A Survey on the Readability of Some Recommended Economics Textbooks for Senior Secondary School in Rivers State

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ABSTRACT
The study investigated the readability level of some recommended economics textbooks for senior secondary school of Rivers State. This study was carried out to determine the reading level of the economics texts, compare the contents of the texts with the topics in the syllabus. Three (3) of the seven recommended texts listed were drawn through simple random sampling techniques. Samples of 600 students were taken through purposive sampling method. Six Government Secondary Schools (G.S.S) were selected from Six Local Government Areas in Rivers State. All the students were SS3 students. Two research questions and two null hypotheses guided this research. Viz; Economics Textbook Content Coverage index (ETCCI), and Gunning Fog index (GFI) were used to answer the research questions, and one-way ANOVA was used to test the null hypotheses at 0.05 level of significance. The research design employed was the utilitarian evaluation research design. Cronbach Alpha method was used in estimating reliability. The reliability for the two instruments were 0.85 and 0.86 respectively. Null hypothesis one with F-cal of 5.48 at α - 0.05 is rejected since it is greater than the critical F – 4.36. This shows that there is a significant difference in the reading level of the three recommended economics textbooks. The Scheffe test of multiple comparisons shows that BEWA has the highest reading level with an index of 20.75 followed by CCE with 14.75 and NSE with 13.5 significantly differing from one another. Null hypothesis two with F-cal of 2.03 at 0.05 level shows that there is a significant variation in the content coverage of the three texts. Hence, null hypothesis that there is no variation in the content coverage of the three recommended economics texts is rejected. Based on the result of this study it is recommended that economics textbooks be written in the form of read-it-yourself manual. Also, expert should be involved in the recommendation economics textbooks at senior secondary school level.

Keywords: readability level, economics textbooks, Gunning Fog Index, Secondary Schools

INTRODUCTION
This paper “surveys the readability level of some recommended economics textbooks for senior secondary schools in Rivers State”. Readability described the language and content of a reading material (or textbook). Nababan (1999:62) defines readability as how easily written materials can be read and understood. Originally readability was associated with reading activity only. Presently readability is related to translation, language, context, and content. According to Gilmore and Root (1997) in Nababan (1999) the readability level of a textbook which is based on linguistic factors and human enchantment is not more than a support tool for a writer in adjusting the readability of
textbook with the ability of the readers. The concept of readability helps one to understand the language and content of the textbook.

The recommendation service is sometimes referred to as book review. The word review means look again or to have a second look (Callahan & Clark, 1977:121). What is reviewed in a textbook is/are the content(s). in economics it is expected of good textbook to explore; the role of price system, competition, capitalism, incentives, government regulation, private property, taxation, labour unions, trade, money and banking, etc (Burton,1999).

Cartwright (1995) gives eighteen (18) points selection criteria for textbooks as follows:
1. What is the date of the copyright? Is the information and interpretation presented up-to-date?
2. Who is the author? Is he competent in the field? Does he write clearly and well?
3. Is the book suitable for the objectives of your course? Does it cover the proper topics with the proper emphasis?
4. Are the topics arranged in a desirable sequence? If not, can the sequence be altered or portions omitted without disrupting the usefulness of the book?
5. Is the content accurate and accurately presented? Is the book free from bias?
6. Are the concepts presented clearly? Are they adequately developed with sufficient details or is there a tendency to attempt to jam in too many ideas too compactly?
7. Are the vocabulary and language appropriate for the learners of the class?
8. Does it presume background knowledge and experiences that learners do not yet have?
9. Does the author make good use of headings, summaries, and similar devices? Does he give opportunity for the readers to visualize, generalize, apply, and evaluate the content?
10. Are the table of contents, preface, index, appendices, and glossary adequate?
11. Does the book provide suggestions for use of supplementary materials?
12. Does it provide a variety of suggestions for stimulating thought-provoking instructional activities?
13. Are these suggestions sufficiently varied both as to level and to kind?
14. Does the author document his sources adequately?
15. Is the book well illustrated? Are illustrations accurate, purposeful, and properly captioned? Are they placed near the text they are designed to illustrate?
16. Does the book have suitable maps, charts and tables? Are they clear and clearly done? Does the author refrain from trying to cram too much data on to his maps and charts?
17. Is the book well made? Does it seem to be strong and durable?
18. Does the book look good? Is the typing clear and readable? Do the pages make a pleasant appearance with enough white space?

Of all the materials of instruction, the textbook has had the most influence on teaching content and method (Callahan & Clark, 1977). Rehman (2006:65) asserts that textbooks evaluation is on the growth in education today. In essence, it takes a problematic, what should be planned, taught and learned in our schools. Recommending and economics textbook, according to him, means justifying the content of the economics textbook.

Aderinto, Akande, Anyanwuocha, & Sani (1991:1) define economics as a social science which concentrates on how man makes use of his limited resources to get maximum satisfaction. Robins (in Aderinto,1999:5) defined economics as “the science which studies human behaviour as relationship between ends and scarce means which have alternative uses”.

Statement of the problems
Economics is a non-vocational elective subject specified by the Federal Republic of Nigeria in her National Policy on Education. It is almost a general subject (i.e registered by every candidate) of the West African Senior School Certificate Examination (WASSCE). This policy is geared towards enabling every student or school leaver to be able to make rational decisions, relative to the use of available economics resources. It aims at helping students to think critically and creatively in the area of manpower development, applying the knowledge of economics in understanding and interpreting the role of economics institutions.
To a large extent, students do not do well in economics during their external examinations due to poor content coverage and difficulty in reading level of economics textbooks. The problem of this study is in finding answers to the following stated questions:

i. How do the economics textbooks recommended for use in secondary schools meet the required standard to prepare candidates for external examinations?

ii. Are the recommended economics textbooks clearly written to equip students for further studies?

iii. Are the recommended economics textbook at the reading level of the students?

iv. Do the economics textbooks cover the contents of WAEC syllabus/curriculum?

v. Are the subject experts involved in the recommendation of economics textbooks?

**Purpose of the study**

The general purpose of this study is to evaluate some recommended economics textbooks for senior secondary schools of Rivers State. Specifically, the study is designed to:

1. Compare the content coverage of the three recommended economics textbooks.
2. Determine the reading level of the economics textbooks at the senior secondary school level.

**Research Questions**

The following research questions guided the conduct of this study:

1. What is the difference in the contents of the recommended economics textbooks?
2. Are the recommended economics textbooks at the reading level of secondary school students?

**Hypotheses**

The hypotheses were tested at 0.05 level of significance.

1. There is no significance difference in the reading level of twenty (20) students learning economics in each of the sampled secondary schools.
2. There is no variation in the content coverage of the recommended economics textbooks investigated.

**Significance of the Study**

This study is significant in the following ways:

The findings of this study may be used to improve the quality of textbooks and the quality of decisions made by the officers recommending the textbooks. It will enable teachers to choose the correct methods of instruction as well as provide criteria for choosing the correct teaching/learning material. The finding of this study will clearly identify limitations, and preferences for designing a textbook in economics. It will help to design methods that will relate various aspects of instructional process in the right order. The finding of this study will help to trace easily how good a particular textbook is in the area of economic.

**REVIEW OF RELATED LITERATURE**

**Concept of readability**

Readability is associated with complete evaluation of textbook contents. The idea of readability best explains the efficacy of the content of a reading material (or textbook). Nababan (1999:62) defines readability as how easily written materials can be read and understood. Originally readability was associated with reading activity only. Presently readability is related to translation, language, context, and content. According to Gilmore and Root (1997) in Nababan (1999) the readability level of a textbook which is based on linguistic factors and human enchantment is not more than a support tool for a writer in adjusting the readability of a textbook with the ability of the readers. The concept of readability helps one to understand the language and content of the textbook. Wardah (1978:2) in her thesis, uses readability level to show how communicable or how easy to understand a particular reading text is, both in terms of its content and forms of a group of readers. This shows how good understanding of readability enhances translation. Every readable material is typed either online or offline using the term font (Hartley & Marx, 1996). A font (sometimes known as fount) was initially a collection of characters of a specific size within a specific typeface, e.g. capitals, small capitals and lower case of 12points Garamond. More recently it has come to have the same meaning as typeface (Cahalan, 1996). The characters used in typing a textbook or reading material attracts the reader. This describes either the boldness of letter for clarity or faintness. The more attracted one is to a particular material depends on “eligibility which refers to what one is accustomed to” (Gill, 1931). Licko & Vanderlans (1994), echoed that assertion in
suggesting that typefaces are not intrinsically legible; rather, it is the reader’s familiarity with typefaces that account for their legibility. Studies have shown that readers read best what they read most.

Interest influences reading. Substantial empirical research suggests that users have a ‘preferred reading level’ online and offline, influenced by interest – Rayner & Pollatsek, 1989. Caslon (2008) said Basic measures of readability include the Flesch reading ease and Flesch Kincaid test, Gunning Fog Index and close procedure. Others are the Fry formula and SMOG (Simple measure of Gobbledygook) test.

The Flesch formula measure reading ease and ‘human interest’, based on four principles:
1. The more syllables in a word, the harder it is to read and understand that word.
2. The more words in a sentence, the harder it is to read and understand.
3. The more words about people there are in a passage, the more “interesting” it is to read.
4. The more sentences “addressed to an audience”, the more interesting that passage is to read.

The Flesch Reading Ease Score
Flesch (1994) identifies readability based on the average number of syllables per word (ASL) and the average number of words per sentence (AWS). The formula is: 206.835 – (1.015 x ASL) - (84.6 x ASW). The formula results in a reproducible and predictable score in the range from zero to 100, with a higher score signifying greater reading ease.

Flesch Kincaid test
The formula for the Flesch-Kincaid Grade level score, an indicator of the level of education (K – 12 and beyond) is - (39 x ASL) + (11.8 x AWS) – 15.59.

Where,
ASL is average sentence length (i.e., \( \frac{\text{number of words}}{\text{number of sentences}} \)) and
ASW is average number of syllables Per word (i.e., \( \frac{\text{number of syllables}}{\text{number of words}} \)).

Yagoda in Caslon (2008) comments that the appeal of Flesch’s work—such as his landmark 1946 the Art of plain Talk— is that it broke down the issue of writing and style into a formula and thus made it seem scientific. It was so simple! One could analyze every piece of writing to find its “reading ease” score, and the easier the better.” The simple style --- the style that meets the scientific test of readability -------- is the classic style of great literature, “ Flesch wrote.” If you start to analyze what style is, the only possible general rule is that the reader must be able to understand what the writer says; and the surest to that is simplicity.”

Gunning Fog Index
The Gunning Fog Index is a similar measure of reading ease and comprehension, using the formula:
\[ \text{Fog Index} = 4 \times (\text{ASL} + \text{WPOLY}) \]
Typically, those using the index select a sample (of say one hundred words), determine the average number of words per sentence, determine the percentage of ‘hard’ words (those with more than two syllables), add the two figures and multiply by 0.4. The ideal index score is 7 or 8, with a score above 12 suggesting that the text would present difficulties for most people.

Forcast Formula:
Another indicator of readability is provided by the US Forcast formula developed for technical material (Arnold, 2004).
\[ \text{Readability} = \frac{20 - \text{number of one syllable word}}{10} \]
1. Count the number of one syllable words in a 150 word passage
2. Divide that number by 10
3. Subtract the answer from 20

Close procedure formula
The close procedure formula is a readability formula based on the deletion of every fifth word (Arnold, 2004). The reader’s ability to fill in the blanks becomes the measure of the text’s readability.
RESEARCH METHODOLOGY

This chapter discusses research design, area of study, population of the study, sample and sampling techniques, validation and reliability of instruments, methods of data collection and data analysis.

Research Design

This study employs utilitarian evaluation research design. Kpolovie (2010:176-179) defines utilitarian evaluation research design as a research methodology that satisfies both scientific and ethical requirements of arriving at and passing value judgments on the way that a programme is planned and executed or implemented for actualization of related societal needs. Utilitarian evaluation research design investigates the effectiveness, efficiency and accountability of an educational programme as planned and executed for the overall good of the society. It allows for the understanding of the aims and interests of the evaluations, operators of the programme, subjects of the study and the members of the society from their different perspectives or standpoints. Thus, with utilitarian evaluation design, the interest of even disadvantaged or powerless groups are represented and accorded priority as an ethical matter that the programme should service or address.

Area of the Study

This study was conducted in Rivers State: it is one of the thirty-six states that make up Nigeria. Rivers State is situated in the south-south of the country, and share boundaries with Bayelsa state on the west, Abia state on the east, Atlantic Ocean in the south and Edo state in the North. The state is made of 23 local government areas. It is a multi-lingual state with a population of about five million and eight hundred thousand persons (5.8 million), (Igbofocus, 2011). The indigenes of the state are into various occupations such as civil service, agriculture and trading, etc. The state capital is Port Harcourt.

Population of the Study

The population of this study consists of all the Seven (7) textbooks of economics recommended by the West African Examinations Council (W.A.E.C) and the Rivers State Ministry of Education for use in the senior secondary schools of Rivers State. These textbooks are:

Table 1: Recommended Economics Textbooks

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Title of Textbook</th>
<th>Name of Author</th>
<th>Year of Pub.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Basic Economic for West Africa</td>
<td>Tawiah, P.K</td>
<td>2007</td>
</tr>
<tr>
<td>6</td>
<td>A Textbook of Economics</td>
<td>Hanson, J.L.</td>
<td>1982</td>
</tr>
</tbody>
</table>

The population of students was 30,325, consisting of all SS3 students taking economics in the senior secondary schools in Rivers State.

Sample and Sampling Techniques

Out of the seven recommended textbooks of economics for senior secondary schools of Rivers State, three (3) were randomly selected through simple random sampling techniques using a table of random numbers. A table of random number consists of a series of five digits, randomly generated by a computer. The numbers were assigned in sequence to members of the population from the upper left column(s). Table of numbers were later on, used to select the required samples (i.e., in vertical direction along lines and columns from 1-10 for 1, 2,3-10).

A sample of 600 students taking economics in Government Secondary Schools (G.S.S) of Rivers State was used. Six (6) local government areas were drawn from the 23 local government areas; one out of every two (2) government secondary schools in a particular local government area was taken. Purposive samples are samples drawn because of the ease of data collection or perceived importance or special characteristics of the members of the sample. The S.S 3 students are mature students, they are accessible and administration of instruments on the members are easy. Purposive sampling was used to select students (respondents) in each Government secondary school that is, 20 students were drawn in each school.
Research Instruments

Gunning fog Index

The researcher selected a sample of at least 100 words from each of the sampled textbooks, determine the mean of the numbers of words per sentence and the percentage of words with more than 2 syllables, add the two figures and multiply by .4. i.e., Fog Index (ASL + WPOLY).4.

Economics Textbooks Content Coverage Index

A questionnaire covering the economics textbooks content was prepared using the following guidelines:

i. Economics syllabus

ii. Every topic and sub-topic in the textbooks were counted and compared with those in the syllabus

Economic Textbooks content coverage index (ETCCI):

Formula:

\[ \text{ETCCI} = \frac{\text{NTT} + \text{NTS}}{\text{Nss} + \text{Nst}} \]

Where:

- NTT is the number of topics in the syllabus covered by the textbook
- NTs is the number of topic in the syllabus
- Nss is the number of Sub-topics in the syllabus covered by the textbook
- Nst is the number of Sub-topic in the textbook

Validation of the Instruments

The instruments were face validated by the researcher’s supervisor and two other experts in test and measurement in the department of Educational Foundation of Rivers State University.

Reliability of the Instruments

The internal consistency of the instrument is measured using the cronbach alpha method of estimating reliability test. A reliability coefficient value of 0.86 and 0.85 were calculated for each of economics text content coverage index (ETCCI) and Economics Textbook Content Coverage Rating Scale (ETCCRS).

Method of Data Collection

The list of recommended economics textbooks were collected from WAEC Zonal office and the Rivers State Ministry of Education, Port Harcourt.

An Economics Textbook Content Coverage Index (ETCCI) and Economics Textbook Content Coverage Rating Scale (ETCCRS) were administered to the students in the sampled secondary schools. The ETCCI consisted of two pages, and the ETCCRS consisted of nine pages. Questions in the ETCCI and ETCCRS were based on the contents of the textbooks and WAEC syllabus.

Method of Data Analysis

1. Research question 1 was analyzed using the Gunning Fog Index
2. Research question 2 was analyzed using the economics textbooks content coverage index.
   Hypothesis one and two were tested using one way analysis of variance

RESULTS

This section presents the results obtained from the analysis of various data produced in course of this study. The analyses were carried out alongside the research questions and research hypotheses.

Research Question One: Are the recommended economics textbooks at the reading level of secondary school students?

The students’ reading ability in each of the three textbooks were evaluated with Gunning Fog Index (test) from the recommended textbooks. Finally index scores were obtained and also used in analyzing research question two.

<table>
<thead>
<tr>
<th>Title of book</th>
<th>Easy Reading Level</th>
<th>Ideal Reading Level</th>
<th>Successful Reading Level</th>
<th>Difficult Reading Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEWA</td>
<td>0-6</td>
<td>7-8</td>
<td>9-12</td>
<td>13 and above</td>
</tr>
<tr>
<td>Index scores</td>
<td>3</td>
<td>29</td>
<td>44</td>
<td>7</td>
</tr>
</tbody>
</table>
From the table, the Gunning Fog Index (score) 3 shows that the students read BEWA at easy level, 29 shows that students were able to read it at the ideal reading level (7-8), 44 represents the index score of the textbook at successful reading level whereas 7 is the index score of difficult reading level of BEWA. The index score 44[9-12] means that a greater number of students read the textbook successfully even though it was difficult.

**Table 3.2: The reading level of the recommended economics textbooks using Gunning Fog Index for CCE.**

<table>
<thead>
<tr>
<th>Title of book CCE</th>
<th>Easy Reading Level</th>
<th>Ideal Reading Level</th>
<th>Successful Reading Level</th>
<th>Difficult Reading Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-6</td>
<td>7-8</td>
<td>9-12</td>
<td>13 and above</td>
</tr>
<tr>
<td>Index scores</td>
<td>3</td>
<td>17</td>
<td>38</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 3.2 shows that the various reading levels and their index scores of 3[0-6], 17(7-8), 38[9-12], 1[13 & above] represented easy reading level, ideal reading level, successful reading level and difficult reading levels respectively. This simply means that the index score 38[9-12] is the score at which the students read the recommended economics textbook [CCE] at successful level.

**Table 3.3: The reading level of the recommended economics textbook using Gunning Fog index for NSE.**

<table>
<thead>
<tr>
<th>Title of book NSE</th>
<th>Easy Reading Level</th>
<th>Ideal Reading Level</th>
<th>Successful Reading Level</th>
<th>Difficult Reading Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-6</td>
<td>7-8</td>
<td>9-12</td>
<td>13 and above</td>
</tr>
<tr>
<td>Index scores</td>
<td>3</td>
<td>20</td>
<td>30</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 3.3 shows students’ reading level of NSE. The index score show that the students read NSE at an Easy level of 3[0-6] ideal level of 20[7-8], successful reading level of 30[9-12], Difficult reading level of 1[13 & above]. This means that more of the students read the textbook at a successful level than at difficult reading level. The formula and calculations of Gunning Fog Readability index for the three textbooks are found in appendix 1.

**Research Question Two:** What is the difference in contents of the recommended economics textbooks?

**Table 3.4: Economics Textbooks content coverage index for BEWA**

<table>
<thead>
<tr>
<th>Title of textbook</th>
<th>Number of topics in the syllabus covered by the text</th>
<th>Number of topics in the syllabus</th>
<th>Number of sub-topics in the syllabus covered by the text</th>
<th>Number of sub-topics in the textbook</th>
<th>Content coverage index [CCI]</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEWA</td>
<td>NTT</td>
<td>NTs</td>
<td>Nss</td>
<td>Nst</td>
<td>0.56</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>22</td>
<td>78</td>
<td>152</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.4 above shows that the number of topics and sub-topics in the syllabus for BEWA for senior secondary schools are 22 and 78. The number of topics covered by BEWA is 20 whereas the sub-topics are 152. The index of content coverage is 0.56. This implies that almost all the topics and not sub-topics were covered.
Table 3.5: Economics Textbook Content Coverage Index for CCE

<table>
<thead>
<tr>
<th>Title of textbook</th>
<th>Number of topics in the syllabus covered by the text</th>
<th>Number of topics in the syllabus</th>
<th>Number of sub-topics in the syllabus covered by the text</th>
<th>Number of sub-topics in the textbook</th>
<th>Content coverage index [CCI]</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCE</td>
<td>NTT</td>
<td>NTs</td>
<td>Nss</td>
<td>Nst</td>
<td>0.49</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>22</td>
<td>99</td>
<td>226</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.5 shows the number of topics and sub-topics in the syllabus as well as economics textbook [Comprehensive Certificate Economics for Senior Secondary Schools]. The topics in the syllabus are 22 and the topics in the textbook are also 22. The numbers of sub-topics in the syllabus are 99 while the number of sub-topics in the textbook are 226. The content coverage index is 0.49. This means that the topics in the textbook and syllabus are the same but the sub-topics in the syllabus and the textbook were not well covered [were broken down].

Table 3.6: Economics Textbooks Content Coverage Index for NSE

<table>
<thead>
<tr>
<th>Title of textbook</th>
<th>Number of topics in the syllabus covered by the textbook</th>
<th>Number of topics in the syllabus</th>
<th>Number of sub-topics in the syllabus covered by the textbook</th>
<th>Number of sub-topics in the textbook</th>
<th>Content coverage index [CCI]</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSE</td>
<td>NTT</td>
<td>NTs</td>
<td>Nss</td>
<td>Nst</td>
<td>0.83</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>22</td>
<td>80</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

The data presented above shows that the topics in the syllabus is 22. The number of topics in the syllabus covered by the textbook is 22. The number of sub-topics in the syllabus is 80 and the number of sub-topics in the textbook is 100. The content coverage index is 0.83. Unlike in BEWA and CCE, most of the topics and sub-topics in the syllabus were duly covered. Table 3.4, 3.5 and 3.6 were used in answering research question two.

Hypothesis one: There is no significant difference in the reading level of twenty [20] students learning economics in each of the sampled secondary schools.

Table 3.7: Summary of ANOVA on the reading level [or index score] of the three recommended economics textbooks.

<table>
<thead>
<tr>
<th>Source of variation (SS)</th>
<th>Sum of squares (SS)</th>
<th>Degree of freedom (DF)</th>
<th>Mean squares (MS)</th>
<th>F-cal</th>
<th>F-crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between group</td>
<td>3149.13</td>
<td>2</td>
<td>1574.57</td>
<td>5.48</td>
<td>4.36</td>
</tr>
<tr>
<td>Within group</td>
<td>171403.28</td>
<td>597</td>
<td>287.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>174552.41</td>
<td>599</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*F is significant at α – 0.05

The result shown proves that there is a significant difference in the reading level of the three recommended economics texts. The calculated F-is 5.48 while the critical or table F – is 4.36. The degrees of freedom are 2 and 597 respectively. Based on the two F – values, the null hypothesis [H0] is rejected. Since calculated F [5.48] is greater than critical F [4.36]. Based on the previous calculation a Scheff’e test was conducted to find out the difference in the reading level of the economics textbooks.
3.8: Summary of Scheff’s test of multiple comparison on the reading level [or index score] of students using the recommended economics textbooks.

**Comparison of Texts and Indices**

<table>
<thead>
<tr>
<th>Comparison</th>
<th>F – cal</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEWA and CCE;</td>
<td>0.09</td>
</tr>
<tr>
<td>BEWA and NSE;</td>
<td>0.14</td>
</tr>
<tr>
<td>CCE and NSE;</td>
<td>4.12</td>
</tr>
</tbody>
</table>

The values arranged in the table above, show the difference in the reading level and the F-ratio of each of the textbooks when compared with another. For instance, the F-cal for BEWA and CCE is 0.09 with index scores of 20.75 and 14.75 and 13.5 with an F-cal of 0.14. CCE and NSE have indices of 14.75 and 13.5 with an F-cal of 4.12, which is the most significant at α = 0.05. The index score for BEWA is statistically different from NSE and CCE.

**Hypothesis two:** There is no variation in the content coverage of the three recommended economics textbooks investigate.

3.9: Summary of ANOVA on the test of no significant difference in content coverage of the recommended economics textbooks.

<table>
<thead>
<tr>
<th>Source of variation (SV)</th>
<th>Sum of squares (SS)</th>
<th>Degree of freedom (DF)</th>
<th>Mean squares (MS)</th>
<th>F-cal</th>
<th>F-crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between group</td>
<td>2312.15</td>
<td>2</td>
<td>1156.07</td>
<td>2.03</td>
<td>1.78</td>
</tr>
<tr>
<td>Within group</td>
<td>339172.01</td>
<td>597</td>
<td>568.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>341484.16</td>
<td>599</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F is significant at α = 0.05

Table 3.9: Shows that the calculated value of F is greater than the table value at 0.05 α – level with degrees of freedom 2 and 597. Hence, the null hypothesis of no significant variation in the content converge of the three recommended economics textbooks is rejected.

**DISCUSSION**

The results of this study are discussed in this section thus – reading level, and content coverage of the three recommended economics textbooks. Others are conclusion, and recommendations.

a) **Reading level of the three textbooks**

The summary of results of the Gunning Fog tests in tables 3.4, 3.5 and 3.6 suggests that BEWA in table 3.4 is the most difficult to read and understand by the students. The difficult reading level has a score of 7 which is the highest among the three textbooks. The reading level scores for New System Economics (NSE) are the best in terms of reading ease and comprehension, followed by Comprehensive Certificate Economics (CCE) with difficulty level scores of 1 respectively. This brings to mind Burton’s Concept of evaluating an economics textbook which states that Good textbooks do not propound particular philosophies, but concentrate on teaching students how to think (Burton, 1999).

The scores of Gunning Fog Index on tables 3.4, 3.5 and 3.6 shows that NSE and CCE are easier to read and understand. These two textbooks have short sentences. That is, few words with less syllables. They also contain more verbal examples than BEWA. The aforementioned textbook adopts colour pages and prints which may interfere with students’ reading ability.

b) **Content Coverage of the Recommended Economics Textbooks**

Content coverage describes the number of topics covered by the textbooks as it is found in the syllabus. It is an open secret that apart from the WAEC, NECO and JAMB syllabuses there are no other syllabuses that can guide teachers, students and authors in teaching, learning and writing of textbooks. The contents or topics provided in a textbook go along way to justify or prove the efficacy of a textbook.

In Tables 3.10, 3.11 and 3.12, the content coverage indices were 0.56 for BEWA, 0.49 for CCE and 0.83 for NSE. The values above show that topics were not properly covered. In BEWA the topics and sub-topics were not presented as it is in the syllabus. Some topics were given related names to those found in the syllabus and at the same time used as sub-topics, e.g., financial institutions as stated in the syllabus with sub-topic types of banks. In BEWA it is written as banking with a sub-topic other
financial institutions. This experience is also common with CCE besides which there is also inclusion of contemporary issues like Structural Adjustment Programme in Nigeria, Privatization and Commercialization. There is also this conservatism in writing like the topic petroleum and the Nigerian economy, an author writing a textbook should follow the various issues of the syllabus to make changes when necessary. This topic presently has been changed to major natural resources. NSE is the best in terms of content coverage among the three textbooks with an index of 0.83 which shows the extent of its coverage. Except for a topic(s) like alternative economic systems and, petroleum and the Nigerian economy which is common to CCE and (BEWA to some extent).

CONCLUSION
This study evaluated three recommended economics textbooks for senior secondary schools of Rivers State and compares their content coverage with that of the syllabus, and various reading levels using Gunning Fog Test. The three textbooks used were randomly selected and purposive samples of six hundred students were also selected. The results obtained from the findings of the research were as follows:

a) One of the three textbooks – BEWA is more difficult to the students at the secondary school level to read and understand.

b) NSE and CCE cover most of the contents in the syllabus except for few adjustments due to the addition of contemporary issues in CCE. The textbook NSE has more topics and sub-topics common to the syllabus.

RECOMMENDATIONS
1. Economics textbooks should be written in the form of read-it-yourself manual – very simple at the secondary school level.

2. The state ministry of education should learn to involve experts very well in the evaluation of textbooks before recommendation. These experts should include – directors or head of departments in the ministry and schools’ boards, principals of schools, teachers, college and university administrations (librarians), authors and evaluation specialists.

3. The following improvements are necessary for subsequent editions of these economics textbooks:

   BEWA: The topic and sub-topics should be presented the same as it is in the syllabuses. The print size should be maintained. Some of the mathematical and diagrammatic illustrations should be translated into verbal and drawn from all parts of West Africa.

   CCE: Beside the topics and sub-topics being presented according to what is obtained in the syllabuses, only issues that are of interest to the target populace should be included and discussed.

   NSE: In the first place this book needs to be reprinted and updated since some of the data in it are of 1963 (P.67), 1970-78 (P.57), 1985 (167). Also, the number of illustrations should increase and be more of practice.

REFERENCES


