

TABLE OF SPECIFICATIONS: AN EFFECTIVE TOOL FOR THE CONSTRUCTION OF CHRISTIAN RELIGIOUS STUDIES' TEST (CRST)

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Abstract: The present study demonstrates how table of specifications (TOS) serve as a tool for designing effective Christian Religious Studies (CRS) test by the teacher for assessment. It is presented as a foundational tool used by the teacher for educational assessment. This entails an alignment between assessment content and intended learning outcomes. TOS facilitates the creation of teacher-made test that accurately measure student understanding. By delineating the distribution of topics, cognitive levels, and weightage of each of item, TOS enhances assessment quality and fairness. Teachers can use this framework to construct CRS tests that reflect both content mastery and critical thinking skills. In general, teachers hardly make use of table of specification in constructing test items used to assess their students' knowledge. As a result, they have no idea about the weighting and quality of the test administered to students. Table of specification should help the teacher to plan instruction and construct items before achievement test is taken. This paper, therefore, looks at how to close the gaps between the table of specifications and the construction of CRS test. It is recommended among others that TOS should be adopted by the teacher for classroom test because it gives direction to the teacher about the number of items to be included in the test. It guides the teacher in the development and evaluation of classroom test.

Keywords: Test, Teacher-made test, Evaluation, Table of Specification.

Introduction

Table of Specifications (TOS) is a valuable tool for educators and test developers. It allows them to design assessments that focus on key areas and allocate appropriate weight to different content domains. Hence, it is a valuable tool for educational assessment. Its primary purpose is to ensure alignment between content, skills, or constructs that an assessment intends to measure and the actual test items. That is, content alignment and thinking skills alignment. TOS helps educators and test constructors focus on response content. For instance, if the students' understanding of a biblical concept 'humility' is being assessed, they may be asked to

provide examples from biblical narratives. And for the thinking skills alignment, questions that require students to analyze, evaluate, or synthesize the biblical concept can be asked. This topic will be treated under the following sub-headings: meaning of test, teacher made-test, principles and procedures in developing a teacher-made test, meaning of evaluation, types of evaluation in education, constructing a table of specification on Christian Religious Studies, content validation.

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Test and Test Construction

One of the most used assessment tools in education is to conduct tests. Apart from being an instrument, tests can also be standard procedures used to measure a sample of behaviour in a systematic way. It can be done by generating items. Tests are used to measure the quality, ability, skill or knowledge of a sample against a given standard. In educational practice, tests are methods used to determine the students' ability to complete certain tasks or show mastery of a skill or knowledge of content. Tests can take the form of multiple choices (Adom, Menser & Dake 2020). Test is not only beneficial to students but also to teachers.

It enables teachers to increase their own efficiency by improving or changing their teaching patterns so that students can benefit more. Therefore, the teachers can see the reflection of their teaching techniques that they used in teaching and learning process (Erna, Jabu, Salija 2018). A test, therefore, can be a tool or method that teachers use to improve teaching and learning. As a tool or method, a test is intended to measure students' knowledge or their ability to complete a task. In this sense, testing can be considered as a form of assessment. However, for a test to be measurable, it must meet some basic requirements, such as validity and reliability. Validity refers to the extent to which a test measures what it is supposed to measure while reliability refers to the consistency of test scores when administered on different occasions (Rhalmi 2018). A test, according to Hartell and Strimel (2019) is a form of written assignment consisting of questions and/or problems to be answered or solved by pupils/students individually during a limited period. The test can take place in a classroom or any other special place meant for it. Test can be divided into two: standardized test and teacher-made test. Standardized tests are instruments that measure and predict ability, aptitude and achievement test. Standardized test is a test that is administered and scored in a consistent manner. It is designed in such a way that the items, conditions for administering them, scoring procedures, and interpretations are consistent and are administered and scored in a predetermined standard (Choudhary & Chaudhary 2022). Simply put, what it means is that test is administered and scored in the same way for everyone who takes the test. This is important because it allows for the comparison of the scores of any student who takes the test across any period (Hartin, 2022). Standardization is a process through which standardized tests are

administered to group of examinees at the same time, scored in the same manner and are assessed in the same way. Anigbo (2014) noted that standardized tests are constructed through a team effort of experts (subject, curriculum and measurement specialists). These standardized tests must be administered under uniform conditions, they must be scored objectively, and they are designed to measure relative performance and not absolute ability on a task. Standardized tests are referred to as assessments. The score or result for each student is then compared to the rest of the group to see how well the students performed (Grant, 2021). Standardized tests are not restricted to use in a school or a few schools but to larger population, so that many schools can use such types of tests to assess their own performance in relation to others and the general population for which the test has been standardized. Standardization of a test is crucial in test construction and administration. For this reason, it must follow a procedure for test development. The procedures as outlined by Anigbo (2014) are as follows: (1) Determination of the objectives of instruction, (2) Construction of a table of specification or test blueprint, (3) Construction of the items to measure the stated objectives, (4) Trial testing, (5) Item analysis, (6) Editing and Selection of items, (7) Final administration, (8) Test Manual. The purpose of standardized tests is to provide fair, valid and reliable assessments that produce meaningful results. If standardized test is done judiciously and qualitatively, it can eliminate bias and prevent unfair advantages by testing the similar information under the same testing conditions (Sirechi 2020). In constructing items for a standardized test, the subject content area must be considered. Though, standardized test and teacher-made test are planned and constructed the same way with a table of

specification, but they vary in the quality of test items, in the reliability of test measures, the procedures for administering and scoring and the interpretation of scores. Teacher-made test does not follow the rigorous process or steps of standardization. That is why, standardized tests are often considered as better in quality, more reliable and valid than teacher-made test (Dishap 2022). Having seen what standardized test means, the interest of this work is on teacher-made test. Emphasis will be on the construction of teacher-made test. Test construction is developing assessments that accurately measure certain psychological traits or skills. This process involves determining the test's objectives, choosing suitable methods, developing test items, and assessing the test's reliability and validity. The aim is to make sure that the test accurately measures the intended concept and is beneficial for practical use (Franzen, 2018). It is not enough to construct a test, rather the above points are considered in the construction of a good test.

Teacher-Made Test

The teacher is one of the determinants of students' success in learning. The reason is that the teacher is a facilitator, learning resource, scientific resource, and assessing student learning outcomes. The type of teachers needed are those who are capable of learning in learning. It means that the teacher learns while teaching. The teacher never stops learning. The teacher is therefore, expected to improve students' competence, motivating students, diagnosing learning difficulties, collaboration skills, and guiding students to think critically. In addition, the teacher should also be interested on how to conduct appropriate class assessments on learning outcomes (Kurniawan, Syifa, Huda, Kusuma 2022). Teacher-made test is developed by the teachers for the aim of conducting classroom

tests. It can be in the form of oral tests or written tests. While the teacher made oral tests are designed to measure the performance of students' skills like listening and speaking in language learning, written tests are aimed to test the abilities of students' knowledge, understanding and written expression. It is the teacher that constructs the teacher-made test. Teacher made-test measures outcomes that are directly linked to classroom specific objectives and specific class situations (www.ada 2022). Teacher-made test is a classroom test. It is used for assessing the progress or performance of students in the classroom. Teacher-made tests are designed by the teacher for his/her class for a special purpose. That is why they are commonly known as teacher-made tests. These tests are meant to cover a subject's content area or course prepared by the teacher to be used in his/her own classroom. It is all about what was taught in classroom. Simply put, what makes the teacher-made test different is that it is constructed by the teacher and it covers only the materials as specified in the curriculum. Teacher-made test is not field tested and revised, and it is not administered to a norm group. Teacher-made test can be prepared for a class, it can be developed for a specific situation, based on a specific set of objectives and a specific group and it is prepared for a single administration. Teacher-made test should be properly planned and carefully prepared to evaluate knowledge of the content taught in the class (Kissi, Oduro-Okyireh, Agyei, 2025). There are certain steps or procedures that a teacher should consider before constructing a test that will be used to measure students' learning outcome.

Steps in Constructing a Teacher-Made Test

There are important steps or procedures in the construction of classroom or teacher-made test. Teachers' Institute (2024) outlined five major steps:

1. Identifying Instructional Objectives: Here, objectives are clearly defined, specifying what students should know or be able to do after instruction. The objectives must be specific. Measurable, attainable, relevant, and time-bound (SMART).

2. Designing the Test: This is determining the test's purpose, format, and length. Then the teacher decides on the types of questions (e.g., multiple-choice, short-answer, essay) that align with the objectives.

3. Preparing a Blueprint: The teacher creates a table that maps each test item to the corresponding instructional objective and content area. There should be a balanced representation of all topics and cognitive levels.

4. Writing Test Items: Developed items must be clear, concise, and unambiguous. The teacher ensures that items are appropriate for the students' cultural and educational backgrounds.

5. Developing a Marking Scheme: The teacher establishes clear criteria for scoring each item, provides rubrics for open-ended questions to ensure consistency and fairness in grading.

Table of specifications cannot be ignored in teaching and learning. Teachers use it to plan lessons and to make sure that their specified objectives have been attained. Table of specifications is used in all subjects taught in schools, as will be seen in Christian Religious Studies. Christian Religious Studies (CRS) is one of the major subjects in the Basic and Senior Secondary Schools in Nigeria.

Christian Religious Studies

Following the emphasis of National Policy on Education (Federal Republic of Nigeria, 2014) on positive attitude and character moulding as the focus of Nigerian education system, Christian Religious Studies in the Basic and Senior Secondary School curriculum would help to achieve these goals. CRS as the name implies is a school subject that has its based on the Christian Bible. CRS is inculcated by the means of religious education in schools, and religious education is the teaching of a specific religion or teaching of religions in general and its varied aspects, its beliefs, devotion, rituals, customs, rites and personal roles. These make religious education differ from rigorous academia which guards religious beliefs as a fundamental tenet and operating modality (Anyebe, 2018). CRS is designed mainly to achieve many goals in the lives of the learners beginning from teaching them about God to the teaching of moral values which is aimed at shaping human behaviour. These values are drawn from the stories and events recorded in the Bible (Njoku and Njoku 2015). The importance of CRS in the education of children is irreplaceable since it is geared towards molding them for good living. Christian religion, according to Eluu (2016) is an instrument for the development of spiritual, moral and mental growth of the pupils or students. It imparts in children an understanding of the universe and the interpersonal relationship between human beings and the supreme being. The importance of Christian religion in inculcating value is found in the claim of personal and spiritual knowledge of God through Jesus Christ, the son of God. It is a stabilizing factor in the individual personality. It trains the students morally and imbues in them the desire to do good and be virtuous. The religious values inculcated in the students help them to raise fundamental questions relating to life and existence. These are the

reasons why CRS subject is being taught in the school. To construct CRS test items, a table of specifications is needed by the teacher as a tool to plan, assess the content coverage and testing of students' cognitive abilities. Table of specifications is one of the valid procedures that a teacher must follow before constructing the items.

Table of Specifications

Table of specifications also known as test blueprint is a table that guides the test developer, and in this case, the teacher to ensure that all measurable relevant abilities are covered. The table is a guide which helps the developer (teacher) to know the number of questions that should come from each content area and the taxonomy levels to be tested. each component of the contents is weighted in proportion to its judged importance (Anigbo, 2014). The Bloom's taxonomy is usually adopted by test developers. The purpose of using a table of specifications is to identify the achievement domains being measured and to certify that the test comprises a fair and representative sample of questions. The teacher cannot measure every topic and objective or ask every question he/she may want to ask but the table of specifications helps him/her to construct a test which focuses on the main areas and weighs those areas according to their importance. Hence, a table of specifications offers the teacher with evidence that a test has content validity that covers what should be covered (studocu.com, 2023). To construct a table of specifications, the teacher should have knowledge of the six levels of the cognitive domain of Bloom's taxonomy of education: knowledge, comprehension, analysis, synthesis, application and evaluation. As noted in Ebuoh (2024), the table of specifications has two dimensions; the content and the process objectives. While the content

comprises series of topics from which the competence of the students is to be tested, the process objectives or mental processes are the cognitive domains. The weighting of the content and process objectives, that is, the percentage of each items on a topic depends on the importance and amount of time placed on it during teaching. Percentages assigned to the topics of the content and the process objectives should make up to 100%. To determine the total number of items, some

things must be considered; time available for the test, type of test to be used, age and ability level of the students, and the type of process objectives to be measured (Ebuoh, 2024). Table of specifications aids the teacher to look at the topics and the number of items that will be included in the topics. It is a guide to the teacher for the development and evaluation of his/her classroom tests.

An example of a table of specifications of Christian Religious Studies' test for Upper Basic 1 (JSS1). Pattern adopted from Ebuoh (2024).

| Objectives Content | Knowledge Recognizes terms and vocabularies 30% | Comprehension Identifies facts, principles and generalization 30% | Analysis Break idea into parts 10% | Synthesis Put elements together to form new matter 10% | Application Applied knowledge in new situation 10% | Evaluation Judge the worth of information 10% | Number of items |
|--|---|---|--|--|--|---|-----------------|
| God and his creation 25% | 4 | 4 | 1 | 1 | 1 | 1 | 12 |
| God's Call 20% | 3 | 3 | 1 | 1 | 1 | 1 | 10 |
| Keeping God in our Relationship 30% | 4 | 4 | 2 | 1 | 1 | 2 | 15 |
| The early life of Jesus 25% | 4 | 4 | 1 | 2 | 2 | 2 | 13 |
| Number of items | 15 | 15 | 5 | 5 | 5 | 5 | 50 |

The procedures for obtaining the percentages of both the items for each topic and the process objectives are as follows, using one of the topics as an example: To obtain the number of items for a topic and process objectives, the percentage of each of the total number of items to be constructed is multiplied and divided by 100.

God and His Creation (i.e. 25% of 50 items): $\frac{25}{100} \times \frac{50}{1} = 12$

Knowledge: $\frac{30}{100} \times \frac{50}{1} = 15$

Comprehension: $\frac{30}{100} \times \frac{50}{1} = 15$

Analysis: $\frac{10}{100} \times \frac{50}{1} = 5$

Synthesis: $\frac{10}{100} \times \frac{50}{1} = 5$

Application: $\frac{10}{100} \times \frac{50}{1} = 5$

The items to know if they truly represent what is intended for the measurement of the area of interest such as achievement. There is no statistical tool for the measurement of content validity, hence, it can be measured through a qualitative approach. According to De Souza, Alexandre, Guirardello (2017), content validity index (CVI) measures the percentage of judges who agree on some aspects of a tool and its items. The CVI method involves a four-point Likert scale, where:

- 1: non-equivalent item
- 2: the item needs to be extensively revised so that equivalence can be assured
- 3: equivalent items need minor adjustments
- 4: totally equivalent items

The procedure is that the items that receive 1 or 2 points must be revised or removed. Then to calculate the CVI for each item of the instrument, the researcher will have to add all 3 and 4 of the experts committee

Evaluation: $\frac{10}{100} \times \frac{50}{1} = 5$

A 'Table of Specification' or 'Test Blueprint' is needed in determining the accuracy of the content validity of test instruments (Ebuoh, 2024). In writing test, the teacher must write a valid test, and this is where content validation of the table of specifications becomes necessary. If a test is not valid, it will be deficient in measurement, that is, it will fall short of measuring what it intended to measure. Content validation, therefore, ensures that a test accurately represents all it intends to measure. The teacher must look at how well-structured the items are. After the test has been constructed or developed, the teacher should be able to use the table of specifications to evaluate

and divide the result by the number of answers, using the formula below:

$$CVI = \frac{\text{No of answers 3 and 4}}{\text{Total no of answers}}$$

The acceptable concordance index among the experts must be at least 0.80, and higher than 0.90 is preferable. Nonetheless, content validity can be assessed using common sense. There is no coefficient for it.

Conclusions

Often teachers tend not to pay attention to the need for table of specifications since teacher-made test is simply a classroom test. They fail to recognize that teacher-made test should be predictive of students' future performance. Table of specifications is important in teaching and learning because with it, the teacher can evaluate specific objectives, curriculum coverage and his/her teaching method. Table of specifications guides the teacher in planning instruction, to ask what has been done and what needs

to improve on his side as well as the learner or student. Table of specifications guides the teacher in the construction of test items which he/she uses in the classroom or at the end of a term to assess students learning cognitive abilities. It usually takes the form of achievement test.

Recommendations

The following recommendations are made based on the topic:

1. Table of specifications should be adopted by the teacher for classroom test because it gives direction to the teacher about the number of items to be included in the test. It guides the teacher in the development and evaluation of classroom test.
2. The use of table of specifications helps the teacher to make value judgement of students' achievement.
3. Table of specification aids the teacher in writing valid test.

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