
C-Test/MC-Test: A New Instrument for Measuring English Proficiency¹

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Abstract

The C-Test is a new format of cloze procedure developed to resolve the problems of the conventional cloze. In the C-Test, the second half of every second word is deleted, beginning from the second sentence. The test taker's task is to provide the missing part of the word. Since most content words in English are in the form of BASE + SUFFIX (ES), a modified C-Test, the MC-Test, has been proposed by the author. In the MC-Test, the first half of the word, instead of the second half, is deleted. It is assumed that, in MC-Test items, more of the syntactic/structural information based on orthographic cues is present, whereas in "normal" C-Test items, more of the semantic information is available. Initial investigations indicate that the newly-proposed format, the MC-Test, is superior to the C-Test with reference to discrimination power, reliability, and "structural" validity.

The C-Test is a new language test developed from the cloze test, which was once very popular among language testers. In this paper, a brief history of the cloze test and C-Test will be given, and the MC-Test, which was initiated by the author (Boonsathorn, 1987), will be proposed.

The Cloze Test

A cloze test is a form of reduced-redundancy testing inspired by Gestalt psychology which hypothesizes that the mind can predict the totality of an incomplete form or shape. A familiar illustration of this is one's ability to see a

broken circle or a broken triangle as a whole one by mentally closing up the gaps. The ability to do this is called "closure". Gestalt psychologists believe that in the process of learning, global comprehension is prerequisite to the comprehension of detail.

Cloze testing also conforms to the Generalized Communication Model. The model only requires the addition of a fourth component, "noise" (Anderson, 1976, :15). Noise is introduced into the channel in order to test whether the learner can perform competently in spite of this interference. The interference can be acoustic, but it can equally well be induced by mutilating parts of the text.

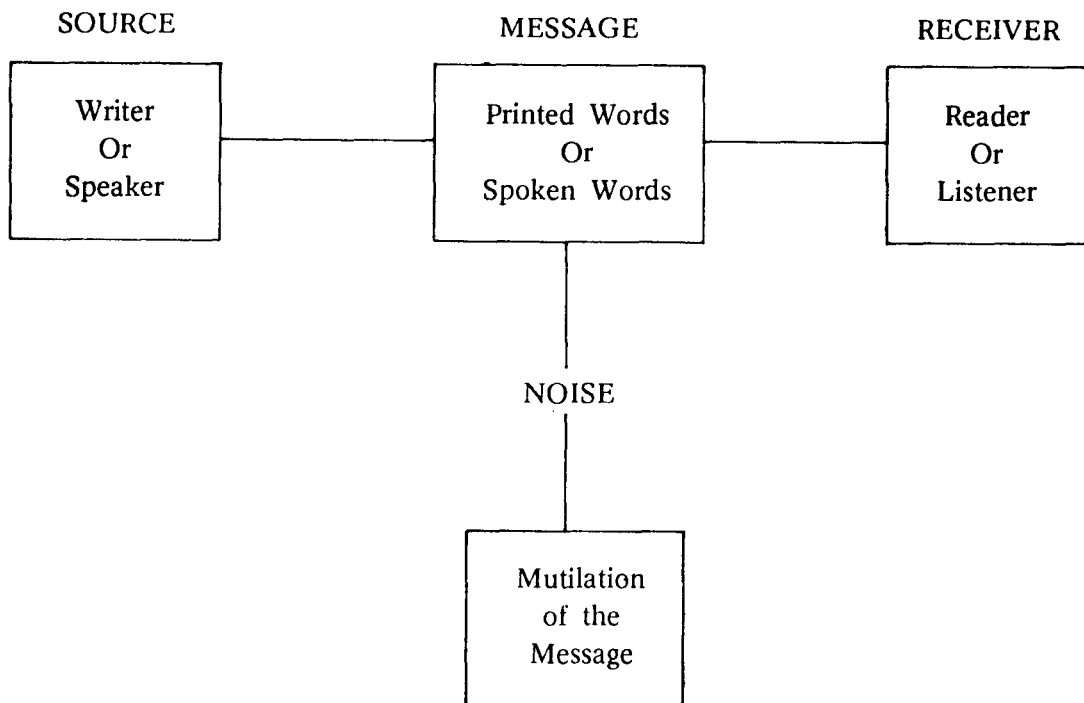


Fig. 1 The Adapted Communication Model for Cloze Testing

The cloze test was pioneered by Taylor (1953), who proposed it as a device for estimating text readability and later for assessing reading ability. However, use of the cloze procedure for testing foreign language proficiency or global language ability was first attempted by Carroll, Caron, & Wilds (1959).

Among the various types of cloze tests, the most popular is the systematic deletion of every n^{th} word in which every 5th (or 7th, etc.) word is deleted. Another well-accepted type is the "rational" deletion, where only certain types of words, depending on the tester's purpose, are deleted. These tests have been used for a variety of purposes--as classroom tests, proficiency tests, diagnostic tests and placement tests. In Thailand, cloze tests have also been widely used. They are commonly found as part of many placement and proficiency examinations.

The C-Test

Cloze tests are an integrative skills test which is simple to construct. Due to

favorable results from earlier studies, the cloze test has invariably been accepted as reliable and valid. In recent years, however, a few researchers (e.g., Alderson, 1979, 1983; Raatz & Klein-Braley 1981; Klein-Braley & Raatz, 1984; and Brown, 1983, 1984) have pointed out the problems of the procedure. Some of the major criticisms are :

1. The systematic n^{th} word deletion does not necessarily produce a random sample of the elements of the text.
2. Different deletion rates and different starting points applied to the same text produce tests which vary considerably in difficulty, reliability and validity.
3. Acceptable-word scoring procedures cause problems concerning criteria for acceptability: the use of exact-word scoring often makes the test too difficult.
4. Since educated native speakers themselves rarely obtain a perfect score, how can they be expected to make accurate judgements of acceptability when they act as scorers?
5. The use of only one or two texts

easily creates a source of bias in the test scores due to text content.

Based on these questions concerning the conventional cloze test, a list of six criteria was proposed by Raatz & Klein-Braley (1981).

1. The new test should use several different texts.
2. It should have at least 100 deletions.
3. Educated native speakers should obtain virtually perfect scores.
4. The deletions should affect a representative sample of the text.
5. Only exact-word scoring should be

possible.

6. The test should have high reliability and validity.

A new test, the C-Test, was therefore developed by Raatz & Klein-Braley in 1981 to meet the above requirements. In the C-Test, four to six short texts (50-100 words each) are normally used. The mutilation in each text begins in the second sentence by deleting the second half² of every second word. The student's task is to provide the missing part of the word. The following is an example of the C-Test.

C-TEST

Many foreigners find that Thailand is a very pleasant place to have a holiday. They disc ____³ that th____ are ma__ interesting thi____ to d_ and t_ see. Th__ say th__ the bea____ are cl____ and t__ scenery i_ beautiful. Ma__ say th__ the hot____ are exce____ and n__ too expe____. They exper____ with diff____ kinds o_ Thai fo__ and fi__ that i_ tastes deli____. They a__ delighted wi__ Thai mu____ and fasci____ by Th__ dancing. Visitors from all countries often say that Thai people are warm and friendly.

Since its initiation in 1981, the C-Test has been developed in several different languages. A variety of samples have been tested, and a number of different questions have been investigated. According to Klein-Braley & Raatz (1984), C-Tests have been used for English, French, German, Spanish, as well as for Hebrew and Turkish. So far the results have been promising.

The MC-Test

Since many English words (specifically, most content words; i.e. nouns, verbs, adjectives and adverbs) are in the form of BASE + SUFFIX (ES), the first half and the

second half of the word must be essentially different. While there is normally more of the semantic information in the first half, there will be more of the syntactic/structural information in the second half. A modified C-Test, the MC-Test, was therefore developed by the author (Boonsathorn, 1987) to research its strengths and weaknesses compared to those of the normal C-Test. In the MC-Test, the first half, instead of the second half, is deleted. This type of test has never appeared in language testing literature.

The example of the MC-Test below was constructed from the same text used for the sample C-Test.

MC-TEST

Many foreigners find that Thailand is a very pleasant place to have a holiday. They _____over that _____re are _____ny interesting _____ngs to _____o and _____o see _____y say _____at the _____hes are _____an and _____e scenery _____s beautiful _____ny say _____at the _____els are _____lent and _____t too _____sive. They _____ment with _____rent kinds _____f Thai _____od and _____nd that _____t tastes _____ious. They _____e delighted _____th Thai _____ic and _____nated by _____ai dancing. Visitors from all countries often say that Thai people are warm and friendly.

From the author's 1987 study, the results of investigations of the C-Test and the MC-Test with 389 high school students (L1) and 104 adult students (L2) in Alberta, Canada, can be summarized as follows:

1. The C-Test and the MC-Test are essentially different types of tests. Although they both are highly reliable and valid for both L1 and L2 samples, they are functionally and structurally different.

2. The MC-Test is more difficult and discriminates better than the C-Test in both L1 and L2 data.

3. Different starting points of deletion do not affect the difficulty, reliability and validity of the tests.

4. Results of factor analyses suggest that the C-Test and the MC-Test have different factor structures. The MC-Test seems to require more of the normal reading processes than the C-Test does.

5. The Michigan Test correlates moderately high with the C-Test/MC-Test. The C-Test, however, appears to predict performance on the Michigan Test better

than the MC-Test does.

6. While the restoration of the C-Test passages appears to rely primarily on the orthographic cues available in the items, interview results show that the processing of the MC-Test items necessitates the use of all the strategies required by readers in the process of normal reading.

In general, the newly-developed MC-Test appears to be empirically superior to the conventional C-Test in several respects. Specifically, the MC-Test discriminates better, has greater reliability, and is more valid with reference to factor structures. However, since the information obtained was from high school students (native English speakers) and adult students (ESL learners) in Canada and some of the questions have not been satisfactorily investigated, the author decided to administer the same C-Test and MC-Test to approximately 3,000 (Matthayom 2 to 6) students in Nakhon Sawan, Uthaithani and Chainat. It is expected that this research project will be completed in the near future.

Notes

1. This paper has been slightly adapted from the original paper entitled "C-Test/MC-Test as a Tool for Measuring English Proficiency", which was presented by the author at the 1990 Regional Seminar, Language Testing and Language Programme Evaluation, RELC, Singapore, April 9-12, 1990.

2. For a word having an odd number of letters, half of the number+1 shall be deleted (i.e. 2 out of 3, 3 out of 5). For a single-letter word (l or a), the whole word may be deleted or (depending on the purpose) ignored so that the following word is deleted.

3. A gap of equal length for each mutilation is possible and will make the test more difficult.

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