

HANDOUT

WORKSHOP Born-Foxcroft 5th ITC Conference July 6-8 2006 Brussels

Ways of judging the readability of a text

1. The Cloze test

Fill in the words in the gaps of the text sample that has been handed out

2. Reading time

Record the time necessary for you to read the text from beginning to end:
..... minutes and seconds

3. The Reading Ease scores

Take a sample of the text of 100 words.

3.1 Flesch Reading Ease score

Rates text on a 100-point scale; the higher the score, the easier it is to understand the document. For most standard documents, aim for a score of approximately 60 to 70.

The formula for the Flesch Reading Ease score is:

$$206.835 - (1.015 \times \text{ASL}) - (84.6 \times \text{ASW})$$

where:

ASL = average sentence length (the number of words divided by the number of sentences)

ASW = average number of syllables per word (the number of syllables divided by the number of words)

3.2 Flesch-Kincaid Grade Level score

Rates text at a U.S. grade-school level. For example, a score of 8.0 means that an eighth grader (a first/second year high school student) can understand the document. For most standard documents, aim for a score of approximately 7.0 to 8.0.

The formula for the Flesch-Kincaid Grade Level score is:

$$(.39 \times \text{ASL}) + (11.8 \times \text{ASW}) - 15.59$$

where:

ASL = average sentence length (the number of words divided by the number of sentences)

ASW = average number of syllables per word (the number of syllables divided by the number of words)

The problem with this index is that countries outside the US may have different norms regarding the reading level expected of 8th grade readers. What is expected of 8th grade readers in your country?

4. Subjective judgment of several features of the text (Angleiter, John, and Löhr; 1986)

Subjective judgment: is the text as a whole

- Difficult, not understandable (versus VERY easy and understandable)
- Ambiguous (multiple interpretations possible)
- Abstract (versus concrete, tangible)
- Self-referent (that is, related to the frame of reference of the readers themselves)

In general, the passage was: *(Put a cross in the appropriate block each time)*

	1	2	3	4	5	6	7		Example/Motivation
Difficult								Easy	
Ambiguous								Clear	
Abstract								Concrete	
Difficult to relate to								Easy to relate to	

Define the following words/terms:

Authored

Fix

Content domain

Technical review

Mimic

Reference: Angleiter, A. John, O.P, & Löhr, F.-J. (1986). It's what you ask and how you ask it: an itemmetric analysis of personality questionnaires. In A. Angleitner & J.S. Wiggins (Eds.), *Personality assessment via questionnaires* (pp. 61-108). Berlin: Springer-Verlag.

5. Judgment of visual/ surface structuring and cues

To what extent do the following contribute to making the passage more readable (*put a cross in the appropriate block each time*):

	Not applicable	No impact on readability	Some impact on readability	Moderate impact on readability	Large impact on readability	Very large impact on readability
Sectioning/ paragraphing of text						
Visual emphasis on key concepts (e.g., boldfaced, underlined, colour cues)						
Sentences are short						
The information is ordered logically						
Bulleting/ numbering of information						
Visualising of information in figures, tables, pictures, etc.						

6. Judgment of causal inferences

Complete a short multiple choice test in which the answers to the questions require inferences to be drawn from the text.

- 6.1** The main idea expressed in this passage is that:
- (a) Test quality is not related to good or bad questions.
 - (b) The quality of a test is not linked to the quality of its questions.
 - (c) Good questions must be developed for a test to be of a high quality.
 - (d) It takes very few people to develop good test questions.
- 6.2** The development of test questions involves:
- (a) very little thought and time.
 - (b) a number of steps to ensure quality items.
 - (c) little skill on the part of item writers.
 - (d) a few experts only.
- 6.3** The quality of test questions is:
- (a) determined only by the results of the field testing of the questions.
 - (b) judged only by subject matter experts.
 - (c) evaluated by the test editor and publisher only.
 - (d) established by input from experts as well as from field testing results.

7. Estimated level of prior knowledge of topic

What is the estimated level of prior knowledge of the topic needed to understand the text (put a cross in the appropriate block):

	1=No prior knowledge needed	2=Some prior knowledge needed	3= Prior knowledge needed to a moderate extent	4= Prior knowledge needed to a large extent	5=Extensive prior knowledge needed
Necessary prior knowledge of topic?					

If prior knowledge of the topic is required, how can this be operationalised (e.g., 1st year course completed)?

8. Estimated level of prior knowledge of English language

What is the estimated level of prior knowledge of the English language needed to understand the text (put a cross in the appropriate block):

	1=No prior knowledge needed	2=Some prior knowledge needed	3= Prior knowledge needed to a moderate extent	4= Prior knowledge needed to a large extent	5=Extensive prior knowledge needed
Necessary prior knowledge of English language?					

If prior knowledge of the English language is required, how can this be operationalised (e.g., Grade 8 level)?

Developing Materials that are Accessible and Meaningful for second language readers

This demands that:

- content is demystified
- language is pitched at readable and comprehensible levels
- assumptions are unpacked and made explicit
- concepts are unpacked and explained
- critical and innovative thinking is encouraged.

1. Make realistic assumptions about the reader's existing background knowledge

You need to be clear about your target audience and the level of knowledge (of the content as well as of English) that you should assume. For example, if you are writing for first year university students, assume that many of your readers do not have any formal background knowledge or experience of what you are writing about. This implies the need to:

- Adopt an empathic, engaging, interactive approach that does not assume familiarity with the topic(s).
- Not assume a common base to draw on.
- Make explicit what you might usually assume to be a given.
- Develop understanding through drawing on what readers may already know.
- Link information concretely and practically with new knowledge.

Questions: Is the analogy of a razor a good one to connect with first-year students? Can you think of a better one that is more appropriate and that links more closely to the development of good test questions?

2. Use ever-day vocabulary and terminology

In preparing materials, simple, ordinary every-day English should be used in general and especially when introducing specialist terminology and unavoidable academic jargon. This implies that wherever possible, authors should:

- Substitute complex, or unfamiliar vocabulary and terminology with simpler, more commonly used equivalents.
- Present and explain new vocabulary, concepts or terminology in accessible every-day language BEFORE using them either in headings or in the text. And then
- Once a concept is understood, introduce and attach the specialist term, almost like a label.

Task: Identify problematic words and substitute them with simpler, more commonly used words. Also, try to explain some of the technical concepts in accessible everyday language before they are used in the text:

An expert in the subject matter (SME) who probably has some experience in writing test questions is the first person to actually produce the first draft of the question, which may include graphics as well. As the question is being authored, often the SME will get help from colleagues to make sure the question is accurate and relevant. All questions, but especially multiple choice questions, require that the SME follow specific format rules for such questions.

After the initial authoring, the question, along with all the others produced, is sent to an editor. The editor is not an SME, but does understand the rules of language, style and the proper formatting of questions. The editor will fix the language and design problems with the sole goal of reducing ambiguity. For example, if the editor notices that, because of vague wording, two choices of a multiple choice question are correct (when only one should be), he or she will rework one of them or alert the original SME to the problem. The result is a better question.

The question is returned to a group of SMEs who review each one for technical accuracy, representation and relevance. One name for this process is the technical review. Does the question really measure the test objective? Is it an important question, measuring important knowledge? Does the test "need" the question to be balanced across the content domain? Is the question accurate, including a correct answer? The question is usually changed (and may even be deleted) at this stage.

3. Look for opportunities to reinforce the meanings of new concepts or terms

Another helpful strategy for introducing readers to the meanings of new terms is to express the meaning of the new term in more accessible words immediately after the first use of the term. This could be through:

- Rephrasing the term using more accessible language.
- Providing the meaning of a term or expression in brackets immediately after it has first been introduced.
- Introducing questions that can help readers to test out whether they have correctly understood a new concept.

Task: Consider the paragraph below. How could the introduction of the term “beta test” be introduced more meaningfully and be reinforced? Develop a question about a beta test to include in the text which can both reinforce the meaning of the term and give the reader an opportunity to test his/her understanding of the term.

When all questions have been refined in this way, they are subjected to an actual “field test” of their quality. In what is called a beta test, questions are answered by actual candidates in circumstances that mimic the motivation and environment of a real test. Beta test participants can comment on the quality of each question, but their answers also create test results that are subjected to a statistical analysis. The analysis will catch those questions that aren’t performing properly, even when those questions have passed all quality checks to this point. These poorly performing questions cannot be part of the final version of the test. Obviously the questions you see on the actual test survived this beta process.

4. Use easy-to-read sentence structures

This refers to both the length and complexity of sentences. To make the text easier to process and digest:

- Use direct sentences that express one idea at a time clearly.
- Use active rather than passive sentence structures.
- Make sure that the ideas in successive sentences follow on logically from one another.
- Make sure that the links between the ideas expressed in sentences are explicit.

Task: There are a number of long sentences in the paragraphs below. Try to revise some of them into shorter sentences. Also, in the last paragraph in particular, see whether you can develop more explicit links between the ideas expressed in the sentences and the main theme of the reading material.

Think of a test question as a product, like a disposable razor, but a lot more expensive and with more long-term impact on your life. The razor, made of plastic and metal, was molded, cut, sharpened, assembled, inspected, packaged, distributed, and finally, bought by you. You probably never thought much about the process that brought that razor to you, but that's because it's not all that important.

But a test question, that's different. It's important to people, at least at the moment they are trying to answer it correctly. And they are probably trying to understand it and evaluate it from the moment they see it until they are on to the next one.

Does a test question go through a similar development process that a razor does, from raw material to useful product? How was the question originally written? Or better yet, why was it written? What reviews and changes did it go through? How many people actually read it and agreed that it should be on the test? These are great questions (no pun intended) and deserve to be answered.

5. Develop one main idea per paragraph

Make sure that all of the sentences in a single paragraph contribute towards developing one main idea and that the progression from one paragraph to the next is also logical. A good test for how well a paragraph does this is to see how easy it is to identify a heading that expresses the main idea in the paragraph. (This is also a good way to select your headings).

Task: There are a number of short paragraphs in the text. Is this useful or not? Try to improve the following paragraphs in terms of developing one main idea and in terms of the progression from one paragraph to the next.

When all questions have been refined in this way, they are subjected to an actual "field test" of their quality. In what is called a beta test, questions are answered by actual candidates in circumstances that mimic the motivation and environment of a real test. Beta test participants can comment on the quality of each question, but their answers also create test results that are subjected to a statistical analysis. The analysis will catch those questions that aren't performing properly, even when those questions have passed all quality checks to this point. These poorly performing questions cannot be part of the final version of the test. Obviously the questions you see on the actual certification test survived this beta process.

The final set of questions then form the official test or exam. But before anyone can take the test, it goes through a final series of quality assurance steps. While these steps are focused on the actual functioning of the test, the questions are briefly reviewed once more.

6. Use explicit signposts in the text

As appropriate, use explicit signposts to make your intentions in the development of arguments clear. For example:

Headings should be signposts that announce exactly what the reader can expect to read about now. In particular, avoid the use of terminology that has not yet been introduced or explained in headings and sub-headings. Rather use an easily understood heading that conveys the essential meaning of the unknown term, and which alerts the reader to what to expect in the section.

First, second, third, next, then, after, that, finally or *in conclusion*, are signposts indicating **sequence**.

In the same way, similarly, and in addition are signposts indicating **supportive/complementary/supplementary relationships** between the ideas expressed in sentences.

However, on the other hand, from another point of view, in contrast, alternatively, and so on all indicate **alternative, contrasting or polarised relationships**.

Task: The accompanying text has no headings. Suggest appropriate points for headings and what the headings should be. *Write suggested headings on the text, at the appropriate place.*

7. Use visual features to enhance readability and meaning

Introducing visual features into the text (e.g., text enhancement, tables, flowcharts, figures, graphics) can make the material more engaging and can assist in reinforcing main points.

Task: There are no text enhancements (e.g., boldface, colour) in the accompanying text. Where can text enhancements be introduced? There are no tables or flowcharts in the text. Suggest where a table/flowchart/diagram/figure can be introduced and develop it.