

## MULTIPLE-CHOICE ITEM CONSTRUCTION: PASSAGE DEPENDENCY OF ITEMS

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The backwash effect of testing on teaching and learning is a phenomenon observable in any educational scene. As Pilliner (1968) states: "It is axiomatic that (the) content (of tests) inevitably influences the teaching and learning which precedes them... Properly constructed, (the test) can foster good teaching and sound learning and discourage their opposites." Indeed, this far-reaching influence has made the teacher gravitate towards teaching what is normally examinable and examined. However, the effect of backwash can imperceptibly turn into backlashing if the test is not properly constructed.

In the Malaysian system of examining the multiple-choice testing format is well-entrenched. Even the major portion of the English Language paper at the third and fifth form levels now consists of this format. Classroom teachers in turn are expected to construct similar types of items for small-scale classroom tests. But not all of them are aware of certain pitfalls that may accompany the construction of such items.

Indeed, devising a multiple-choice test is no easy task. The only facility lies in its scoring procedure. Unlike cloze testing which requires no skill or particular training on the part of the tester, the multiple-choice format requires the tester to be constantly alert to possible weaknesses that may arise from within the item itself, between items or in the relationship of that particular item to the passage as a whole. This is normally referred to as the passage dependency of test items. I would like to make reference to such items in the testing of reading comprehension.

An item is said to be passage dependent if the testee is required to read and understand the passage before he can answer the item correctly. This is what a reading comprehension based on a passage should do — namely, test how well a student has understood what he has read through his performance in the items. Underlying this rationale is a tacit assumption that there is a direct relationship between reading the passage and answering questions on it. Greater comprehension is reflected in higher test scores.

But is this necessarily true? Research findings have reported many instances in which items from standardised reading tests have been found to clearly lack this passage dependency. Reports by Weaver and Bickley (1967), Bickley, Weaver and Ford (1968) and Weaver, Bickley and Ford (1969) have shown that students are well able to answer comprehension questions without the aid of the text from which the questions were derived. In the 1967 study they noted: "The subjects who had no reading passage to aid in answering the items, nevertheless, correctly completed 67% as many items as subjects with all the reading passages." (p. 294). Such finding should caution the test constructor.

A number of ways in which the subjects could have answered correctly without comprehending or having access to the passage are suggested below:

- Example 1:** Most people who keep cats want pets which
- can be their companions.
  - will hunt for them.
  - can put them to sleep.
  - will get them food and lodging.

A student will most likely arrive at the right answer by using his prior knowledge. One can argue that in reading with understanding it is necessary to relate prior experience and information to help in the processing of the information content. However, it cannot be, and should not be, a sufficient condition to perform well in a well-devised reading comprehension test. If so, then the validity of the test is in question.

- Example 2:** In prehistoric days fire was mainly used to
- scare away animals.
  - burn weeds.
  - signal for help.

The choice of distractors may cue a testwise student to spot the key through the process of elimination. Unlikely, irrelevant distractors will surely help to delimit the choice of the key.

**Example 3:**

- Item 1: Did the Ongs go on holiday in December?
- Yes.
  - No.
  - Not sure.
- Item 2: How did the Ongs spend most of their time holidaying in Kuantan?
- Sightseeing.
  - Resting.
  - Swimming.

In this case, the stem of Item 2 serves as a clue to the answer to Item 1. Thus, Item 1 is independent of the passage.

Another type of item that may be answered without the passage is the traditional vocabulary item where a word is tested without a context, as in the example below:

- He felt very **sad**.
- timid.
  - happy.
  - weary.
  - sorrowful.

The context for the word **sad** is obviously superfluous. A vocabulary item tested this way only measures knowledge of a word but not knowledge of a word as dictated by its context:

- "Look at that stone!" exclaimed the guests at the wedding, as the bride was about to cut the cake.
- "Look at that stone!" cried the excavators in their readiness to blast the cave.

A test of **stone** in the two contexts should elicit an understanding of the text in which it occurs.

Generally, questions testing inference are more passage dependent than factual items. In inference the testee may be expected to understand, for example, the mood, the writer's feeling, intent, the tone and setting of the passage, before he can make the correct inference to a set portion of the text.

Passage dependency of items is, therefore, a primary hurdle to cross in multiple-choice test construction. It may not even be possible to approach an optimal limit in passage dependency. This is so even if the passages contain highly imaginary materials. It may also be wise to bear in mind that items that may prove passage dependent for one group of students need not necessarily behave in the same manner with another group of students. The educational sophistication of the child/group may decrease the passage dependency of the items. Hence, teachers should be aware of this is constructing a reading test for multi-grade purposes.

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