
The Information Standard Workshop

Understanding Health Literacy – best practice in developing and testing health and care information

10th October 2013

Resources and useful information

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English National Qualifications Framework (NQF): Literacy

Level	NQF age equivalent	Literacy <i>An adult classified at this level understands:</i>	Examples of typical skills	Bloom's taxonomy of learning	SMOG readability score	Newspapers
Entry 1	5-7 years	Short texts, repeated language, familiar topics, information from common signs and symbols.	Write short messages. Select floor numbers in lifts.	Knowledge gathering, comprehension relying on Speaking and Listening skills rather than Reading and Writing.		
Entry 2	7-9 years	Short straightforward texts, familiar topics. Short documents, familiar sources, signs and symbols.	Describe health symptoms. Use a cashpoint machine.			
Entry 3	9-11 years	Short straightforward texts on familiar topics, information from everyday sources.	Understand price labels. Pay household bills.	Knowledge gathering, comprehension.	10-11	Sun, Mirror
Level 1	Matriculation examinations (GCSE) grade D-G	Understands short straightforward texts of <u>varying length</u> on a variety of topics, accurately and independently, from different sources.	GCSE grades D-G		12-13	Express, Mail
Level 2	GCSE grades A* to C or higher qualifications	Understands texts of varying complexity, accurately and independently, can obtain information of varying length and detail from different sources.	5 grades A* to C GCSE	Analysis, application	14-16	Times, Telegraph, Guardian
Above level 2	A levels and above	Increasing ability to obtain, interpret, evaluate and synthesise complex information.	A levels and above			

Assessing the readability of materials

	Harder to read	Easier to read
Text density	High	Lots of white space, short chunks of text, spaces between chunks of text, good size margins.
Line spacing	Less than double	Double or greater
Font	Gothic, italic, size less than 12	Distinct, clear e.g. Calibri, Arial, Helvetica. Size 12-14
Casing	ALL CAPITALS	Mixture of upper and lower case.
Highlighting	CAPITALS	Bold or boxed
Illustrations	Separated from relevant text, used as background	Next to relevant text, at end of paragraphs.
Layout	Headings etc. scattered throughout pages, sentences running over pages, no page numbering.	Headings, new sections etc. at top of pages. Sentences and paragraphs not running over pages. Pages numbered.
SMOG	Long sentences, long words, multiple clauses, many points per sentence.	Short sentences, short words, one point per sentence, one or two clauses.
Voice	Passive	Active

Simple Measure of Gobbledygook (SMOG) calculation

This uses sentence complexity (number of words per sentence) and word complexity (number of words of 3 or more syllables) to give a readability score. Shorter sentences with simpler words will give better readability. The lower the readability score, the more accessible the document. Given current English literacy levels, the number (%) of people of working age able to understand and use text documents at various readability levels is shown in the table. Population numbers assume an English adult working age population of 35 million.

Readability level	Able to fully understand and use		Not able to fully understand and use	
	Number (million) (%)		Number (million) (%)	
10-11	32.5	93	2.5	7
12-13	29.8	85	5.2	15
14 and over	20.0	57	15.0	43

Rewriting text to improve readability: The Meningitis Septicaemia Tumbler test

Original	Rewrite
<p>The rash and tumbler test People with septicaemia may develop a rash of tiny red ‘pin prick’ marks which can develop into purple bruising. The tumbler test is a simple test that can help you to distinguish this rash from other rashes.</p>	<p>The rash and tumbler test. People with septicaemia may develop a rash of tiny red ‘pin prick’ marks. These can turn into purple bruises. The tumbler test is a simple test. It can help you to tell this rash from other rashes.</p>
<p>How to do the Tumbler Test: 1. Press the side of a clear glass firmly against the rash (on dark skin, check for the rash on lighter parts of the body, eg. inner eyelids, soles of feet, palms of hands or finger tips) 2. If the rash does NOT fade when the glass is pressed against it, seek medical help IMMEDIATELY as this indicates that it might be a sign of septicaemia 3. If the rash fades when the glass is pressed against it, KEEP CHECKING. In rare cases, the rash can change from fading to non-fading</p>	<p>How to do the Tumbler Test: 1. Press the side of a clear glass firmly against the rash. On dark skin look for the rash on lighter parts of the body, e.g. inner eyelids, soles of feet, palms of hands or finger tips. 2. If the rash does not fade when the glass is pressed against it, it might be a sign of septicaemia. Seek medical help at once. 3. If the rash fades when the glass is pressed against it, keep checking. In rare cases, the rash can change from fading to non-fading.</p>
<p>What does the rash look like? Apart from the tumbler test, the rash that develops during meningococcal septicaemia can also be distinguished from other rashes depending on the following: Appearance: small pin prick to larger red or purple bruises Size: maximum diameter greater than 2mm Distribution: universal, can be anywhere on the body</p>	<p>What does the rash look like? The rash can also be told apart from other rashes in these ways: • What does it look like? It looks like a small pin prick or larger red or purple bruises. • How big is it? It will be no bigger than 2mm across. • Where is it? It can be anywhere on the body.</p>
<p>Who gets the rash and when does it appear? Someone who becomes unwell rapidly should be examined particularly carefully for the meningococcal septicaemia rash. However, only 40% of patients with invasive meningococcal disease will develop this rash and it usually does not appear until six to twelve hours after the first symptoms.</p>	<p>Who gets the rash and when does it appear? Someone who suddenly becomes unwell should be tested very carefully for this rash. However, only 40% of people with this disease get this rash. It usually appears six to twelve hours after the first symptoms.</p>
<p>SMOG 18.3 Well above level 2</p>	<p>SMOG 11.9 Entry 3</p>
<p>Illustrations Number (%) of population unable to fully understand and use text: 15 million (43%)</p>	<p>Number (%) of population unable to fully understand and use text: 2.5 million (7%)</p>
<p>SMOG Long sentences, long words, multiple clauses, many points per sentence</p>	<p>Short sentences, short words, one point per sentence, one or two clauses</p>

Assessing and simplifying the numerical content of health materials

	Harder to understand	Easier to understand
Calculations	Raw figures, ambiguity	Example calculations, descriptions
Terminology	Maths: maximum or majority / minimum or minority / mean / median / diameter	Literacy: most / least or fewer / average / commonest / width or size
Fractions / ratios	Ratios / proportions / fractions / percentages	Absolute values, pictorial representation
Number size and complexity	Large numbers, decimal points	Small numbers, whole numbers
Figures vs. words	Words (e.g. Eighty-eight)	Numbers (e.g. 88)
Concepts	Abstract maths concepts	Real-life examples
Number of calculation steps	Multiple steps	No steps, or single steps with examples. If multiple steps are required consider tables.
Layout	Lots of numbers, small font, distracting information	Few numbers next to simple explanatory text, lots of white space, illustrations and tables may help.

Resources

The Adult Literacy Core Curriculum (ALCC)

<http://rwp.excellencegateway.org.uk/Literacy/Adult%20literacy%20core%20curriculum/>

Access for All

<http://rwp.excellencegateway.org.uk/Access%20for%20All/>

SMOG Calculator

<http://www.niace.org.uk/misc/SMOG-calculator/smogcalc.php#top>

Readability: how to produce clear written materials for a range of readers (NIACE)

<http://shop.niace.org.uk/readability.html>

The British Dyslexia Association Style Guide has helpful advice, including recommendations for making on-screen documents and websites easier to read:

<http://www.bdadyslexia.org.uk/about-dyslexia/further-information/dyslexia-style-guide.html>

Plain English Campaign guide to producing medical information. Authors are able to use the guides freely provided they stay within the copyright guidelines.

<http://www.plainenglish.co.uk/files/medicalguide.pdf>

The Adult Numeracy Core Curriculum

<http://rwp.excellencegateway.org.uk/Numeracy/Adult%20Numeracy%20Core%20Curriculum/>