

**ASSURING CULTURE FAIRNESS IN SOCIAL
STUDIES TESTING AT THE BASIC LEVEL OF
EDUCATION IN NIGERIA**

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Abstract

The paper examined the need to ensure culture fairness in Social Studies testing in Nigeria schools in view of the introduction of new concepts into the curriculum. The meaning of the main concepts that underpin the discourse of the paper-culture and culture-fairness were discussed bringing out their relevance in achieving fairness in Social Studies testing. Principles and procedures that can guide Social Studies teachers in ensuring culture-fairness in testing were highlighted.

Introduction

Educational testing is the process of obtaining learners' cognitive competencies by subjecting them to test items derived from learnt curriculum contents in a subject area. It is synonymous with measurement of learning outcome in the cognitive domain. Issues that pertain to test fairness or its direct bipolar, test bias are difficult to define or explain in categorical terms. This is because when test fairness or test bias is mentioned, test or measurement experts have different connotative meaning or interpretation about it. For instance, according to Mehrens and Lehmann (1978) culture fairness or culture bias can be interpreted from the following perspectives:

- (i) if different sub-groups obtained different mean scores on a

test.

- (ii) if it measured different constructs for different subcultures.
- (iii) differential prediction equations and/or different selection ratios or success ratios. Selection ratio and success ratio are factors that affect whether test data are likely to improve decision making. Selection ratio is the proportion of people to be selected while success ratio is the proportion of people selected who succeed.

The rationale for ensuring test fairness in testing depend largely on the notion that test results (scores) are used to make high stake decisions that affect learners educational progress in future. As such, Childs (1990) and Hambleton and Rodgers (1995) contend that students who take them should be given equal opportunity to demonstrate their abilities and knowledge.

Factors that have Influenced Current Testing Procedures

Many factors have influenced testing procedures in modern times. Kaplan and Saccuzzo (2004); Thorndike (1997) observed these factors to include: science of psychology, achieving common and higher standards, increased objectivity and improved technology.

- (i) Science and Psychology: There is need to improve testing procedures and the quality of test items. New ways of testing have been influenced considerably by researches conducted by psychologists in the laboratories especially among behavioural psychologists.
- (ii) Achieving Common and Higher Standards: Standards involve the introduction of quality into something. In testing, therefore, uniform guidelines have enabled test constructors to reach some level of agreement. Also, standards had improved the quality of test uses among test users, by increasing their knowledge on what to look out for in tests. This ensures that the right test is used for the right purpose.
- (iii) Improved Technology: Technology especially the introduction of computers had enabled the use of statistical procedures such

as factor analysis and item analysis to improve the quality of test items.

- (iv) **Increased Objectivity:** Objectivity in testing has equally influenced and will continue to influence the quality of testing processes. In this regard, empirical researches in education and psychology have contributed a great deal in achieving this feat.
- (v) **Proper use of Tests and Increased Public Awareness and Influence:** Other factors as highlighted by Kaplan and Saccuzzo (2004) are proper use of tests and increased public awareness and influence. Every year, in Nigeria for instance, greater public outcry on students' poor performance in public examinations such as WAEC, NECO and JAMB examinations have led to the demand for better ways of reporting students' performances to reflect other criteria (indicators) such as relating performance across gender. Proper use of tests to eliminate or minimise abuse and misuse of tests thereby increasing testees and test users knowledge of their rights is also on the increase.
- (vi) **The use of Computer and Internet Facilities:** Besides all the aforementioned reasons, a current challenge that is stalling public examining bodies and school administrators in Nigeria on the face is how to grapple with competencies of examinees and their teachers on computer appreciation skills and the use of internet facility both in teaching and testing. Many processes of testing are currently being taken over by computer through on-line procedures. Though the western world has progressed ahead of Nigeria and other developing nations in this area, there is so much Nigeria and other developing countries have to do so as to get along with trends in other parts of the world where the use of these facilities have been put right. Nigeria for instance has to seek for ways to solve the many problems confronting the optimal use of these facilities. These include problems of electricity, testees and instructors proficiency on the use of computer for testing, attaining competencies in the development of valid and reliable test items among others.

Meaning of Culture and its Characteristics

Culture, in the views of Akhandjyoti (2003), incorporates genesis, the

expansion of the philosophy, values, goals and modes of life in any society or nation. According to this source, culture involves the basis and nature of life of a social or national system that provides support and atmosphere for civilised liberal and illuminating progress of a people. Culture, according to this source, therefore, is the backbone of any society-traditional or modern- through which the social, traditional, arts, festivals, rituals, values and the way of life of the community are developed and shaped. Also, according to Kaplan and Saccuzzo (2004), all cultures tend to reinforce certain skills, and activities at the expense of others. As a consequence, any disruption in the flow of cultural values alters the structure of the society or civilization (Akhandjyoti,2003).

The characteristics of culture among others are;

- (i) it is shared by a group of people;
- (ii) it is learned and not biologically inherited;
- (iii) it has evolved through the ages;
- (iv) it is based on symbols as in objects of worship. ; and
- (v) it is integrative in nature since all human endeavours such as economic, political, social and religious activities are neatly linked.

These characteristics and perhaps several others, make culture peculiar to different races of the world. These peculiarities are due to variations in their historical antecedents, circumstances, philosophies, social and geographical conditions; and modes of life of the people as well as the extent or state of technological and scientific development of the society or nation. Culture, thus, plays a very important role in influencing what we do and how we do it.

Meaning of Culture-Fairness Test and its Uses

The term culture- fairness test was mostly used in relation to intelligence tests, because critics of these tests found them to be biased against the testees who took them. Intelligence is the entire repertoire of a person's acquired skills, knowledge, learning sets and generalised tendencies considered to be intentional in nature

(Mehren & Lehmann, 1978). Tests designed to measure these attributes are intelligence tests. These tests have been critiqued because of the belief that they are biased against certain racial and economic groups. Experts and some individuals do not agree on the objectivity of intelligence tests. For instance, Kaplan and Saccuzzo (2004), Jones (2003) and Owen (1985) believe they are not objective while some authors such as Gregory (1999) and Greisinger (2003) are certain about their objectivity. In addition, research evidence has shown that there is a correlation between standardised intelligent tests and socio-economic background, findings which Kaplan and Saccuzzo (2004) have linked to the works of Bernstein, Hahn, Sawalsky and Haynes (2003). These authors contend that research evidence as these has made many other people such as Hays (2001) and Micle (2002) to believe that intelligence tests are biased mostly against ethnic minority and people from poor background and are employed to maintain status quo. There are different types of test biases. Among these are: gender, culture, language and religious biases.

In the views of Hambleton and Rodgers (1995) cultural bias is defined as the presence of some characteristics of an item that result in differential performance for individuals of the same ability but from different ethnic or cultural groups. Similarly, if a test favours one group of examinees over another, the test is considered biased and violates the principle of test fairness (Schumacker, 2010). When a test item is responded to by a group of examinees who possess equal knowledge, but exhibit different probabilities of success on the item, a situation that Schumacker referred to as Differential Item Function (DIF), then that item is biased.

Of particular interest in this write-up is the meaning of culture-fairness test and its application seen from the perspective that a test is constructed to measure different constructs for different sub-cultures or cultures. By implication, when differential measure is obtained for different sub-groups or groups on a test, it is said to be bias and it is not ideal. This type of situation will most probably occur when a Social Studies teacher at the lower basic level of education in Nigeria adopts a test constructed for a different cultural group or sub-group without any modification and goes ahead to administer it to students in his/her prevailing cultural context. The point being made is that a

test constructed in the Western or Eastern world like North America, South America, Asia etc. will not necessarily be suitable for a Nigerian learner if it is not made culture fair. Similarly, tests which consist of images, objects or visuals are more susceptible to misconception by testees. Culture-fairness items are thus generally designed to minimise the effects of the differing cultures or experiences of national, ethnic, sexual or socio-economic groups. These tests should not favour one group of persons while putting the other group at a disadvantage.

Though psychologists contend that it is not totally possible to achieve a hundred percent test that is culture fair (Kaplan & Saccuzzo, 2004), it is the contention here that there is need to strive to achieve or reduce any bias to the barest minimum, especially when dealing with Social Studies contents that are culturally loaded and value-laden. Thus, culture fair tests are relatively free of all influences of culture, language, ethnicity etc. or tests that reduce cultural factors as much as possible.

The Nature of Social Studies Curriculum

The Social Studies school programme, according to Akinbote (2006), draws its contents from the social science, local communities, current affairs and world problems and does not exclusively belong to one particular discipline. He, argued further that Social Studies programme is concerned with the wide dissemination of information, the development of social and inquiry skills; and the improvement of social attitudes and behaviours. This way Social Studies emphasises 'the functional use' of the subject matter from many sources to increase and improve social literacy, and to develop the socially and desirable behaviours that evolve from sound attitudes and the appreciation and understanding of other people in young learners.

To make the Social Studies school programme work, the curriculum structure is organized in themes and topics spirally arranged. Thematically, the curriculum is organised to emphasise human interrelationship with the environment, the problems human is confronted with and their solutions. The Universal Basic Education Social Studies Curriculum (2007) is currently organized into major clusters and themes that are related. From these, topics and units are selected. These are:

- (i) social and cultural issues and problems,
- (ii) economic issues and problems,
- (iii) health issues and problems,
- (iv) civil and political issues and problems,
- (v) infrastructural facilities/services, and
- (vi) scientific and technological issues and problems.

In addition, the major concepts or topics for instruction are selected from societal issues and problems. These are organised in a spiral form in such a way that any major issue or topic selected and organised in the first year, is built upon in greater depth and scope in the subsequent second or third year as the case may be.

Social Studies is a dynamic school subject. As a result of human's social behaviour, changes in events in human society often times necessitate that the content of the curriculum be modified, revised or updated at intervals. Rapid changes in events at national and international arenas call for changes in knowledge of the subject, otherwise, Social Studies knowledge becomes obsolete. Similarly, the fact that the world has fast become a global village has brought different cultures of the world closer together, and it has also ensured that knowledge is no longer being hoarded. Consequently, the Social Studies curriculum has to be revised and updated to achieve relevance, currency, depth and interrelatedness of curricula contents. Such changes no doubt ensures that learners are equipped with skills that empower them to live meaningful lives after schooling, have improved value re-orientation, enhanced job and wealth creation among others.

Research efforts conducted to evaluate the role of core subject curricula at the junior basic secondary school level in drop-out reduction, indicated differential rate of these curricula in achieving the UBE objectives. The Okwilagwe and Sadiku (2011), study for instance, which reported these findings, observed that Social Studies curriculum achieved 53% reduction rate with adaptability being the only important influencing indicator out of the seven quality curriculum indicators measured. In contrast, English Language and Mathematics achieved 68% and 70% reduction rates respectively. Indicators such as relevance, responsiveness and application of teaching-learning

methods were important for English Language and for Mathematics, adaptability, responsiveness, relevance, application of teaching-learning methods and materials were important indicators. Inferences from these findings indicated that the implementation of Social Studies curriculum is far from achieving its curriculum objectives yet.

The objectives of Social Studies as encapsulated in the 9-years Basic Education Social Studies curriculum are to

- i. develop ability to adapt to the changing environment;
- ii. inculcate the right type of values;
- iii. develop a sense of comprehension towards other people, their diverse cultures, history and those fundamental things that make them human;
- iv. develop the capacity to recognize the many dimensions of being human in different culture and social contexts; and
- v. develop a sense of solidarity and sharing based on a sense of security in one's own identity (Federal Ministry of Education, 2007).

To achieve these objectives, the methods and strategies of Social Studies curriculum implementation are to be practical, participatory, comprehensive by promoting the three domains of learning and student-centred. However, studies (Okwilagwe & Adetayo, 2011; Okwilagwe, 2005; Blake & Landsdell, 2000) have shown that many Social Studies teachers and teachers generally do not give enough attention to employing effective learning enhancing methods and strategies but use lecture as the dominant method, without the use of copious instructional materials. Also, Social Studies teachers selectively teach topics they are comfortable with excluding the difficult ones (Falaye & Okwilagwe, 2008). With these deficiencies, it is doubtful if Social Studies as currently taught and evaluated can guarantee the achievement of the set objectives. Going by the indicators of quality measured in the Okwilagwe and Sadiku's (2011) study, and the minimal extent achieved in Social Studies, teachers have much to do with respect to the compliance of laid down methods/strategies of teaching and evaluation of the Social Studies curriculum content

to achieve its objectives.

Achieving the Objectives of Social Studies at the Basic Level of Education in Nigeria

Social Studies education exposes the individual (learner) at the basic level of education to the totality of experiences and understanding of the problems that confront human as he/she interacts with his other environments. In view of this, Social Studies learning at this level of education aims at inculcating in the individual knowledge, skills, competencies, values, morals necessary for making seasoned judgement to effectively live, interact and contribute to the development of all facets of human endeavours in Nigeria and the world at large.

To achieve the aims and objectives of Social Studies as highlighted in this work, contents at the basic level are so structured that the recipient is expected to imbibe all the values and morals, and develop skills and competencies among other things, and be useful to the society. The curriculum, is therefore, dynamic and ensures that it is regularly updated. Currently, emerging issues that are of public concern and are value-laden have been incorporated into the curriculum besides those already being taught in order to meet the Millennium Development Goals (MDGs) and the critical elements of National Economic Empowerment and Development Strategies (NEEDs) (FME, 2007). These contents include religious practices, cultural practices, family, marriage types and practices, family life/HIV and AIDS, gender discrimination, drugs and its abuse; human rights education, peace and conflict, entrepreneurial skills.

These topics have to be taught and examined by the teacher. Inadequate textual materials that expose teachers to the nitty-gritty of how to handle these new topics, poses a challenge to many teachers. Another challenge is the constraint of inability to develop valid testing instruments. Thus, the tendency sometimes is to want to borrow from other culture and use existing evaluation/testing instruments in the subject area. When this is the case, there is the need for teachers to borrow and use sensibly so as not to jeopardise the learners achievement and parents expectations from schooling. Teachers need adequate information on how to go about constructing

good items or what to do if items are adopted.

How to Ensure Culture-fairness in Social Studies Testing

1. Define clearly, the purpose for testing, the content and skills to be tested.
2. Have clear guidelines on the characteristics of the testees, the content and content coverage, and other information that will ensure fairness throughout the test development process.
3. Select and use the most appropriate test/instrument based on your knowledge of content, skills and the intended testees.
4. Review the test to ensure that test items are appropriate for the content and skills intended to be assessed.
5. Ensure that the linguistic demands of the items are appropriate for the level of testees.
6. Avoid demeaning language and complex vocabulary. Use general items instead.
7. Avoid controversial, inflammatory and upsetting materials to member of one gender, ethnic group, culture and so on.
8. Ensure the items are construct, gender and culturally appropriate.
9. Provide the testees with clear guidelines and procedures for taking the test/examination well in advance of the test administration.
10. Provide a conducive testing environment for all groups of testees.
11. Guideline for scoring the test must be provided and strictly adhered to.
12. In order to ensure objectivity, scorers must be trained to use scoring guideline almost the same way and to ensure that construct irrelevant factors do not influence their scoring.
13. Communicate test results promptly (Institute of Education, University of Ibadan, 2008).

Beside the above identified principles, there are others as identified by Childs (1990) that the teacher needs to know. They have to do with test use which is an important aspect of test fairness. They are:

1. The need to ensure comparability of prediction of test scores for all groups on the test which scores are to be used for placement and promotion decision,

2. Less reliance on the use of a single test score,
3. Avoiding basing decision on irrelevant characteristics rather than on the construct being measured, and
4. Most importantly is the meaning that is ascribed to the obtained scores and the action it generates.

Conclusion

Issues of cultural fairness in testing are very important when it comes to ensuring that candidates or group of persons taking specific tests are concerned. To achieve objectivity and fairness in testing, the overriding principle is to ensure that all essential aspects of test construction from item development, validation, administration, scoring and/or adoption and use of already produced tests guarantee fairness. Otherwise, the test serves no usefulness. Social Studies teachers testing at the basic level of education in Nigeria, should aim at achieving fairness at each and every level afore-mentioned. Culture fair tests do not only ensure objectivity in testing but ensure that testees are put on the same pedestal to achieve equally without undue advantage or disadvantage of an individual or group over the other. Indeed, a good test or score is only considered valid when all these procedures are properly adhered to.

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