



Health Sciences North
Horizon Santé-Nord

Plain Language & Readability

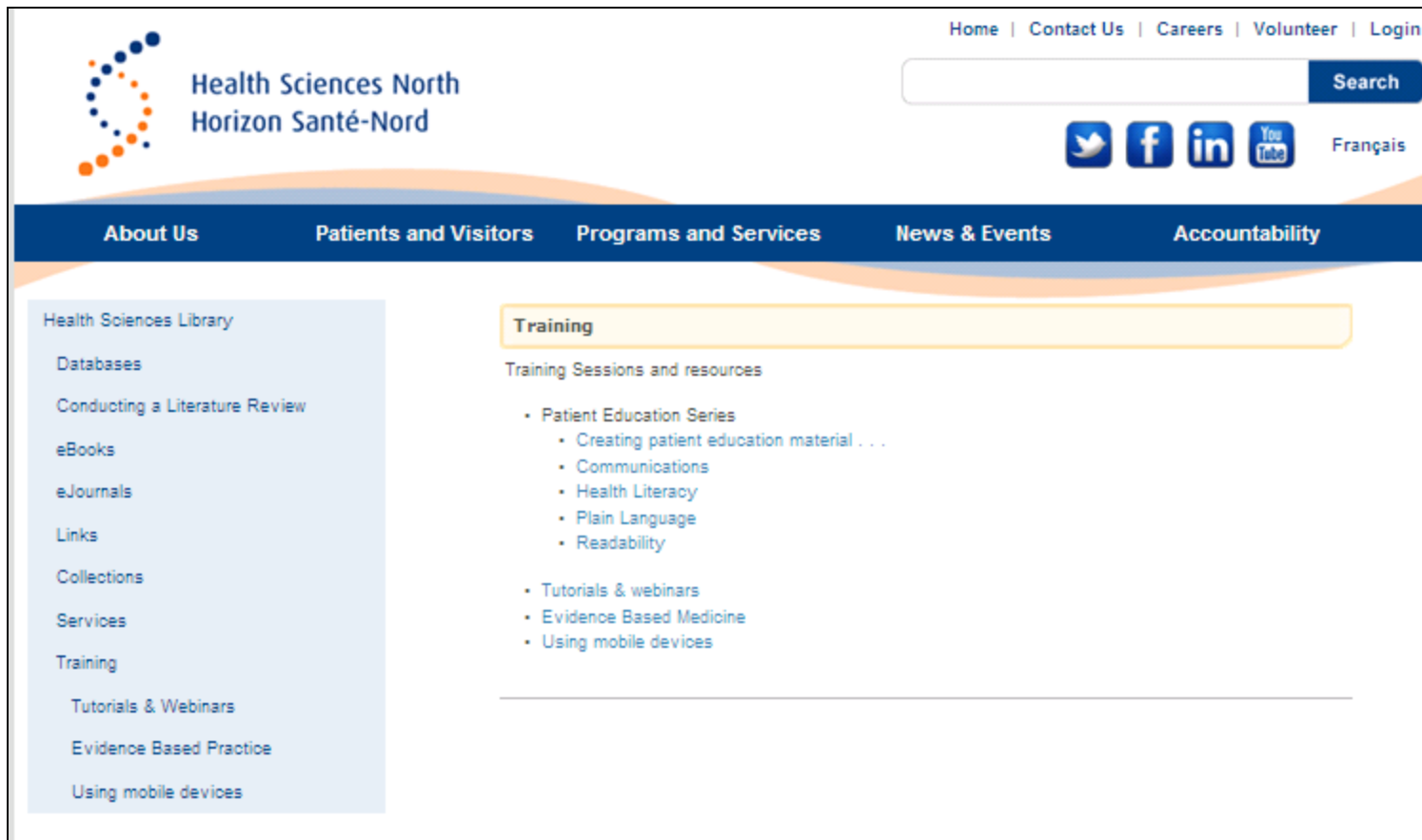
Jami van Haften, Librarian
September 2013

Plain Language & Readability

At the end of this session, the Learner will be able to:

- Discuss how plain language and clear design principles affect the readability of health information
- Apply principles of Plain Language and Clear Design to improve reading level of written material
- Assess the reading level of sample text using on-line tools

Patient Education Series . . .



The screenshot shows the Health Sciences North website. The header includes the logo, navigation links (Home, Contact Us, Careers, Volunteer, Login), a search bar, and social media icons. The main navigation bar lists: About Us, Patients and Visitors, Programs and Services, News & Events, and Accountability. A left sidebar menu contains: Health Sciences Library, Databases, Conducting a Literature Review, eBooks, eJournals, Links, Collections, Services, Training, Tutorials & Webinars, Evidence Based Practice, and Using mobile devices. The main content area is titled "Training" and lists "Training Sessions and resources":

- Patient Education Series
 - Creating patient education material . . .
 - Communications
 - Health Literacy
 - Plain Language
 - Readability
- Tutorials & webinars
- Evidence Based Medicine
- Using mobile devices

Patient Education Series . . .

Find out more about this topic at:

www.hsnsudbury.ca > Programs and Services > Northeast Cancer Centre
> Professional Resources and Networks > Cancer Patient Education



- Northeast Cancer Centre Home
- Cancer Research
- General Patient Information
- Programs/Services
- Volunteers
- Professional Resources and Networks
 - Cancer Patient Education**
 - Creating patient material . . .
 - Communication Skills
 - Health Literacy
 - Plain Language
 - Readability
 - Multidisciplinary Cancer Conferences (MCCs)
 - Primary Care Resources
 - Referral Forms
 - Donations

Cancer Patient Education

Creating patient education material . . .

Process to add or create patient education material at Northeast Cancer Centre

For materials created in house by health care professionals

For materials created by an external agency

Guidelines for creating patient material

Review Tool

Communications

Communications - Health care professionals

Communications - patients

Readings . . .

Health Literacy

What is health literacy?

Factors affecting health literacy and communications

Readings . . .

Plain Language

Principles of Plain Language

Plain Language Tools

Principles of clear design

Readings . . . plain language and clear design

Readability

Readability Assessment Tools

Patient Education Series . . .

 Health Sciences North
Horizon Santé-Nord

Certificate of Completion

Issued to

Employee Name

*In recognition of completion
of the following workshops in the
Patient Education Series:*

**Health Literacy and Communication Skills
Plain Language and Readability**

Date Signed

Health Sciences Library

Plain Language

- You achieve plain language when you use the simplest, most straightforward way of expressing an idea.
- Writers of plain English let their audience concentrate on the message . . . They make sure that their audience understands the message easily.

<http://www.plainlanguage.gov/>



Plain Language

- Use simple words, or explain longer words
- Use short sentences
- Be concise
- Write in the second person using pronouns, such as “you.”
- Use active sentences and stay in the present tense
- Use “living room language”

Plain Language

First person

I will show my medical records, medications and insurance card

Second person

You will show your medical records, medications and insurance card.

Third person

The patient will show their medical records, medications and insurance card.

Plain Language

Passive Sentence

That individual will need to see your records, medications and insurance card, and will ask you to describe your past and present medical history.

Active sentence

You will show your medical records, medications and insurance card and describe your medical history.

Plain Language

- Practical focus: explain things in the order they need to be done
- Use bullets and design elements to simplify
- Use upper and lower case
- Do not use all capital letters (DO NOT SHOUT)
- Limit use of bold, underlined or italicized text
- Use headings and subheadings

Plain Language



- **What is my main problem?**
- **What do I need to do?**
- **Why is it important for me to do this?**

www.npsf.org/for-healthcare-professionals/programs/ask-me-3/

Clear Design

Clear Design relates to the layout and graphic design of your print material or website.

Clear Design

The Font

- Use a minimum 12 point font
- In printed material use serif font (this is Times Roman)
- Online use sans serif (this is Arial)

Clear Design

Serif font

Times Roman

Century

Courier

Garamond

Sans serif

Arial

Calibri

Tahoma

Verdana

Clear Design

HSN Graphic Standards Manual

Typography

The official font for body copy for documents under HSN is Arial.

Clear Design

Formatting

- Use special text formatting to emphasize important elements (underline, etc.)
- Leave white space between words, between paragraphs, and around margins
- Include culturally sensitive graphics
- Use pictures

Clear Design

- Do not use columns

Your appointment

People diagnosed with cancer are often referred to the Northeastern Ontario Regional Cancer Program for a medical opinion and treatment. If you are coming for an appointment, please review the information provided below to help you plan your visit.

Date and Time. Our new-patient coordinator will call you within two to three weeks with the date and time of your first appointment. The time assigned to you will be for your clinic appointment, so please arrive **one hour before** that time to allow for the registration process. This initial visit may take several hours, so it's best not to set other appointments for this day.



Clear Design

- Left justify text

Left justification:

If you are coming for an appointment, please review the information provided below to help you plan your visit.

Full justification:

People diagnosed with cancer are often referred to the Northeastern Ontario Regional Cancer Program for a medical opinion and treatment.

Plain Language - Resources

Plain Language Medical Dictionary

<http://www.lib.umich.edu/plain-language-dictionary>

WordNet

<http://wordnetweb.princeton.edu/perl/webwn>

Wiktionary

<http://en.wiktionary.org/>

http://prism.grouphealthresearch.org/course_introduction/splash_page_before_registration.html

Program for Readability In Science & Medicine (PRISM)

Thank you for your interest in PRISM Online Training!

- The goal of this FREE, hour-long course is to help research teams improve the readability of consent forms and other participant materials.
- If you provide your email address when you register, you can exit the course, re-enter and go back to the page you were on last.
- You will need speakers or headphones to hear the audio track.

Click Next to go to the registration page.

Concepts – Reading Level

Reading Level

What is the recommended reading level?

How can you measure readability?

What are the limitations of this method?



Reading Level

What is the recommended reading level?

Reading Level

What is the recommended reading level?

Grade 6 is recommended.

Grade 4 – 6 is the recommended range.

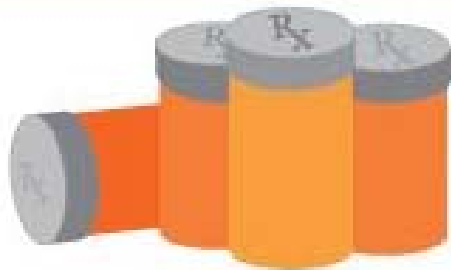
Reading Level

Reading levels, literacy and education:

- Average adult reads 3-5 levels below years of education
- Many high school graduates are illiterate
- As age increases, so do the deficits in literacy as a result of:
 - declining cognitive function
 - increased time since formal education
 - decreased sensory abilities

Reading Level

HEALTH LITERACY, OUTCOMES & COST



9
out of
10

ADULTS HAVE DIFFICULTY USING
HEALTH INFORMATION
THAT IS ROUTINELY AVAILABLE.

Patients with Health Literacy Support



Annual Healthcare Costs



Proficient Health Literacy Skills



Infographic: Are your patients health literate? Make it easier for patients to understand health information. <http://www.healthcarecommunication.com/Main/Articles/11712.aspx>



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Reading Level

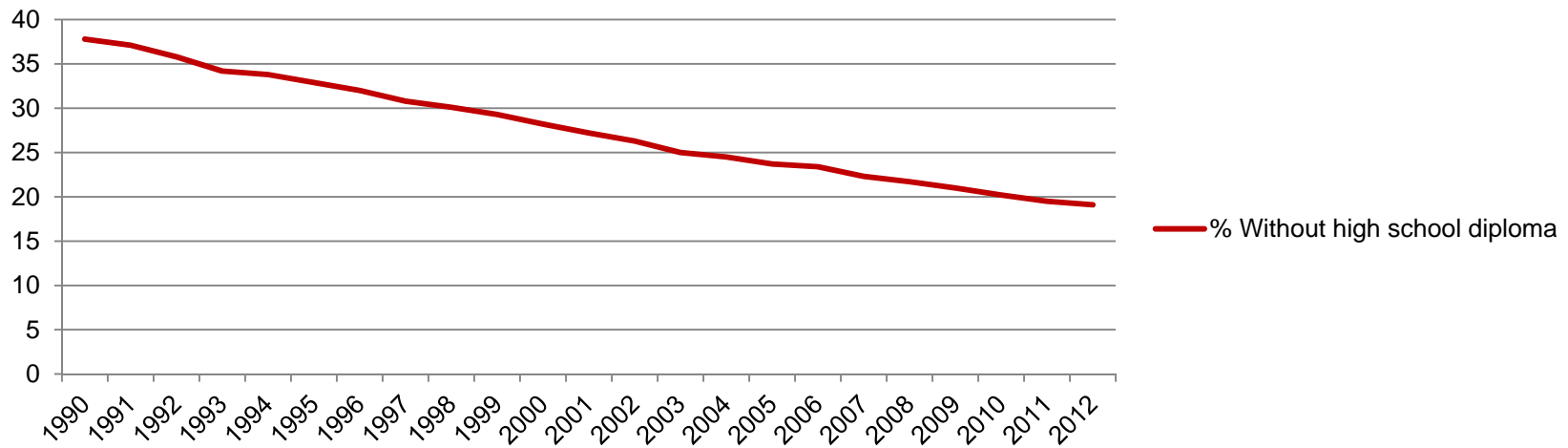
Reading levels, literacy and education:

- One-half of the individuals who scored at the lowest level, had not finished high school.
- About 45% of those scoring at the lowest level had immigrated to Canada
- 43% had a mother tongue other than English or French.

Statistics Canada. *Building on our Competencies: Canadian Results of the International Adult Literacy and Skills Survey 2003*. Ottawa, Statistics Canada, 2005 (Cat. No. 89-617-XIE, see Table 2.9).

Reading Level

Level of education, Canadians 15 years of age and over



Indicators of Well-being in Canada
Human Resources and Skills Development Canada
<http://www4.hrsdc.gc.ca/.3ndic.1t.4r@-eng.jsp?iid=29>

Readability Assessment

- FOG
- SMOG: Simple Measure of Gobbledygook
- Flesch-Kincaid (grade level)
- Flesch Reading Ease Index (score)
- Fry

Readability Assessment

Count

- Number of long words (three or more syllables)
- Sentences per paragraph
- Characters per word

Calculate

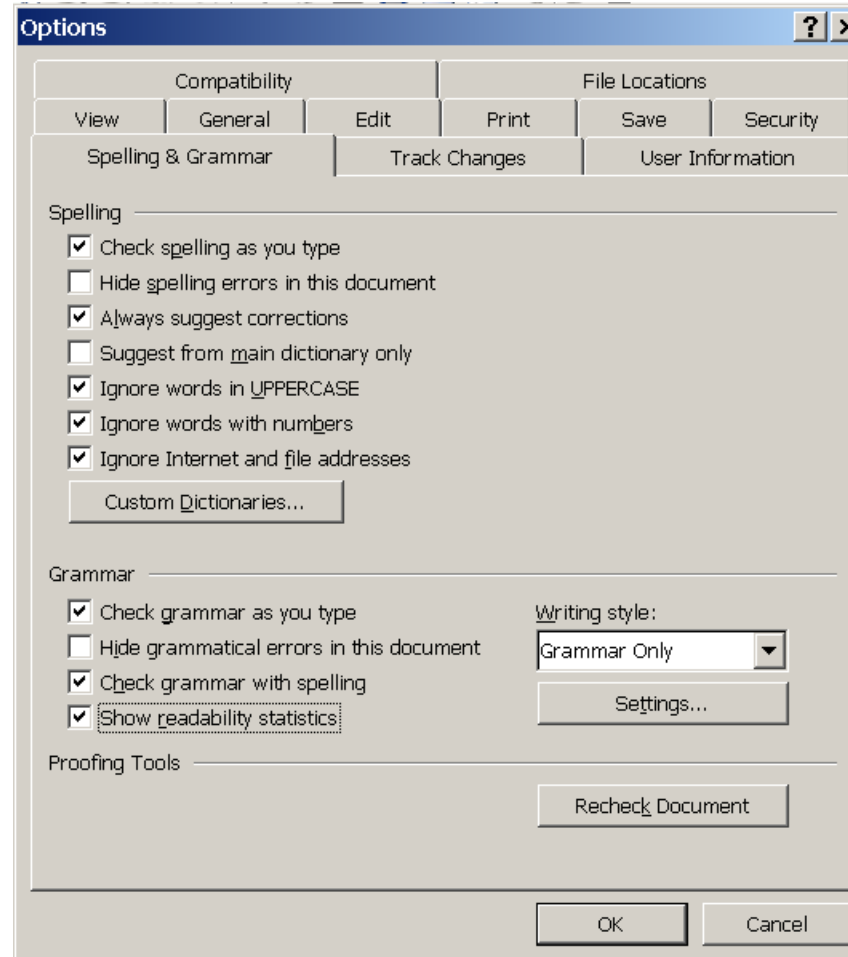
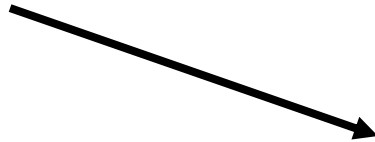
- Average sentence length (words per sentence)
- Average number of syllables per word
- % of passive sentences

Readability Assessment

Microsoft Word 2003 Readability Test

Tools Menu

- Options
- Spelling & Grammar
- Check “Show readability statistics”
- Click OK

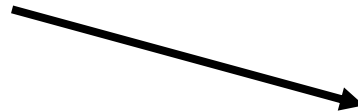


Readability Assessment

Microsoft Word 2003 Readability Test

Select text

- Open Review menu
- Select Spelling and Grammar
- Result



Averages	
Sentences per Paragraph	1.5
Words per Sentence	15.0
Characters per Word	5.4

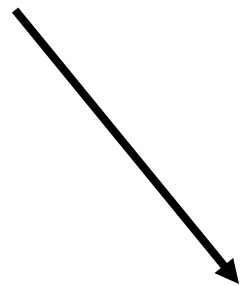
Readability	
Passive Sentences	11%
Flesch Reading Ease	36.8
Flesch-Kincaid Grade Level	11.8

OK

Readability Assessment

Microsoft Word 2010 Readability Test

Click on options

The screenshot shows the Microsoft Word 2010 ribbon with the 'Options' button highlighted. The ribbon includes buttons for Save, Save As, Save as Adobe PDF, Open, Close, Info, Recent, New, Print, Save & Send, Help, Options, and Exit. The 'Options' button is highlighted with a blue border. To the right, the 'Information about TOC-Nursing' task pane is visible, showing the file path K:\Library\Journals\Routing\TOC-Nursing.doc and several sections: Compatibility Mode, Permissions, Prepare for Sharing, and Versions. The 'Options' button is highlighted with a blue border.

Information about TOC-Nursing
K:\Library\Journals\Routing\TOC-Nursing.doc

Compatibility Mode
Some new features are disabled to prevent problems when working with previous versions of Office. Converting this file will enable these features, but may result in layout changes.

Permissions
Anyone can open, copy, and change any part of this document.

Prepare for Sharing
Before sharing this file, be aware that it contains:

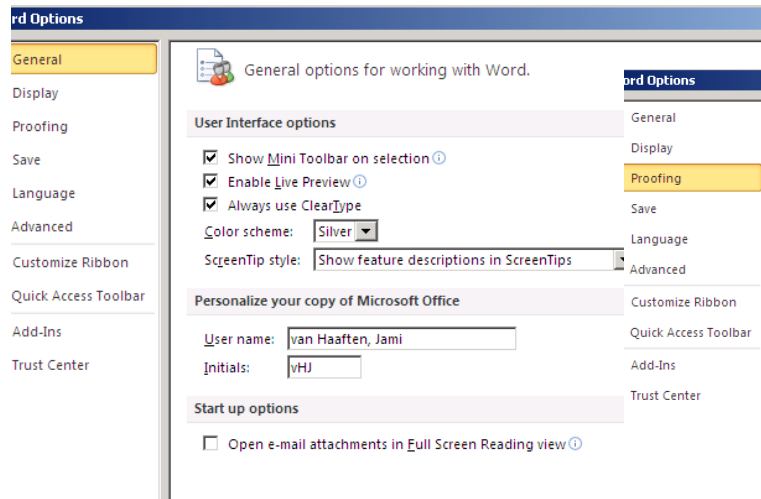
- Document properties, author's name and related dates
- Content that cannot be checked for accessibility issues because of the current file type

Versions
There are no previous versions of this file.

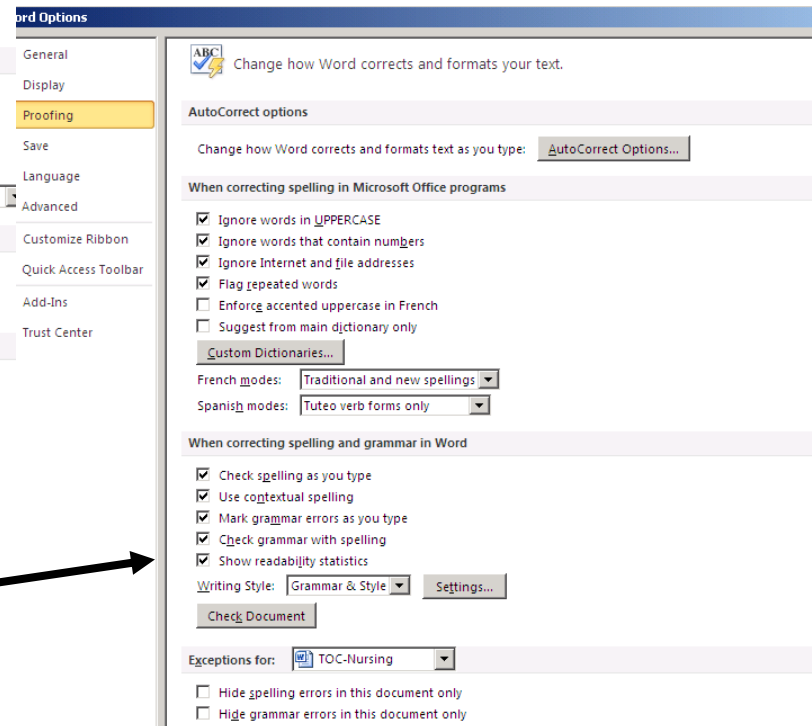
Readability Assessment

Microsoft Word 2010 Readability Test

Choose proofing



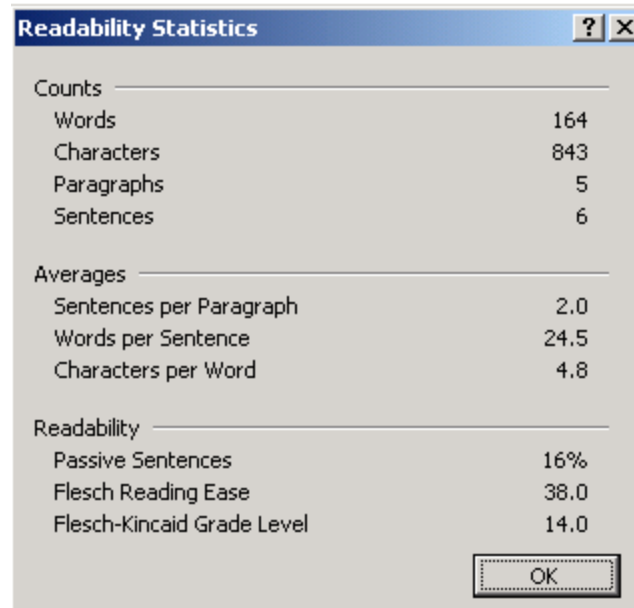
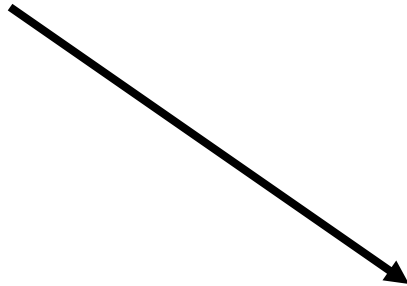
Check off
Show readability statistics



Readability Assessment

Microsoft Word 2010 Readability Test

Run the spelling & grammar check and view the Results



Readability Statistics	
Counts	
Words	164
Characters	843
Paragraphs	5
Sentences	6
Averages	
Sentences per Paragraph	2.0
Words per Sentence	24.5
Characters per Word	4.8
Readability	
Passive Sentences	16%
Flesch Reading Ease	38.0
Flesch-Kincaid Grade Level	14.0
OK	

Readability Assessment

Sample – before and after

Exercise

Readability Assessment

Limitations of Readability Measures

Flesh-Kincaid grade level, used in Word and other online tools, under-estimates grade level by two-three years.

From Writing Sample Analyzer

Readability Assessment

Limitations of Readability Measures

- Can't handle bulleted text/point form
- Won't reflect cultural sensitivity
- Fails to account for illustrations
- Won't evaluate layout or visual impact
- Doesn't consider when, in the continuum of care, the information is being distributed

(Smith, Haggerty 2003; Osborne, 2004)

Readability Assessment

Limitations of Readability Measures

- Readability formulas may overestimate the difficulty of commonly used medical terms based on word length alone
- May not take into account the use of glossaries when scoring a material.
- Readability assessment does not measure suitability, quality, accuracy or currency of patient information

(Finnie, Filder, Kneuper-Linder and Mullen 2010)

Readability Assessment

Limitations of Readability Measures

- Readability assessment can be used to give you an idea of the consistency of your writing style
- It is recommended that you use focus groups to provide a better indication of a document's readability.
- The Assessing the Suitability of Materials (SAM) tool may be used to go beyond readability measurements

Readability Assessment

Online calculators - Writing Sample Analyzer

Text Sample:

Malden Park Continuing Care Centre is a state of the art building, located on the grounds of the Western Campus of Windsor Regional Hospital against the backdrop of Malden Park. Our Centre is a long-term care home environment with private and semi-private room accommodation.

Number of Sentences:	<input type="text" value="2"/>
Words Per Sentence:	<input type="text" value="22"/>
Characters Per Word:	<input type="text" value="5.16"/>
Flesch Reading Ease:	<input type="text" value="51.84"/>
What does this mean?	
Fog Scale Level:	<input type="text" value="12.44"/>
What does this mean?	
Flesch-Kincaid Grade Level:	<input type="text" value="11.49"/>
What does this mean?	



Readability Assessment

SMOG:

Measures materials written between 4th grade and college level. Most popular because of accuracy, speed of use, and simplicity

Fry:

Measures materials between 1st grade and college level. More accurate at the lower levels

Readability Assessment

How to Use the SMOG Formula

1. Count 10 sentences in a row near the beginning of your material. Count 10 sentences in the middle. Count 10 sentences near the end. (30 total sentences)
2. Count every word with three or more syllables in each group of sentences, even if the same word appears more than once.
3. Add the total number of words counted. Use the SMOG Conversion Table I to find the grade level.

Readability Assessment

Selecting text for online readability tools

- Include at least 30 sentences or 300-500 words
- Use only complete sentences
- Choose samples of connected, flowing text
- Spell out numbers and acronyms, so that number of characters and syllables can be counted)

Readability Assessment

Clean up the text

Delete

- Headings
- Lists with bullets
- Sentence fragments
- Periods that do not mark the end of a sentence

Readability Assessment

Online calculators - SMOG Calculator

http://www.wordscount.info/wc/jsp/clear/analyze_smog.jsp

WordsCount
Language Is Our Passion

Statistics
Stat Mule
Explanation

Syllable
Syllable Scythe
Explanation

Readability
Calculator
Explanation

SMOG
Calculator
Explanation

CLEAR
Calculator
Explanation

WordsCount: SMOG

This SMOG measure give you the reading grade determined by the formula described below.

Click 100000 characters remaining.
Click button to submit



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Readability Assessment

- Writing Sample Analyzer
<http://obsidian.sktyler.com/tools/writer/sample.php>
- Reading effectiveness tool -
www.eastendliteracy.on.ca/ClearLanguageAndDesign/readingeffectiveness/tool/start2.htm
- Readability index calculator – French language
www.standards-schmandards.com/exhibits/rix/