Principles of Constructing Multiple-choice in Reading Comprehension of CET-4 and Their Enlightening to General College English Teaching

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Abstract

Reading comprehension multiple-choice (MC) is an indispensable part in College English Tests Band 4(CET-4) in China. The paper focuses on some principles of designing reading comprehension MC. To illustrate this, a detailed analysis is made on reading comprehension MC options taken from CET-4 to enlighten the general college English teachers to instruct their students to develop reading comprehension skill.

Keywords: Multiple-choice, Option, Reading comprehension, English teaching

1. Introduction

According to Spolsky, there are three main trends in the area of language testing: the pre-scientific approach, the psychometric-structuralist approach, and the psycholinguistic-sociolinguistic approach. Multiple-Choice is just one of the testing techniques resulting from the psychometric-structuralist approach. This approach believes that testing can be objective, precise, reliable and scientific. This led, on the one hand, to the development of techniques to make traditional tests more reliable, and, on the other hand, to the development of tests with multiple-choice questions (TheoVan Els 1984p325). Although testing theories have advanced over the last few decades, MC has been inherited thereafter as a valuable testing technique. The convenience it brings to test developers can be generalized into four points: First, MC is scientific and reliable as it measures reading comprehension with the help of psychometrics. Second, the grading of MC is very easy and can be done even by non-professionals and grading machines; besides, candidates' scores are not affected by such subjective factors as graders' mood, health conditions, etc. Third, it can cover many reading skills at a time, thereby making MC option more representative and valid. Last, it not only measures candidates' familiarity with reading material, but also their competence in understanding the material and using reading skills, such as their inferential and deductive abilities.

However, it seems that due importance has not yet been attached to the design of MC in reading comprehension testing of CET-4 for the past few years. It is a bare fact that MC, as one of the favorable and effective testing techniques, is an indispensable part of many authoritative English tests, such as CET, WSK, TOEFL, GRE, IELTS, etc. But its designing principles and regulations are rarely touched upon. The paper, hoping to draw some attention to the design of MC, brings forth some fundamental principles in the construction of reading comprehension MC options in CET-4.

2. Fundamental Principles

Reading comprehension MC consists of stem sentences and options of words to fill a blank, and options include distracters and a key. MC construction is a tough and technical job about which the constructor has to think carefully because it involves several complicated factors, such as testing point, stem and distracters, among which the construction of distracters is the hardest as it must meet many concrete requirements. *J.B. Heaton* (2000, 8) argues that the design of the questions for the reading comprehension MC should base on the information provided by the reading material. The candidates can not choose the key according to their background knowledge; The options should not be copied from the original material and the wording be attached more importance to; Not only the superficial information but the implicature of the reading material should be tested; Try to avoid testing the accurate information, such as date, figures, etc.; Refrain from providing more than one key; The length of the options should almost be same with the one of the structure; Every option should be grammatical. It expounds that though reading comprehension tests of CET-4 measure candidates' competence in using reading skills, the specific goal is to measure within certain degree of difficulty of candidates' reading comprehension is a date. Reading comprehension is a certain contexts. Reading comprehension is

much more usefully tested in contexts since contexts give specific information and relevance to keys, thus creating situations that are as linguistically valid as possible in the circumstances. Consequently, the prerequisite for the design of reading comprehension MC is to design options that are relevant to the context and consistent in discourse.

1. The construction of items depending simply on a matching of words and phrases should be avoided. Items should test more than a superficial understanding of the text and should require the testees to digest and interpret what they have read. Please look at the example taken from CET-4 exercises:

Example 1 (Passage 3 in Jan., 1999)

<u>The appeal of advertising to buying motives can have both negative and positive effects.</u> Consumers may be convinced to buy a product of poor quality or high price because of an advertisement. For example, some advertisers have appealed to people's desire for better fuel economy for their cars by advertising automotive products that improve gasoline mileage. Some of the products work. Others are worthless and a waste of consumer's money.

<u>Sometimes advertising is intentionally misleading.</u> A few years ago a brand of bread was offered to dieters with the message that there were fewer calories in every slice. It turned out that the bread was not dietetic, but just regular bread. There were fewer calories because it was sliced very thin, but there were the same number of calories in every loaf.

<u>On the positive side, emotional appeals may respond to a consumer's real concerns</u>. Consider fire insurance. Fire insurance may be sold by appealing to fear of loss. But fear of loss is the real reason for fire insurance. The security of knowing that property is protected by insurance makes the purchase of fire insurance a worthwhile investment for most people. If consumers consider the quality of the insurance plans as well as the message in the ads, they will benefit from the advertising.

<u>Each consumer must evaluate her or his own situation.</u> Are the benefits of the product important enough to justify buying it? Advertising is intended to appeal to consumers, but it does not force them to buy the product. Consumers still control the final buying decision.

The passage is mainly about -----.

- A) how to make a wise buying decision
- B) the ways to protect the interests of the consumer
- C) the positive and negative aspects of advertising
- D) the function of advertisements in promoting sales

If every topic sentence in every paragraph in the passage, i.e. the first sentence underlined in every paragraph is extracted, they form four relative complete syntagmas:

1) The appeal of advertising to buying motives can have both negative and positive effects.

2) Sometimes advertising is intentionally misleading.

3) On the positive side, emotional appeals may respond to a consumer's real concerns.

4) Each consumer must evaluate her or his own situation.

Thus, the theme of the passage is concentrated in the four sentences. If the testees digest and interpret the four sentences, they will get the theme (answer C) of the passage easily. But the theme is implicated in the four sentences.

2. There is often a temptation to concentrate too much on facts, figures and dates when constructing test items based on a factual text. Generally speaking, figures and dates are included in a test chiefly for the purpose of illustration or to show the application of a general principle. It is useful in such cases to construct items that require the testees to use the figures in the text to state (or restate) the general principle behind them. The next reading comprehension exercise is a typical example illustrating the principle.

Example 2 (Passage 1 in CET-4 in June, 2000)

Long after the 1998 World Cup was won, disappointed fans were still cursing the disputed refereeing decisions that denied victory to their team. A researcher was appointed to study the performance of some top referees.

The researcher organized an experimental tournament involving four youth teams. Each match lasted an hour, divided into three periods of 20 minutes during which different referees were in charge.

Observers noted down the referees' errors, of which there were 61 over the tournament. Converted to a standard match of 90 minutes, each referee made almost 23 mistakes, a remarkably high number.

The researcher then studied the videotapes to analyze the matches in detail. Surprisingly, he found that errors

were more likely when the referees were close to the incident. When the officials got it right, they were, on average, 17 meters away from the action. The average distance in the case of errors was 12 meters. The research shows the optimum distance is about 20 meters.

There also seemed to be an optimum speed. Correct decisions came when the referees were moving at a speed of about 2 meters per second. The average speed for errors was 4 meters per second.

If FIFA, football's international ruling body, wants to improve the standard of refereeing at the next World Cup, it should encourage referees to keep their eyes on the action from a distance, rather than rushing to keep up with the ball, the researcher argues.

He also says that FIFA's insistence that referees should retire at age 45 may be misguided. If keeping up with the action is not so important, their physical condition is less critical.

The number of refereeing errors in the experimental matches was------.

A) slightly above average	B) higher than in the 1998 World Cup
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C) quite unexpected D) as high as in a standard match

In this passage, although too much figures are included and the figure being related to the question above is offered in the sentence "...the referees' errors, of which there were 61 over the tournament", the purpose of providing the figure is to require the testees to use the figures in the test to state the general information behind it. Pay attention to the implication of "converted to a standard match of 90 minutes", especially the most important illustration "a remarkably high number" in the third paragraph, the testees will conclude that answer C is right. The item tests students' ability to handle simple facts and figures in English. So it is valid.

3. The choice of the correct option in each MC item must depend on a testee's comprehension of the reading test rather than on general knowledge or intelligence. Care must be taken to avoid setting distractors which may be true, even though they may not have been explicitly stated by the writer. In the following test item based on a reading text about the United Nations and the dangers of war:

What would happen if there was a global war?

- A) Nations would train men for war.
- B) Lots of terrible weapons would be made.
- C) The whole human race would be completely destroyed.
- D) People would grow very desperate.

C is the required answer; however, all four options are correct-even though not stated in so many words by the writer but based on general knowledge or intelligence. So the result of the test is neither valid nor reliable.

4. All the options must be grammatically correct: there is a tendency especially in reading comprehension to overlook the grammatical appropriateness of some of the distractors used. Recently, there is no this kind of options in CET-4 exercises. So it's more difficult for the candidates to choose the correct option. Still look at example 1, another question is extracted here to illustrate the principle here:

Advertising can persuade the consumer to buy worthless products by------.

A) stressing their high quality B) convincing him of their low price

C) maintaining a balance between quality and price D) appealing to his buying motives

The preposition by before the blank indicates that all the four options should be gerund. If the answer D was gerund distinctly but the other three were the other forms, it would be easier for the candidates to distinguish the correct answer D from the others. But the four options are all grammatically appropriate; therefore, the testees have to choose D according to their understanding of the original material but not their general grammatical knowledge.

5. There is another tendency in reading comprehension to test the candidates' understanding of the author's general attitude toward the subject presented in the reading material in CET-4 exercises in recent years. The following examples taken from CET-4 exercises prove the trend:

- 1) What is the author's overall attitude toward fridges? (Passage One, No.15 in CET-4 in June, 1997)
- A) Neutral B) Critical C) Objective D) Compromising
- 1) Which of the following best describes the author's tone in this passage? (Passage One, No.25 in CET-4 in Jan., 2000)
- A) Optimistic. B) Critical. C) Objective. D) Arbitrary.
- 2) What is the author's attitude toward the future of autos? (Passage One, No. 25 in CET-4 in Jan, 2000)

A) Enthusiastic B) Pessimistic C) Optimistic. D) Cautious.

There are also other principles for the construction of reading comprehensions MC not mentioned above. They are all practical in CET-4 exercises. For instance, an useful device in the option ALL OF THESE or NONE OF THESE; the double negatives items which are only confusing are best avoided; the correct option must be roughly the same length as the distracters, etc. All of them can be testified in CET-4 reading comprehension MC. Every exercise in the relevant part in CET-4 can prove them excellently. So we needn't find the example to explain them in detail here.

3. Enlightening of the Principles to General College English Teaching

Based on the above fundamental principles of constructing MC in reading comprehension of CET 4, the general college English teachers in China tend to instruct their students to read comprehensively while their daily teaching. They generally apply the following ways to training their students to develop their reading comprehensive ability:

1). To learn a text, ask the students to look through the whole text and generalize the main idea and the author's attitude towards the subject of the text at first in order to help the students get an overall understanding of it.

2). Instruct the students to summarize the main idea implied in the text with the interpretation of the text so as to digest it more than a superficial understanding.

3). Draw students attention to the facts, figures and dates included in the text and require the students to predict the factual matters and the general principle reflected from them.

4). Direct the students to differentiate the truth implicitly stated in the text from the general knowledge or intelligence which may be true out of the context of the text so that the students must get a thorough command of the text depending on a comprehension of it.

5). After guiding the students understanding the text thoroughly, teach them the collocation of the new words, the sentence patterns and the grammatical principle in the text to help the students have a good mastery of the language.

4. Conclusion

MC in reading comprehension of CET 4 should be constructed in such a way that students obtain the correct option by direct selection rather than by the elimination of obviously incorrect options. Context, above all, is the most important in all tests. It is felt that an understanding of the meaning of the words is critical for selection. This, of course, is emphasized more on the correct understanding of the context. The testees are required to identify the correct paraphrase of a statement from a choice of four. They are told in the rubric that the four statements may refer to the entire sentence or text. The actual construction of MC reading comprehension items offers a useful way of testing reading comprehension. All these requirements make the design of four plausible MC options a very tough job. In view of this, it is essential to generalize designing principles out of practice to guide the process of MC design. From the analysis made above, it's clear that contextual relevance not only ensures the validity of distracters, but also the testing of the candidates' true understanding of the text and their reading skills in various contexts; on the other hand, grammatically correct appropriateness of some of the options guarantees the cohesion of the discourse, so as to test nothing but candidates' textual knowledge. Only with these principles can reading comprehension MC maintain its validity, reliability and practicality. Knowing these principles can also help general college English teachers direct the students to read efficiently and communicate with the writer of the reading materials.

References

Arthur, H. (1989). Testing for Language Teachers. Cambridge: Cambridge University Press.

Bachman, L. F. (1990). Fundamental Considerations in Language Testing. Oxford: Oxford University Press.

Brown, J. D. (2006). *Testing in Language Programs: A Comprehensive Guide to English Language Assessment*. Beijing: Higher Education Press.

Heaton, J. B. (2000). Writing English Language Tests. Beijing: Foreign Language Teaching and Research Press.

J. Charles Alderson, Caroline Clapham & Dianne Wall. (2000). *Language Test Construction and Evaluation*. Beijing: Foreign Language Teaching and Research Press.

Spolsky, Bernard. (1995). Measured Words. UK: Oxford University Press.

Van Els, T. et al. (1984). Applied Linguistics and the Learning and Teaching of Foreign Languages. London: Edward Arnold Ltd.