International Journal of Novel Research in Engineering & Pharmaceutical Sciences
Journal Homepage : https://journalofnovelresearch.com ISSN : 2348-8689
Int.J.Novel.Res.Eng & Pharm.Sci., Vol 9, Issue 01; 01-05

(Research Article)

Table of Statement: Performance of Blueprint forAchievement of Specific and General Objectives

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1. Introduction

The table of specification is often useful to organize the planning processes of designing a testwhich allows the teacher to determine the content of the test.

The purpose of the table of specification (TOS) is to identify the achievement domains being measured and to ensure that a fair and representative sample of questions appear on the test to elicit general output.

A table of specification (TOS) provides the teacher with evidences that the test has content validity, that is, it covers what should be covered. Hence, it helps the teacher to alleviate content validity problem through creating good balance in the whole areas.

2. What is TOS – Definition

Table of Specification is a chart that provides graphic representations of data extracted from the treated topics with respect to the designed objectives in relation to the domains of learning based on the percentage of the content coverage of the topics as well as the percentage of measurable objectives from each of the 3 domains of learning.

Content of Table of Specification

1. The domains of learning
2. The lesson plan measurable objectives
3. The verbs of learning

1. The Domains of Learning

Learning takes place within these domains that is why German Psychologist Benjamin Bloom generally categorized learning into three (3) domains and these are – cognitive, affective and psychomotor within each there are multiple levels of learning that progress from more basic, surface-level learning to more complex, deeper-level learning.

i) **Cognitive Domain**:

It involves knowledge and development of intellectual skills. This includes the recall or recognition of specific

facts; procedural patterns, and concepts that serve in the development of the intellectual activities and skills. They have been categorized under the following levels of achievements such as knowledge, comprehension, application, analysis, synthesis and evaluation.

ii) **Affective Domain**:

It involves feelings, attitudes and emotions. This means it encompasses the ways in which people deal with external phenomenon emotionally such as value, enthusiasms andmotivations. Hence, it's factors includes motivations, attitudes, perceptions and values. Therefore, this domain contains five (5) levels from lowest to highest which are: receiving, responding, valuing, organization and characterization.

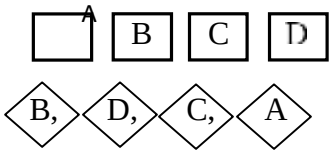
iii) **Psychomotor Domain**:

This domain includes physical movement, coordination and the use of skills areas. The development of these skills requires practice and is measured in terms of speed, precision, distance, procedure or technique in execution.

2. The lesson plan achievable objectives

Each lesson plan should start by considering what students will learn or be able to do by the end of a lesson. For example, by the end of the lesson, students should be able to recite, and identify numbers 1 – 5. Therefore, objectives are the targeted goals of the lesson(s), what the teacher wants achieve with the students in that very lesson at a given period of time. The objectives are normally stated as follows:

1. At the end of the lesson, students should be able to:
a) Identify,
b) Drive
c) Apply the general quadratic equation formula and
d) Solve quadratic equation problemsOR
2. By the end of the lesson, pupils should be able to:
a) Identify and read the alphabet letters
b) Identify and read the letters: A, B, C, D
c) Pick the card of each figure such as



Furthermore, the lesson's objectives has been categorized into two and these are specific andgeneral objectives, which is going to be clarified briefly below:

a) Specific Objectives:

These are the objectives designed within a very short period of time, within a period ordouble period at a given time. It is termed as a short term achievement objective.

b) General Objectives:

They are the objectives that stated in the lesson plan which are achievable in a long period of time, depending on the nature of the topic and the availability of the period or periods allocated for the subject. For instance, the plan might be initially made for 2 periods of 'A' class and at the same time in that very same day you may have a single period in 'B' class and no even a single period for the remaining classes of 'C' and 'D' inthat same day. This therefore, means the already planned lesson of 'A' class has to be shifted to the next day or days of the week for the remaining classes of B, C and D of the same arm. That is as regard to the period allocation of a subject being taught by a teacher.Likewise, a teacher may plan his specific objectives but as a result of the nature of the topic or goals to be taught are taught to the students, the plan cannot be achieved in a single period already planned for but in 2, 3 or even 4 periods of the week for thatspecific objectives plan to be successfully achieved, this is what changed it to general objectives.

In another way, teacher might planned his lesson in the nature of specific achievement but due to the students' socio-economic, or educational background of the students could have tempered and changed the plan from specific to general objectives.

Moreover, right from the word go, a teacher may have his intention of planning a long term achievement plan otherwise known as general objectives.

The Verbs of Learning:
These are the verbs we use in designing our objectives in education, the lesson plan objectives must be measurable and/or observable in nature. This therefore, signifies that all verbs which are measurable or observable and they must be functionable and acceptable verbs in the statement of lesson plan objectives sense. Likewise, all non-observable verbs are unacceptable and not useful in lesson planning.

d) Example of Measurable Verbs: explain, write down, read, list, mention, calculate, count, solve, identify, recite, drive, imitate, work out, enumerate, evaluate, describe, draw,sketch, construct, determine, give.
e) Example of non-observable verbs: know, understand, amplify, appreciate, beware, be(come) familiar with, explore, gain, insight, increase, improve, learn, realize, etc. All these are not measurable verbs.
f) Example of measurable verbs in relation to each domain:

Verb	**Domain**
Recall	Cognitive
Recognize	" "
Memorize	" "
Drive	" "
Examine	" "
Analyze	" "
Write	Psychomotor
Calculate	" "
Mixture	" "
Compute	" "
List	" "
Itemize	" "
Choose	Affective
Compare	" "
Separate	" "
Filtrate	" "
Evaluate	" "

Furthermore, it is also very important for teachers to be aware for using technique or methods interchangeably, so as for the learning to becomes unbias from all angles in order to carry everybody along in the learning processes. For this reason, it becomes necessary for us to indicate the relationship between the learning verbs, methods of teaching and learning domains.

Strategies involved in the Table of Specification Initiation

The main point of consideration in the formation of TOS is the number of items the teacher is intending to set out of the so far content covered in relation to the treated topic in view of the space dominance in the note already treated. For instance, if x, y and z are the treated topics of Biology and the space percentage dominated in the note is 30%, 20% and 50% respectively. It means x topic (30%), y (20%) and z (50%). So, if the total number of items (questions) to set out is 30. We should find the number of items to each topic in respect of the total items (30). For example,

i) x topic 30% of 30 = $^{30}/_{100}$ x 30 = 3 x 3 = 9

ii) y topic 20% of 30 = $^{20}/_{100}$ x 30 = 2 x 3 = 6

iii) z topic 50% of 30 = $^{50}/_{100}$ x 30 = 5 x 3 = 15

However, the same thing to be applied for the domains with respect to the observable verbs used in the statements of the whole objectives right from one end to another end of the whole note.

In view of this, if the teacher observes that the percentage of the whole verbs used implies 40%, 35% and 25% for cognitive, psychomotor and affective domains respectively, to calculate the suitable items for the respective domains under each column of the 3 topics we should find the percentage of the domain with respect to the total number of items for each topic. For instance;

a) Cognitive Domain (40%)

i) Column x 40% x no of items = $^{40}/_{100}$ x 9 = 3.6

ii) Column y 40% y no of items = $^{40}/_{100}$ x 6 = 2.4

iii) Column z 40% z no of items = $^{40}/_{100}$ x 15 = 6.0

b) Psychomotor Domain (35%)

i) x column 35% x no of total = $^{35}/_{100}$ x 9 = 3.15

ii) y column 35% y no of total = $^{35}/_{100}$ x 6 = 2.10

iii) z column 35% z no of total = $^{35}/_{100}$ x 15 = 5.25

c) affective Domain (25%)

i) x column 25% x no of total = $^{25}/_{100}$ x 9 = 2.25

ii) y column 25% y no of total = $^{25}/_{100}$ x 6 = 1.5

iii) z column 25% z no of total = $^{25}/_{100}$ x 15 = 3.75

As regard to the points involved in the table in most of the columns, the negligible ones should be neglected while the reasonable ones could be rounded up. Like under cognitive domain the total items is 12 and the completed values are 3.6, 2.4 and 6.0 respectively. Now, for 2.4 the point 4 should be neglected and consider the point 6 as 1 (one) for the value 3.6 which becomes

3.6 = 4 and 2.4 2, that gives 4 + 2 + 6 = 12 items.

Secondly, for complex row like that of affective domain the total is 7.5 items while the corresponding column values are 2.25, 1.5 and 3.75. The point 2.25 = 2, 1.5 to remain unchangedand 3.75 = 4 which gives 2 + 1.5 + 4 = 7.5 items. Therefore, the rounding up was made through weighing the two decimal numbers 3.75 and 1.5 by

taking the heavier one as 4.

Conclusively, however all totals could be found by computing the percentage with respect to the total items to set out in the test, either vertically for the domains or horizontally for the topics.

3. Recommendations/Suggestions

Since one of the greatest problems we experience here in Nigeria as regard to teaching and learning processes is an unplanned schedule execution such as implementation of lesson without making proper planning to it improvising of teaching aids from local materials, carrying out evaluation, more especially in test or examination by teachers, lecturers etc but without using professionals advises or techniques that put learning processes to the right order.

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