Using Your Computer for Readability

Two Warnings!

Standard word processing software can give you information on text you want to analyze. However, these programs are not always dependable.

< Microsoft Word’s readability function is not reliable or valid (in our experience and in two published studies). We do not recommend using it for readability analysis.

< The Flesch-Kincaid readability formula, in any software package, may not be accurate. It typically gives a score 2-3 grade levels lower than other formulas. Moreover, in some versions of MS Word, this score is artificially “capped” at grade 12 even if the document’s reading level is far above that! So what to do instead?

Readability Software and a Website

It’s best to purchase a free-standing software program designed specifically for readability analysis. We like Readability Calculations or Readability Plus from Micro Power & Light, Dallas, TX, (214) 553-0105 or www.micropowerandlight.com. (See the instructions below for preparing your text before using any software program.) We ask the software to provide scores using the SMOG, the Gunning Fog, and the Fry. We then average the three scores. This takes into account variation among formulas.

You can also go to: http://www.online-utility.org/english/readability_test_and_improve.jsp. This site is quick and free. It gives quite a bit of information. (Remember to prepare your text first, as described below.) For “plain language” text (about 7th - 8th grade) these are the scores you want:

< The average number of words per sentence should be between 10 and 15. If it’s higher, look for sentences that could be shortened and still hold their meaning.

< The average number of syllables per word should be less than 1.5. If it’s higher, you are using too many long words. Try to use more conversational, “living room” language.

< A SMOG score (rounded to the nearest whole number) of 7 or 8.

< A Flesch Reading Ease (NOT Flesch-Kincaid) score of 70 or higher (higher is easier). See below for more on this formula.

Selecting and Cleaning Your Text for Electronic Readability Analysis

Sample Size

< Small samples may not give an accurate score so try to include at least 30 sentences or 300-500 words.

Choosing Your Text

< Use only complete sentences. Choose samples of connected, flowing text.

< If the text is long, take a sample from near the beginning, the middle, and near the end. Don’t use the first and last sentences. These are often not characteristic of the rest of the text.

< Cut and paste the text you’ll analyze into a new document and rename it. Or delete what you won’t use and rename the document.
Cleaning Up Your Text

You will have problems with reliability and accuracy if you don’t “clean up” your text first. Be sure to go through the document and delete:
< headings
< sentence fragments
< lists with bullets (if bullets are complete sentences, you can use them in your sample)
< periods that don’t mark the end of a sentence, such as numerals in a numbered list (1. or 2.);
  abbreviations (Jill M. Sanchez, M..D. or Q. & A.); periods in e.g., or i.e.; decimals (98.6 degrees or 12.9%); or periods in times (9 a.m.)

If you don’t remove extra periods, your software may “see” many more sentences than are really there. This will artificially lower your readability score.

A Note: Flesch Reading Ease Scale (or Flesch Index)

On some software programs, any formula is called “readability score.” Be sure to look in the software manual to see which formula it uses. If it’s the Flesch-Kincaid, ignore it.

If it’s the Flesch Reading Ease formula, you’re lucky. This one even works well in MS Word but only if you remember to prepare the document as described above. This is a good, reliable formula that matches results for many others. You’ll need the interpretation chart below because the Flesch Reading Ease score is not a “grade level” score.

< A score on this formula is on a scale from 0-100 showing the relative difficulty of printed material. Use the chart below to find the grade level range.
< Higher scores mean easier to read.
< A minimum score for “plain English” is 60 or above.
< Try to get your writing into the 80-70 range.

<table>
<thead>
<tr>
<th>Flesch Score</th>
<th>General Level of Difficulty</th>
<th>Approximate Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-90</td>
<td>Very Easy</td>
<td>5th</td>
</tr>
<tr>
<td>90-80</td>
<td>Easy</td>
<td>6th</td>
</tr>
<tr>
<td><strong>80-70</strong></td>
<td>Fairly Easy</td>
<td><strong>7th</strong></td>
</tr>
<tr>
<td>70-60</td>
<td>Standard</td>
<td>8th-9th</td>
</tr>
<tr>
<td>60-50</td>
<td>Fairly Difficult</td>
<td>10th-12th</td>
</tr>
<tr>
<td>50-30</td>
<td>Difficult</td>
<td>College</td>
</tr>
<tr>
<td>30-0</td>
<td>Very Difficult</td>
<td>Above college (graduate school)</td>
</tr>
</tbody>
</table>

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