

**CONTENT VALIDITY OF NATIONAL EXAMINATION
COUNCIL SENIOR SCHOOL
CERTIFICATE EXAMINATION ECONOMICS OBJECTIVE TESTS**

BY

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Abstract

*The study was conducted to investigate the content validity of NECO multiple choice Economics test items for 2009-2011 academic sessions. Two purposes of study were formulated with two corresponding research questions. Survey research design was adopted for the study. The population for the study was nine thousand seven hundred and five students that sat for Economics during the three years under study. Internal consistency of the instrument was established using Kuder Richardson formula 20 (KR 20) which gave reliability index of .79. Research questions were answered using means and standard deviations. The findings showed high percentage inclusions of most topics/themes and a high percentage coverage of behavioral objectives for three years under study. **The researchers recommended among others that** Federal Ministry of Education and National Education Research Development Council (NERDC) should ensure that content validation are carried out for all test packages used in public examinations in Nigeria.*

Key Words: *Content validation, evaluation, multiple choice items.*

Introduction

Every evaluation instrument such as test, questionnaire, interview schedule, interest scale, among others, has some useful properties associated with it. Such properties include reliability, validity and usability, (Harbor-Peters, 1999). The reliability of a test is defined as the degree of consistency or stability which the test exhibits (Nworgu, 1992). In other words, it is concerned with how far a particular test result represents the testee in the attribute

being measured and how reproducible such test results are when the measurement is repeated on different occasions or *when* retested with an identical test. On the other hand, usability is the ability of a test to serve the educational purpose it is designed to serve. It has implication on the decision taken on the test results. For instance, a test which is used to select candidates for further studies should be able to discriminate between high and low achievers. Validity is the extent to which a test evaluates what it is designed or

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There are different kinds of validity: - face validity, content validity, criterion-related validity and construct validity. The purpose of an evaluation instrument will determine which attribute (reliability, usability and validity) to be sought. For example, a standardized test will require all the listed properties while a teacher made test will require only usability and some aspect of validity such as content validity. According to Nworgu (1992), the content validity of any given test refers to the extent to which the test measures both the subject matter content and the instructional objectives designed for a given course. It is the most appropriate form of validity for achievement tests.

Content validity of test is best determined by the curricula method whereby the analysis of the test content is matched against the analysis of the course content and instructional objectives to ascertain the degree of agreement between them. Validity is a matter of degree; therefore, it is not absolute. A test cannot be actually invalid or perfectly valid. Validity is specifically for a particular use or objective. For instance, an Economics test may be valid for achievement but not for reasoning ability.

This study is concerned with content validity. Content validity according to Harbor – Peters (1999) is the extent to which a test measures a representative sample of a given subject matter content and its behavioral changes under consideration. This is usually obtained by the use of table of specification or blueprint. Content validity is meant for achievement tests where subject matter content is clearly defined in a curriculum or syllabus. In other words, content validity is a two way grid testing content (topics) across the vertical left side column and behavioural objectives across the horizontal top row. A test should be evenly spread across all the behavioural objectives. These behavioural objectives are knowledge, comprehension, application, analysis, synthesis and evaluation. A good test ought to be topically adequate and behaviourally relevant before being administered to the students.

The National Examinations Council (NECO) conducts the Senior School Certificate Examination (SSCE) in all senior Secondary School subjects including Economics. National Examination Council (NECO) came into existence in April 1999, under General Abdusalam Abubarka's regime with the main responsibility of conducting

Purpose of the Study

Content validity for a test is important so as to ensure sound construction of a valid achievement test (Nworgu, 1992). To be content-valid, questions (items) should be set from all parts of the syllabus. Also the number of items set in each section should reflect the relative importance of each section. In other words, the test ought to measure all the subject matter content and all the instructional objectives designed for a given course. Some studies (Nworgu (1985) and Agwagwah (1985), have been carried out on the content validity of WASC test items but no research work, known to the researchers, has been done on content validity of NECO multiple choice Economics test items. This is the trust of this study.

Research Questions

In the execution of the investigation, two research questions were posed:

1. What is the percentage inclusion of each theme/topics in the national curriculum for economics in the NECO Senior school certificate examination multiple choice achievement test item for 2009, 2010 and 2011? and
2. To what percentage are the stated behavioural objectives included in the NECO economics multiple choice achievement test for 2009, 2010 and 2011?

Method

The survey research design was adopted. According to Ali, Ezeadi, & Ogbazi, (1982), a survey research design can be defined as a descriptive study which seeks to document and describe what exists, or the present status of existence or absence of what is being investigated. Nworgu (2003) also defined it as one in which a group of people or items considered to be

representative of the group are studied and the result generalized on the entire group. The population consists of all the 9,705 NECO candidates that sat for SSCE in 2008, 2009 and 2010 in all the 27 public Senior Secondary Schools in Enugu Education Zone. Data obtained from NECO showed that the population for 2009, 2010 and 2011 were 3016, 3169 and 3520 respectively. Out of this, 384 SS3 candidates who sat for NECO examinations in Economics were sampled for the study. The instruments for data collection are the three NECO multiple choice test packages for Economics for 2009, 2010 and 2011. Each of these packages was generated by NECO and contains 60 multiple choice items. The research questions were answered using frequencies and percentages.

Results

Research Question 1

What percentage of each economics theme/topics in the national curriculum for economics is covered to the NECO SSCE multiple choice items for 2009, 2010 and 2011?

| S/N | Themes | Percentage covered (100%) | | |
|-----|---|---------------------------|------|------|
| | | 2009 | 2010 | 2011 |
| 1. | Principles of economics | 26.6 = 27 | 20 | 32 |
| 2. | Economic systems | 1.6 = 2 | 3 | - |
| 3. | Business organizations | 10 | 13 | 13 |
| 4. | Comparative economics | - | - | - |
| 5. | Population, labour market & capital development | 5 | 12 | 8 |
| 6. | Consumer behavior, price determination & market structure | 10 | 10 | 3 |
| 7. | Structure of Nigeria economies & major national economy | 7 | 10 | - |
| 8. | National income and public finance | 12 | - | 3 |
| 9. | Financial institutions & regulatory agencies | 8 | 3 | 3 |
| 10. | Money and inflation/deflation | 8 | 13 | 8 |
| 11. | Distributive trade | 3 | 3 | 3 |
| 12. | International trade & balance of payments | 3 | 8 | 8 |
| 13. | Development economics | 7 | - | 2 |
| 14. | Business finance | - | - | - |
| 15. | International economic organizations | 3 | 3 | 5 |
| 16. | Applied economics and contemporary economic organization | - | - | - |
| | Total percentages | 100 | 100 | 100 |

indigenous Senior School Certificate Examinations (SSCE) and also other examinations such as Basic School Certificate Examinations (BECE), National Common Entrance Examinations (NCEE), Entrance examination into school for the gifted children Suleja Niger State, and the Senior School Certificate Examinations (external). The national curriculum for Economics is published by the Nigerian Educational Research and Development Council (NERDC) on behalf of the Federal Ministry of Education. NECO bases the contents of her examinations on the national curriculum published by NERDC. Nevertheless, this study is interested only in NECO SSCE multiple choice test items in economics. There is need to ascertain the extent to

which NECO multiple choice examination test items in Economics is content valid. This will help increase the confidence of the testees, examiners and the general public on the results of the examinations..

Purpose of the Study

Content validity for a test is important so as to ensure sound construction of a valid achievement test (Nworgu, 1992). To be content-valid, questions (items) should be set from all parts of the syllabus. Also the number of items set in each section should reflect the relative importance of each section. In other words, the test ought to measure all the subject matter content and all the instructional objectives designed for a given course. Some studies (Nworgu

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Expected and Actual Table of
Specification – 2009**

Table 2: Percentage coverage of the behavioural objective in the NECO Economics multiple choice test items for 2009 – SS1.

| SS I | | Ideal Cognitive Levels | | | | | | Actual Cognitive Levels Tested | | | | | | | |
|------|---------------------------------------|------------------------|----------|----------|----------|---|----------|--------------------------------|----------|----------|----------|----------|----------|----------|------------------------|
| S/n | Topics | 1 | 2 | 3 | 4 | 5 | 6 | Total no of Questions | 1 | 2 | 3 | 4 | 5 | 6 | Total no. of Questions |
| 1 | Economics, meaning and Basic Concepts | 1 | 1 | | | | | 2 | 1 | 1 | | | | | 2 |
| 2 | Basic tools for Economic Analysis | | | 1 | | | 1 | 2 | | | 1 | | | 1 | 2 |
| 3 | Basic Economic Problems of Society | 1 | | | | | | 1 | -1 | | | | | | - |
| 4 | Production | | 1 | 1 | | | | 2 | | 1 | 1 | | | | 2 |
| 5 | Business organization | | 1 | | 1 | | | 2 | | 1(+1) | | 1(+1) | | | 4 |
| 6 | Population | 1 | | 1 | | | | 2 | 1 | | -1 | | | | 1 |
| 7 | Labour Market | | 1 | | | | | 1 | | 1 | | | | | 1 |
| 8 | Distributive Trade | 1 | | | 1 | | | 2 | 1 | | | 1 | | | 2 |
| 9 | Money | | | 1 | | | 1 | 2 | (+1) | | -1 | | | 1 | 2 |
| 10 | Agriculture | | | 1 | | | | 1 | | | -1 | | | | - |
| | Total | 4 | 4 | 5 | 2 | | 2 | 17 | 4 | 5 | 2 | 3 | - | 2 | 16 |

EQUATED: $5/10 \times 100 = 50\%$,

AVOIDED: $2/10 \times 100 = 20\%$,

PARTIAL ALLOCATION: $1/10 \times 100 = 10\%$,

MISPLACED: $1/10 \times 100 = 10\%$, **PARTIAL:** $1/10 \times 10 = 10\%$

Economics II

Expected and Actual Table of Specification – 2009

Table 3: Percentage coverage of the behavioural objective in the NECO Economics multiple choice test items for 2009 – SS11.

| SSII | | Ideal Cognitive levels | | | | | | Total no of Questions | Actual Cognitive Levels Tested | | | | | | Total no. of Questions |
|------|-----------------------------------|------------------------|----------|----------|----------|----------|----------|-----------------------|--------------------------------|----------|----------|----------|----------|----------|------------------------|
| S/n | Topics | 1 | 2 | 3 | 4 | 5 | 6 | | 1 | 2 | 3 | 4 | 5 | 6 | |
| 1 | Basic tools for Economic Analysis | 1 | | 1 | | | | 2 | 1 | | 1 | | | | 2 |
| 2 | Production | | | | 1 | | 1 | 2 | | | | -1 | | -1 | - |
| 3 | Labour Market | | | 1 | | | 1 | 2 | | | 1 | | | -1 | 1 |
| 4 | Money | 1 | | 1 | | | | 2 | 1 | | | 1 | | | 2 |
| 5 | Agriculture | | 1 | | 1 | | | 2 | | 1 | | 1 | | | 2 |
| 6 | Inflation | | | 1 | | 1 | | 2 | | | 1 | | 1 | | 2 |
| 7 | Industrialization | | 1 | | 1 | | | 2 | | 1(+1) | | 1 | | | 3 |
| 8 | Alternative Economic Systems | | | 1 | | | | 1 | | | 1 | | | | 1 |
| 9 | Theory of Cost | | 1 | | | | 1 | 2 | | 1 | | (+1) | | 1 | 3 |
| 10 | Consumer Theory | 1 | | 1 | | | | 2 | 1 | (+1) | 1 | | | | 3 |
| 11 | Theory of Demand and Supply | | 1 | 1 | | | 1 | 3 | | 1 | 1 | | | 1 | 3 |
| 12 | Public Finance | | 1 | | 1 | | | 2 | | -1 | | -1 | | | - |
| 13 | Financial Institution | | | 1 | | | 1 | 2 | | | 1 | | | 1 | 2 |
| | Total | 3 | 5 | 7 | 4 | 2 | 5 | 26 | 3 | 6 | 7 | 4 | 1 | 3 | 24 |

EQUATED: $7/13 \times 100 = 53.85\%$,

TOTALLY AVOIDED: $2/13 \times 100 = 15.3\%$,

EXCESS: $3/13 \times 100 = 23.07\%$

PARTIAL: $1/13 \times 100 = 7.6\%$

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Expected and Actual Table of Specification – 2009

Table 4: Percentage coverage of the behavioural objective in the NECO Economics multiple choice test items for 2009 – SS111.

| | | SSIII | | | | | | Ideal Cognitive Levels | | | | | | | Actual Cognitive Levels Tested | |
|-----|---|----------|-----------|-----------|----------|----------|---|------------------------|----------|-----------|-----------|-----------|---|-----------|--------------------------------|--|
| S/N | Topics | 1 | 2 | 3 | 4 | S/N | Topics | 1 | 2 | 3 | 4 | S/N | Topics | 1 | 2 | |
| 1 | Industrialization | | | 1 | | 1 | Industrialization | | | 1 | | 1 | Industrialization | | | |
| 2 | Theory of Demand and Supply | | | | 1 | 2 | Theory of Demand and Supply | | | | 1 | 2 | Theory of Demand and Supply | | | |
| 3 | Market Structure | | | | 1 | 3 | Market Structure | | | | 1 | 3 | Market Structure | | | |
| 4 | Elements of National Income Accounting | | | 1 | | 4 | Elements of National Income Accounting | | | 1 | | 4 | Elements of National Income Accounting | | | |
| 5 | Elementary Theory of Income Determination | | | | | 5 | Elementary Theory of Income Determination | | | | | 5 | Elementary Theory of Income Determination | | | |
| 6 | International Trade | | 1 | | | 6 | International Trade | | 1 | | | 6 | International Trade | | 1 | |
| 7 | Balance of Payment | | | 1 | | 7 | Balance of Payment | | | 1 | | 7 | Balance of Payment | | | |
| 8 | Economic Organizations | | | | 1 | 8 | Economic Organizations | | | | 1 | 8 | Economic Organizations | | | |
| 9 | Economic Development | | | 1 | | 9 | Economic Development | | | 1 | | 9 | Economic Development | | | |
| 10 | Petroleum and Nigeria Economy | | 1 | | | 10 | Petroleum and Nigeria Economy | | 1 | | | 10 | Petroleum and Nigeria Economy | | 1 | |
| | Total | | 2 | 4 | 3 | 4 | 4 | 17 | | 2 | 5 | 4 | 3 | 6 | 20 | |
| | Grand Total (SSI + SSII + SSIII) | 7 | 11 | 16 | 9 | 6 | 11 | 60 | 7 | 13 | 14 | 11 | 4 | 11 | 60 | |

EQUATED $7/100 \times 100 = 70\%$,

EXCESS = $3/100 \times 100/1 = 30\%$

NO PARTIAL, NO MISPLACED

ANALYSIS FOR 2010

Economics II

Expected and Actual Table of Specification – 2010

Table 5: Percentage coverage of the behavioural objective in the NECO Economics multiple choice test items for 2010 – SS1.

| SS I | | Ideal Cognitive Levels | | | | Actual Cognitive Levels Tested | | | | | | | | | |
|------|---------------------------------------|------------------------|----------|----------|----------|---------------------------------------|----------|-----------|----------|----------|---------------------------------------|----------|----------|-----------|-----|
| S/n | Topics | 1 | 2 | 3 | S/n | Topics | 1 | 2 | 3 | S/n | Topics | 1 | 2 | 3 | S/n |
| 1 | Economics, meaning and Basic Concepts | 1 | 1 | | 1 | Economics, meaning and Basic Concepts | 1 | 1 | | 1 | Economics, meaning and Basic Concepts | 1 | 1 | | 1 |
| 2 | Basic tools for Economic Analysis | | | 1 | 2 | Basic tools for Economic Analysis | | | 1 | 2 | Basic tools for Economic Analysis | | | 1 | 2 |
| 3 | Basic Economic Problems of Society | 1 | | | 3 | Basic Economic Problems of Society | 1 | | | 3 | Basic Economic Problems of Society | 1 | | | 3 |
| 4 | Production | | 1 | 1 | 4 | Production | | 1 | 1 | 4 | Production | | 1 | 1 | 4 |
| 5 | Business organization | | 1 | | 5 | Business organization | | 1 | | 5 | Business organization | | 1 | | 5 |
| 6 | Population | 1 | | 1 | 6 | Population | 1 | | 1 | 6 | Population | 1 | | 1 | 6 |
| 7 | Labour Market | | 1 | | 7 | Labour Market | | 1 | | 7 | Labour Market | | 1 | | 7 |
| 8 | Distributive Trade | 1 | | | 8 | Distributive Trade | 1 | | | 8 | Distributive Trade | 1 | | | 8 |
| 9 | Money | | | 1 | 9 | Money | | | 1 | 9 | Money | | | 1 | 9 |
| 10 | Agriculture | | | 1 | 10 | Agriculture | | | 1 | 10 | Agriculture | | | 1 | 10 |
| | Total | 4 | 4 | 5 | 2 | | 2 | 17 | 7 | 6 | 5 | 2 | 1 | 21 | |

EQUATED: $7/13 \times 100/1 = 40\%$,

MISPLACED&EXCESS $1/10 \times 100/1 = 10\%$,

PARTIAL $1/10 \times 100/1 = 10\%$,

EXCESS $4/10 \times 100/1 = 40\%$

Economics II

Expected and Actual Table of Specification – 2010

Table 6: Percentage coverage of the behavioural objective in the NECO Economics multiple choice test items for 2010 – SS11.

| SSII | | Ideal Cognitive levels | | | | Actual Cognitive Levels Tested | | | | | | | | | |
|------|-----------------------------------|------------------------|---|---|-----|-----------------------------------|---|---|---|-----|-----------------------------------|---|---|---|-----|
| S/n | Topics | 1 | 2 | 3 | S/n | Topics | 1 | 2 | 3 | S/n | Topics | 1 | 2 | 3 | S/n |
| 1 | Basic tools for Economic Analysis | 1 | | 1 | 1 | Basic tools for Economic Analysis | 1 | | 1 | 1 | Basic tools for Economic Analysis | 1 | | 1 | 1 |
| 2 | Production | | | | 2 | Production | | | | 2 | Production | | | | 2 |
| 3 | Labour Market | | | 1 | 3 | Labour Market | | | 1 | 3 | Labour Market | | | 1 | 3 |
| 4 | Money | 1 | | 1 | 4 | Money | 1 | | 1 | 4 | Money | 1 | | 1 | 4 |
| 5 | Agriculture | | 1 | | 5 | Agriculture | | 1 | | 5 | Agriculture | | 1 | | 5 |
| 6 | Inflation | | | 1 | 6 | Inflation | | | 1 | 6 | Inflation | | | 1 | 6 |
| 7 | Industrialization | | 1 | | 7 | Industrialization | | 1 | | 7 | Industrialization | | 1 | | 7 |
| 8 | Alternative Economic Systems | | | 1 | 8 | Alternative Economic Systems | | | 1 | 8 | Alternative Economic Systems | | | 1 | 8 |
| 9 | Theory of Cost | | 1 | | | | 1 | 2 | | 1 | | | | 1 | 2 |
| 10 | Consumer Theory | 1 | | 1 | | | | 2 | 1 | | 1 | | | | 2 |

| | | | | | | | | | | | | | | | |
|----|-----------------------------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|-----------|
| 11 | Theory of Demand and Supply | | 1 | 1 | | | 1 | 3 | | 1 | 1 | | | 1 | 3 |
| 12 | Public Finance | | 1 | | 1 | | | 2 | | 1 | | -1 | +1 | | 2 |
| 13 | Financial Institution | | | 1 | | | 1 | 2 | | | 1 | | | 1 | 2 |
| | Total | 3 | 5 | 7 | 4 | 2 | 5 | 26 | 2 | 7 | 8 | 2 | 2 | 4 | 25 |

EQUATED: $7/13 \times 100 = 53.8\%$,

EXCESS; $2/13 \times 100 = 15.4\%$,

PARTIAL; $3/13 \times 100 = 23\%$

MISPLACED: $1/13 \times 100 = 7.7\%$

Economics II

Expected and Actual Table of Specification – 2010

Table 7: Percentage coverage of the behavioural objective in the NECO Economics multiple choice test items for 2010 – SS111.

| S/ N | SSIII Topics | Ideal Cognitive Levels | | | | | S/ N | Topics | Actual Cognitive Levels Tested | | | | | S/ N | Topics | 1 | 2 |
|---------|---|------------------------|----------|----------|----------|----|---------|---|--------------------------------|----------|----------|----------|----|---|---|----------|---|
| | | 1 | 2 | 3 | 4 | 5 | | | 1 | 2 | 3 | 4 | 5 | | | | |
| 1 | Industrialization | | | 1 | | | 1 | Industrialization | | | 1 | | | 1 | Industrialization | | |
| 2 | Theory of Demand and Supply | | | | 1 | 2 | | Theory of Demand and Supply | | | | 1 | 2 | | Theory of Demand and Supply | | |
| 3 | Market Structure | | | | 1 | 3 | | Market Structure | | | | 1 | 3 | | Market Structure | | |
| 4 | Elements of National Income Accounting | | | 1 | | 4 | | Elements of National Income Accounting | | | 1 | | 4 | | Elements of National Income Accounting | | |
| 5 | Elementary Theory of Income Determination | | | | | 5 | | Elementary Theory of Income Determination | | | | | 5 | | Elementary Theory of Income Determination | | |
| 6 | International Trade | | 1 | | | 6 | | International Trade | 1 | | | | 6 | | International Trade | | 1 |
| 7 | Balance of Payment | | | 1 | | 7 | | Balance of Payment | | | 1 | | 7 | | Balance of Payment | | |
| 8 | Economic Organizations | | | | 1 | 8 | | Economic Organizations | | | | 1 | 8 | | Economic Organizations | | |
| 9 | Economic Development | | | 1 | | 9 | | Economic Development | | | 1 | | 9 | | Economic Development | | |
| 10 | Petroleum and Nigeria Economy | | 1 | | | 10 | | Petroleum and Nigeria Economy | 1 | | | | 10 | | Petroleum and Nigeria Economy | | 1 |
| | Total | | 2 | 4 | 3 | | | Total | 2 | 4 | 3 | | | Total | | 2 | |
| | Grand Total (SSI + SSII + SSIII) | 7 | 1 | 1 | 9 | | | Grand Total (SSI + SSII + SSIII) | 7 | 1 | 1 | 9 | | Grand Total (SSI + SSII + SSIII) | 7 | 1 | |

EQUATED: $7/10 \times 100/1 = 70\%$,

PARTIAL: $2/10 \times 100/1 = 20\%$.

ANALYSIS FOR 2011

Economics II

Expected and Actual Table of Specification – 2011

Table 8: Percentage coverage of the behavioural objective in the NECO Economics multiple choice test items for 2011 – SS1.

| SS I | | Ideal Cognitive Levels | | | | Actual Cognitive Levels Tested | | | | | | | | | |
|------|---------------------------------------|------------------------|----------|----------|-----|---------------------------------------|----------|----------|----------|-----|---------------------------------------|----------|----------|----------|-----|
| S/n | Topics | 1 | 2 | 3 | S/n | Topics | 1 | 2 | 3 | S/n | Topics | 1 | 2 | 3 | S/n |
| 1 | Economics, meaning and Basic Concepts | 1 | 1 | | 1 | Economics, meaning and Basic Concepts | 1 | 1 | | 1 | Economics, meaning and Basic Concepts | 1 | 1 | | 1 |
| 2 | Basic tools for Economic Analysis | | | 1 | 2 | Basic tools for Economic Analysis | | | 1 | 2 | Basic tools for Economic Analysis | | | 1 | 2 |
| 3 | Basic Economic Problems of Society | 1 | | | 3 | Basic Economic Problems of Society | 1 | | | 3 | Basic Economic Problems of Society | 1 | | | 3 |
| 4 | Production | | 1 | 1 | 4 | Production | | 1 | 1 | 4 | Production | | 1 | 1 | 4 |
| 5 | Business organization | | 1 | | 5 | Business organization | | 1 | | 5 | Business organization | | 1 | | 5 |
| 6 | Population | 1 | | 1 | 6 | Population | 1 | | 1 | 6 | Population | 1 | | 1 | 6 |
| 7 | Labour Market | | 1 | | 7 | Labour Market | | 1 | | 7 | Labour Market | | 1 | | 7 |
| 8 | Distributive Trade | 1 | | | 8 | Distributive Trade | 1 | | | 8 | Distributive Trade | 1 | | | 8 |
| 9 | Money | | | 1 | 9 | Money | | | 1 | 9 | Money | | | 1 | 9 |
| 10 | Agriculture | | | 1 | 10 | Agriculture | | | 1 | 10 | Agriculture | | | 1 | 10 |
| | Total | 4 | 4 | 5 | | Total | 4 | 4 | 5 | | Total | 4 | 4 | 5 | |

EQUATED: $4/10 \times 100/1 = 40\%$,

EXCESS: $2/10 \times 100/1 = 20\%$,

TOTALLY AVOIDED: $2/10 \times 100/1 = 20\%$,

MISPLACED,PARTIAL: $1/10 \times 100/1 = 10\%$

Economics II: Expected and Actual Table of Specification – 2011

Table 9: Percentage coverage of the behavioural objective in the NECO Economics multiple choice test items for 2011 – SS11.

| SSII | | Ideal Cognitive levels | | | | Actual Cognitive Levels Tested | | | | | | | | | |
|------|-----------------------------------|------------------------|----------|----------|-----|-----------------------------------|----------|----------|----------|-----|-----------------------------------|----------|----------|----------|-----|
| S/n | Topics | 1 | 2 | 3 | S/n | Topics | 1 | 2 | 3 | S/n | Topics | 1 | 2 | 3 | S/n |
| 1 | Basic tools for Economic Analysis | 1 | | 1 | 1 | Basic tools for Economic Analysis | 1 | | 1 | 1 | Basic tools for Economic Analysis | 1 | | 1 | 1 |
| 2 | Production | | | | 2 | Production | | | | 2 | Production | | | | 2 |
| 3 | Labour Market | | | 1 | 3 | Labour Market | | | 1 | 3 | Labour Market | | | 1 | 3 |
| 4 | Money | 1 | | | 4 | Money | 1 | | | 4 | Money | 1 | | | 4 |
| 5 | Agriculture | | 1 | | 5 | Agriculture | | 1 | | 5 | Agriculture | | 1 | | 5 |
| 6 | Inflation | | | 1 | 6 | Inflation | | | 1 | 6 | Inflation | | | 1 | 6 |
| 7 | Industrialization | | 1 | | 7 | Industrialization | | 1 | | 7 | Industrialization | | 1 | | 7 |
| 8 | Alternative Economic Systems | | | 1 | 8 | Alternative Economic Systems | | | 1 | 8 | Alternative Economic Systems | | | 1 | 8 |
| 9 | Theory of Cost | | 1 | | 9 | Theory of Cost | | 1 | | 9 | Theory of Cost | | 1 | | 9 |
| 10 | Consumer Theory | 1 | | 1 | 10 | Consumer Theory | 1 | | 1 | 10 | Consumer Theory | 1 | | 1 | 10 |
| 11 | Theory of Demand and Supply | | 1 | 1 | 11 | Theory of Demand and Supply | | 1 | 1 | 11 | Theory of Demand and Supply | | 1 | 1 | 11 |
| 12 | Public Finance | | 1 | | 12 | Public Finance | | 1 | | 12 | Public Finance | | 1 | | 12 |
| 13 | Financial Institution | | | 1 | 13 | Financial Institution | | | 1 | 13 | Financial Institution | | | 1 | 13 |
| | Total | 3 | 5 | 7 | | Total | 3 | 5 | 7 | | Total | 3 | 5 | 7 | |

TOTALLY AVOIDED: $2/13 \times 100/1 = 15.3\%$,
EXCESS $3/13 \times 100/1 = 23.07\%$
PARTIAL: $1/13 \times 100/1 = 7.69\%$

MISPLACED: $2/13 \times 100/1 = 15.3\%$,
EQUATED: $4/1 \times 100/1 = 30.76\%$
MISPLACED & AVOIDED

Economics II

Expected and Actual Table of Specification – 2011

Table 10: Percentage coverage of the behavioural objective in the NECO Economics multiple choice test items for 2011 – Ss111.

| SSIII | | Ideal Cognitive Levels | | | | Actual Cognitive Levels Tested | | | | | | | | | |
|-------|---|------------------------|---|---|---|--------------------------------|---|---|---|---|---|-----|---|---|---|
| S/N | Topics | 1 | 2 | 3 | 4 | S/N | Topics | 1 | 2 | 3 | 4 | S/N | Topics | 1 | 2 |
| 1 | Industrialization | | | 1 | | 1 | Industrialization | | | 1 | | 1 | Industri-tion | | |
| 2 | Theory of Demand and Supply | | | | 1 | 2 | Theory of Demand and Supply | | | | 1 | 2 | Theory of Demand and Supply | | |
| 3 | Market Structure | | | | 1 | 3 | Market Structure | | | | 1 | 3 | Market Structure | | |
| 4 | Elements of National Income Accounting | | | 1 | | 4 | Elements of National Income Accounting | | | 1 | | 4 | Elements of National Income Accounting | | |
| 5 | Elementary Theory of Income Determination | | | | | 5 | Elementary Theory of Income Determination | | | | | 5 | Elementary Theory of Income Determination | | |
| 6 | International Trade | | 1 | | | 6 | International Trade | | 1 | | | 6 | International Trade | | 1 |

| | | | | | | | | | | | | | | | |
|----|---|----------|-----------|-----------|----------|----|---|----------|-----------|-----------|----------|----|---|----------|-----------|
| 7 | Balance of Payment | | | 1 | | 7 | Balance of Payment | | | 1 | | 7 | Balance of Payment | | |
| 8 | Economic Organizations | | | | 1 | 8 | Economic Organizations | | | | 1 | 8 | Economic Organizations | | |
| 9 | Economic Development | | | 1 | | 9 | Economic Development | | | 1 | | 9 | Economic Development | | |
| 10 | Petroleum and Nigeria Economy | | 1 | | | 10 | Petroleum and Nigeria Economy | | 1 | | | 10 | Petroleum and Nigeria Economy | | 1 |
| | Total | | 2 | 4 | 3 | | Total | | 2 | 4 | 3 | | Total | | 2 |
| | Grand Total (SSI + SSII + SSIII) | 7 | 11 | 16 | 9 | | Grand Total (SSI + SSII + SSIII) | 7 | 11 | 16 | 9 | | Grand Total (SSI + SSII + SSIII) | 7 | 11 |

Where, + indicates levels where additional items were generated not as stated in the actual table of specification

Indicates levels where specific items were not generated as in the actual table of specification
The tables above are a representation of the themes, their expected allocation under **ideal** circumstances and their **actual** weights of allocation in the examinations for the three years. At the extreme of each row is a box that shows the status of allocation or inclusion of such a theme or topic in the examination. The major categories are **equated** where the allocation for ideal and actual matches; **partial**, where the allocation has not been fully done; **totally avoided** where no item has been generated for that theme; **excess** where more than required item has been constructed for

that theme ; and **misplaced** where the required number of item is generated for that theme but is assigned to a wrong cognitive level . Please note that cognitive levels **1, 2, 3, 4, 5** and **6** represent **knowledge, comprehension, application, analysis, synthesis** and **evaluation** respectively. Note also that: the symbol **+1** indicates there is an additional item vis-a-vis the expected table of specification while **- 1** Indicates a loss of an item at that very location when related to the expected table of specification.

Discussion

From the result, it is obvious that though not all the themes were covered, the test packages achieved high percentage coverages in the years under study. Some themes were

conspicuously omitted for the three years under study. These include; business finance, applied economics and contemporary economic organization and comparative economics. The omission could be as a result of the difficulty in generating objective test items in certain topics or the possibility of discarding a poorly generated item from such themes without taking pains to replace them. Ukeje 1977 reported similar issue in SSCE objective test in English language and agreed with Nwankiti (1976) that the objective test format cannot be serviceable in evaluating all the cognitive domains.

Conclusion

Going by the high percentage content coverages of the NECO Economics objective test items for the 2009-2011 sessions, it can be safely said the NECO objective test packages achieve high content validity. This is quite commendable as NECO is one of the main evaluation agencies of Upper Basic and Senior Secondary schools in Nigeria.

Recommendations

It is hereby recommended that;

Federal Ministry of Education and National Education Research Development Council (NERDC) should ensure that such practices of content validation of test items are being carried out in all public examinations in Nigeria.

Measurement and evaluation experts should be employed in the ministries and schools to monitor the above practice. The Federal and State Ministries of Education

should create divisions responsible for quality assurance of public examinations. Such units should look after the conduct of the examination and subject the test items to standardized assessments and analysis to prove their suitability and conformity to ideal standards.

As the nation adopts the above recommendation, we can hope for improved quality in our public examinations.