**Developing a practical readability tool for assessing written oral health promotion material for people with low literacy**

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**Abstract**

**Objective:** Oral health promotion resources need to be simple, useful, accessible and understandable to be effective. The importance of this is magnified for population groups who are at increased risk of poor oral health, have low literacy or language barriers. Consultation with health service providers identified the need for a readability tool to assist them to assess and develop appropriate oral health promotion resources to ensure they were written using language that was easy to understand by those with high oral health needs and low literacy levels. The objective of this study was to identify and adapt existing health literacy and readability tools, and pilot the tool to determine its appropriateness for use in oral health promotion targeting those with high oral health needs and low literacy levels.

**Design:** This paper reports the development of an oral health readability tool.

**Methods:** Existing readability tools were identified through electronic searching and reviewed for suitability. In parallel, written oral health resources used in Australia specifically targeting refugee and asylum seeker population were identified through discussions with oral health service providers and an online grey literature search.

**Results:** No single tool was identified which could be readily used to screen and assess written oral health resources. Two existing tools, the Fry readability formula and a suitability checklist, were therefore adapted and integrated into one tool. This new readability tool was then piloted by screening ten written oral health resources currently in use in the public oral health sector for refugee and asylum seeker populations. Of the ten written oral health resources assessed, only four were of an appropriate reading level for clients with low literacy.

**Conclusions:** This study developed and tested an oral health readability tool to assess and develop oral health promotion resources.

**Key words:**

oral health literacy, resources, tool, health promotion, readability

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**Introduction**

Health literacy refers to the ability of individuals to gain access to, read, understand and use health information in ways that promote and maintain good health and enable individuals to make informed health decisions ([Institute of Medicine, 2004](#_ENREF_17)). Although there is a link between a person’s general literacy level (their ability to read, write, speak, and compute and solve problems) and health literacy, a high general literacy does not correlate with high health literacy ([Public Health England and UCL Institute of Health Equity, 2015](#_ENREF_26)). People with high levels of health literacy are able to understand and access healthcare more efficiently and have better health outcomes; conversely people with low health literacy have poorer health outcomes ([Barratt, 2008](#_ENREF_7); [Adams et al., 2009](#_ENREF_3); [Mika et al., 2005](#_ENREF_23)). In 2006, the Australian Bureau of Statistics (ABS)([Australian Bureau of Statistics, 2006](#_ENREF_5)) reported that less than half (41 per cent) of Australians aged 15-74 years had an adequate (or better) level of health literacy. Inadequate health literacy can affect an individual’s ability to access and navigate health care systems, as well as their ability to read prescription instructions, communicate effectively on health related matters and seek tests for screening or diagnostic purposes ([Australian Bureau of Statistics, 2006](#_ENREF_5)). An individual’s health literacy is influenced by a range of factors including socio-economic status, disability, age, residential location, culture, language and social connectedness ([Australian Commission on Safety and Quality in Health Care, 2014](#_ENREF_6); [World Health Organisation, 2013](#_ENREF_30)).

 Health literacy applies to both individuals and healthcare systems. Healthcare systems can apply effective health literacy strategies by providing equal and easy access to, and delivery of, healthcare and health information (Nutbeam, 2008). This involves the integration of health literacy considerations into planning, evaluation and patient safety and quality improvement (Department of Health and Human Services, 2014). Healthcare professionals can promote effective health literacy by presenting and communicating information in ways that improve clients’ understanding and ability to act on the information. One way to promote health literacy is by improving the readability of written and quality of verbal health communications, and enhancing the health professionals’ understanding of the impact of low health literacy on their clients’ ability to improve their health ([Nutbeam, 2008](#_ENREF_25)).

 Adults at all reading levels learn better with simple and clear instructions ([Davis et al., 1998](#_ENREF_11); [Davis et al., 1996](#_ENREF_10)). Providing simple resources for use by health professionals can be valuable as it can promote communication with clients that are easy to understand, with minimum medical jargon ([Department of Health and Human Services, 2014](#_ENREF_12); [Arora et al., 2014](#_ENREF_4)). Studies specifically examining the relationship between health literacy and oral health are limited ([Jackson and Eckert, 2008](#_ENREF_18); [Khan et al., 2014](#_ENREF_21)). Oral health literacy has been defined as “the degree to which individuals have the capacity to obtain, process and understand basic oral health information and services needed to make appropriate health decisions” ([National Institute of Dental Craniofacial Research and Services, 2005](#_ENREF_24): page 176). This is more than the ability to read, and includes other skills such as numeracy, and the ability to navigate systems within health ([Horowitz and Kleinman, 2012](#_ENREF_16)). Oral health literacy has been identified as one of the key factors influencing oral health status and outcomes ([Rogers, 2011](#_ENREF_28)). Clients with high oral health literacy are considered more likely to access oral health services and have better oral health, although studies on this topic are limited ([Jones et al., 2007](#_ENREF_19); [Horowitz and Kleinman, 2012](#_ENREF_16)).

 Providing people with quality written oral health information can be useful to increase their knowledge; however, to have an effect, the information provided needs to be suitable ([World Health Organisation, 2013](#_ENREF_30)). To date, there are a number of international studies ([World Health Organisation, 2013](#_ENREF_30); [Barratt, 2008](#_ENREF_7); [Adams et al., 2009](#_ENREF_3); [Mika et al., 2005](#_ENREF_23)) evaluating the effectiveness of written health information for various health topics; however, there is little research specifically in oral health. Those studies that have examined written oral health information ([Hendrickson et al., 2006](#_ENREF_15); [Kang et al., 2005](#_ENREF_20); [Harwood and Harrison, 2004](#_ENREF_14); [Arora et al., 2014](#_ENREF_4)) have found that many were written for people with high literacy abilities and the resources could be improved.

 There are several tools available to assess the readability and suitability of written resources. Readability formulae measure the difficulty of vocabulary and sentences in written resources ([McGee, 2010](#_ENREF_22)). Although each formula is calculated differently, they provide a grade which measures the number of years of education required to understand the text ([Rudd and Anderson, 2006](#_ENREF_29)). Other tools, such as a suitability checklist assesses the writing style, design, appeal and cultural appropriateness of the resources. Currently there is lack of consensus on the best readability tool(s) to use and to date studies have used different readability formulae and suitability checklists to evaluate resources.

 The aim of this study was to develop and pilot an oral health readability tool that could be used a) by oral health professionals to assess and develop resources that are written at an appropriate reading and comprehension level, and b) to assess existing oral health resources intended for refugees and asylum seeker clients to determine their appropriateness and identify areas for improvement.

**Methods**

***Identification of need***

Dental Health Services Victoria (DHSV) was established in 1996 and is the leading public oral health agency in Victoria, Australia. It aims to improve the oral health of those residents in the state of Victoria, particularly vulnerable groups and those most in need. The Victorian State Government funds DHSV to provide clinical oral health services to eligible Victorians. Priority population groups for DHSV include refugees and asylum seekers and studies have shown that this population is more likely to have low levels of oral health literacy, access to oral health information, including oral health services and treatments ([Riggs et al., 2014](#_ENREF_27)).

 This project arose from discussions with oral health service providers and clinicians in Victoria who use oral health resources specifically for refugee and asylum seeker clients. Clinicians felt that many oral health promotion resources available were not presented or written at a level that enabled refugee and asylum seeker clients to understand the cause of oral disease and ways to prevent it from developing. Clinicians identified the need for a tool that could be used to assess the readability and suitability of written oral health resources. Existing tools either focus on readability or suitability but we wanted a tool that was comprehensive hence the decision to develop a tool.

***Identification of available oral health resources***

Discussions with key stakeholders (oral health service providers) identified a number of existing oral health promotion resources that were designed and used in public oral health clinics in Victoria for improving the oral health of refugee and asylum seeker clients. An online search during February 2014 was also undertaken to identify other relevant oral health promotion resources in use across Australia.

***Identification of readability tools to assess, screen and develop oral health resources***

An online search was undertaken by one of the authors (KV) in March 2014 to identify existing health literacy tools (readability formulae and checklists). This involved conducting a search of EBSCOHOST for journals evaluating health resources using readability formulae and suitability checklists. Search terms used were ‘readability formula’ and ‘checklist’ in conjunction with ‘health’, ‘Australian’, ‘compar-e/ison’, and ‘pros and cons’. A grey literature search was also undertaken using ‘health literacy’ and ‘readability formula’ and ‘checklist’ in conjunction with ‘health’, ‘Australian’, ‘compar-e/ison’, and ‘pros and cons’.

**Results**

***Identification of oral health resources in use in Australia***

Ten English-language resources were selected through convenience sampling for assessment; two resources were for oral health professionals, and eight for multilingual or refugee and asylum seeker clients. The resources comprised of tips sheets, fact sheets and a brochure.

***Identification of readability assessment tools***

Existing health literacy tools were reviewed and no single tool was identified which could be readily used to screen and assess the written oral health resources. Existing tools mostly referred to using readability formulae, and there were few that promoted use of both a readability formulae and a suitability checklist to comprehensively screen resources. Three readability formulae were identified and considered for use: online Simple Measure of Gobbledygook (SMOG), manual SMOG and manual Fry. These formulae were identified as they appeared to be the most commonly used formulae in research journals assessing readability of health resources for patients; however they had different methods of calculating the grade level to assess the reading level. In addition to the readability formula, the print communications rating checklist by the Health Literacy Studies Unit of Harvard University was sourced ([Rudd and Anderson, 2006](#_ENREF_29)).

***Development of an oral health readability tool***

In this study, a new oral health readability assessment tool was developed based on adaptation of the manual Fry readability formula in addition to a modified suitability checklist adapted from Health Literacy Studies Unit of Harvard University ([Rudd and Anderson, 2006](#_ENREF_29)) to allow a more comprehensive assessment than using either alone. After an initial calculation and comparison of the ten resources using each of the three formulae by KV, AH-L and another assessor, it was concluded that Fry was better suited for resource development, as well as assessment, as the manual calculation gave more insight into the content than computer generated grades (i.e. SMOG online). In addition, SMOG does not differentiate well at levels of literacy below a 6th grade (11-12 year olds) reading level ([Rudd and Anderson, 2006](#_ENREF_29)). The Fry readability formula was more suitable for low literacy resources compared to other formulas, which was consistent with other studies recommending Fry ([Burke and Greenberg, 2010](#_ENREF_8); [McGee, 2010](#_ENREF_22); [Doak et al., 1996](#_ENREF_13)).

 The 24 items within the original print communication rating section were simplified to 17 items, with similar items combined or removed, to remove repetition. To enable assessors to give a more accurate score and to reduce variation in scoring, instructions were included on the checklist’s use and how to score items between 0 and 3, with reasons to explain a particular item. To generate the overall assessment, each item was scored (between 0 and 3), these scores were added and the assessed resources categorised into one of three ranges: caution, acceptable and good. The adapted checklist (Figure 1) was divided into three large sections: writing style, organisation and design, and appeal (to audience). A non-applicable section was also added to the adapted checklist for items that were not present or could not be assessed in a particular oral health resource. It became apparent that not all materials had jargon (item 6) or diagrams (item 10), so the non-applicable box only applies to two items which do not have to be present to engage the audience. All other items were found to be present in some way for all materials assessed, so these items should be present/ considered if the material were to be recreated, or supplemented with additional education for clarification.

***Piloting the oral health readability tool***

The new oral health readability tool was piloted with a sample of ten oral health resources designed for refugee and asylum seeker clients. The ten resources were evaluated by two assessors (KV and AH-L). Using the Fry readability formula, it took approximately 15 minutes to evaluate each resource. Two sets of grades were calculated for the Fry readability formula - grades using text from different parts of a specific resource and grades using the identical text within the same resource. When assessing the text independently from different parts of each resource, similar grades were obtained by the two assessors for five out of the ten resources, while other resources showed differences of one to two grades between the assessors. In comparison, when using the same text, eight out of ten resources were graded similarly by the two assessors, while two resources had a difference of one grade (See Table 1 for results of review of identical text). We did not undertake any formal assessment of reliability. A comparison of the two independent gradings was performed for each resource but the results were not analysed statistically.

 The Centre for Culture, Ethnicity and Health, a government-funded community organisation in Victoria and ([Doak et al., 1996](#_ENREF_13)) recommend adopting a reading level at or below the US 6th grade (11-12 year olds) for resources to ensure that the information is understood by the majority of the population. For the purpose of this evaluation, resources that were graded at, or below the 6th grade were considered appropriate. Regardless of assessing identical or different sections of the same resource, both assessors scored four of the resources as Good (at the 6th grade or under), and scored the two resources available for health professionals’ at approximately the 16th grade.

 The suitability checklist took approximately 15 minutes to evaluate each resource. Scores were converted to percentages and scores between 0-33% indicate that caution should be used when using the resource. A score of 34-64% indicates that the resource is acceptable, while 65-100% indicates that the resource is good. No resources scored below 30 per cent, and the four resources that scored well in the readability component also scored above 65 per cent (Table 1). In the checklist evaluation, the two resources used by oral health professionals performed well in the areas that related to grouping content into meaningful sections, and colour contrast between text and paper. Areas that required improvement included the use of short, simple sentences and words (without altering the meaning), the use of activities such as stories to engage the reader, and font size. There were 4 resources that had a readability grade of 6th grade and under. The areas that these four resources did well in included summarising main points and desired behaviour changes, avoiding humour, and having short and direct sentences. Although they scored well in the suitability checklist, there were many areas lacking which may affect the reader’s ability to understand and use the information. Resources rarely used activities to engage the reader, such as stories.

 The pilot testing identified improvements of the modified suitability checklist. As a result, the layout was changed with a section added for comments about that particular score. The non-applicable section now only applies to two items which do not have to be present to engage the audience.

**Discussion**

Oral health literacy is an important determinant of oral health status and providing people with quality, suitably written oral health information is important to increase their knowledge ([World Health Organisation, 2013](#_ENREF_30)). This study identified that no existing readability tool was available that could readily be used to screen and assess written oral health resources for use by oral healthcare providers. This study has now developed and tested an oral health readability tool that can be used to assess and develop quality oral health promotion resources.

 Oral health service providers, including DHSV, have highlighted the importance of providing simple and easy to understand information for health professionals and clients. Improving written oral health information is just one component of improving the oral health literacy of refugee and asylum seeker clients and the general population. Only four of the ten oral health resources assessed were at an appropriate reading level for clients with low oral health literacy. This is consistent with the feedback from oral health service providers and current studies ([Arora et al., 2014](#_ENREF_4); [Harwood and Harrison, 2004](#_ENREF_14); [Hendrickson et al., 2006](#_ENREF_15); [Kang et al., 2005](#_ENREF_20)) that identified the limited availability of appropriately written oral health information and resources for clients and health professionals. The oral health readability assessment tool developed here is not intended to determine which resources are ‘good’ and which are ‘bad’. Instead, the tool identifies areas for improvement in development of appropriate health information and resources that will promote better client engagement and participation in health-promoting behaviours. Where possible, market testing the resource with the target client groups will provide the best indicator of what is an appropriate resource for them. Ideally, from the first time they read it, clients must be able to ‘find what they need, understand it, then use it’ ([Centre for Culture Ethnicity and Health, 2014](#_ENREF_9)).

**Conclusions and Implications**

This new oral health readability tool provides a practical way of enabling healthcare providers to develop better oral health resources that are more likely to effectively promote and support oral health in diverse community groups.

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**References**

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Adams, RJ, Appleton, SL, Hill, CL, Dodd, M, Findlay, C and Wilson, DH (2009) Risks associated with low functional health literacy in an Australian population. *Medical Journal of Australia* 191: 530-534.

Arora, A, Lam, AS, Karami, Z, Do, LG and Harris, MF (2014) How readable are Australian paediatric oral health education materials? *BMC Oral Health* 14: 111.

Australian Bureau of Statistics (2006) Health Literacy, ~~Australia~~*~~,~~* ~~2006~~ Report no. 4102.0, Australian Bureau of Statistics, Australia, Available at: [http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features20June+2009](http://www.abs.gov.au/AUSSTATS/abs%40.nsf/Lookup/4102.0Main%2BFeatures20June%2B2009) (accessed 24 April 2014) -> estimated date, unsure if cite as website or report

Australian Commission on Safety and Quality in Health Care (2014) Health literacy: taking action to improve safety and quality. Report, ACSQHC, Sydney.

publisher? Australian Commission on Safety and Quality in Health Care (ACSQHC),

https://www.safetyandquality.gov.au/publications/health-literacy-taking-action-to-improve-safety-and-quality/ (accessed 14 March 2016)

Barratt, A (2008) Evidence Based Medicine and Shared Decision Making: the challenge of getting both evidence and preferences into health care. *Patient Education and Counselling* 73: 407-412.

Burke, V and Greenberg, D (2010) Determining Readability: How to Select and Apply Easy-to-Use Readability Formulas to Assess the Difficulty of Adult Literacy Materials. *Adult Basic Education and Literacy Journal* 4: 34-42.

Centre for Culture Ethnicity and Health (2014) Health literacy information sheet 8: Written communication

 Available at : http://www.ceh.org.au/wp-content/uploads/2015/12/HL8\_Written-communication.pdf (accessed 25 June 2014).

Davis, TC, Bocchini, JA, Jr., Fredrickson, D, Arnold, C, Mayeaux, EJ, Murphy, PW, Jackson, RH, Hanna, N and Paterson, M (1996) Parent comprehension of polio vaccine information pamphlets. *Pediatrics* 97: 804-810.

Davis, TC, Holcombe, RF, Berkel, HJ, Pramanik, S and Divers, SG (1998) Informed consent for clinical trials: a comparative study of standard versus simplified forms. *Journal of National Cancer Institute* 90: 668-674.

Department of Health and Human Services. (2014) Health literacy enabling communication and participation in health. Background paper, Victorian Department of Health. Melbourne: Victorian Government

. Available at: http://www.healthissuescentre.org.au/images/uploads/resources/Health-literacy-background-paper-Victorian-Department-of-Health.pdf (accessed 26 April 2016)

Doak, CC, Doak, LG and Root, JH. (1996) Teaching patients with low literacy skills 2nd edn ed.: J.B. Lipponcott Company: Philadelphia. Available at: https://www.hsph.harvard.edu/healthliteracy/resources/teaching-patients-with-low-literacy-skills/ (accessed 12 April 2014).

Harwood, A and Harrison, JE (2004) How readable are orthodontic patient information leaflets? *Journal of Orthodontics* 31: 210-219.

Hendrickson, RL, Huebner, CE and Riedy, CA (2006) Readability of pediatric health materials for preventive dental care. *BMC Oral Health* 6: 14-14.

Horowitz, AM and Kleinman, DV (2012) Oral health literacy: a pathway to reducing oral health disparities in Maryland. *Journal of Public Health Dentistry* 72: S26-S30.

Institute of Medicine. (2004) Health Literacy: A Prescription to End Confusion. Washington,DC: [National Academies Press (US)](http://www.nap.edu/).

Jackson, RD and Eckert, GJ (2008) Health literacy in an adult dental research population: a pilot study. *Journal of Public Health Dentistry* 68: 196-200.

Jones, M, Lee, JY and Rozier, RG (2007) Oral health literacy among adult patients seeking dental care. *Journal of the American Dental Association* 138: 1199-1208.

Kang, E, Fields, HW, Cornett, S and Beck, FM (2005) An evaluation of pediatric dental patient education materials using contemporary health literacy measures. *Pediatric Dentistry* 27: 409-413.

Khan, K, Ruby, B, Goldblatt, RS, Schensul, JJ and Reisine, S (2014) A pilot study to assess oral health literacy by comparing a word recognition and comprehension tool. *BMC Oral Health* 14: 135.

McGee, J. (2010) Toolkit for Making Written Material Clear and Effective. Available at: https://www.cms.gov/Outreach-and-Education/Outreach/WrittenMaterialsToolkit/index.html?redirect=/writtenmaterialstoolkit/ (accessed 23 April 2014)

Mika, VS, Kelly, PJ, Price, MA, Franquiz, M and Villarreal, R (2005) The ABCs of Health Literacy. *Family and Community Health* 28: 351-357.

National Institute of Dental Craniofacial Research and Services, (2005) The invisible barrier: literacy and its relationship with oral health. A report of a workgroup sponsored by the National Institute of Dental and Craniofacial Research, National Institute of Health, U.S. Public Health Service, Department of Health and Human Services. *Journal of Public Health Dentistry* 65: 174-182.

Nutbeam, D (2008) The evolving concept of health literacy. *Society for Science and Med* 67: 2072-2078.

Public Health England and UCL Institute of Health Equity. (2015) Local action on health inequalities: Improving health literacy to reduce health inequalities. London: Public Health England, Wellington House

Riggs, E, Gussy, M, Gibbs, L, van Gemert, C, Waters, E and Kilpatrick, N (2014) Hard to reach communities or hard to access services? Migrant mothers' experiences of dental services. *Australian Dental Journal* 59: 201-207.

Rogers, JG. (2011) *Evidence-based oral health promotion resource*. Melbourne: Department of Health.

Rudd, RE and Anderson, AM (2006) The health literacy environment of hospitals and health centers. Report, Boston: Harvard School of Public Health.

(accessed 26th February 2014) https://www.hsph.harvard.edu/healthliteracy/practice/environmental-barriers/)

*The Fry Graph Readability Formula*. Available at: <http://www.readabilityformulas.com/fry-graph-readability-formula.php>.

*The SMOG Readability Formula*. Available at: <http://www.readabilityformulas.com/smog-readability-formula.php>.

World Health Organisation. (2013) Health literacy:The solid facts. Report, World Health Organisation: Copenhagen. Available at: http://www.euro.who.int/en/health-topics/environment-and-health/urban-health/publications/2013/health-literacy.-the-solid-facts (accessed 13 April 2016)

**Table 1:** Results for each resource evaluated using identical text from the same resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Name of resource** | **Fry readability grade (average)** | **Suitability checklist score (average)** | **Suitability Rating** |
|  | ***Resources for patients*** |  |  |  |
| **1** | Clean well, drink well, eat well (DHSV) | 6th grade | 73  | Good |
| **2** | Dental care (VicSEG) | 8.5th grade | 66  | Good |
| **3** | Dental care for children (VicSEG) | 4th grade | 66  | Good |
| **4** | How to brush your teeth (NRCH) | 3rd grade | 79  | Good |
| **5** | How to keep your teeth healthy (NSW Refugee Health Service) | 5th grade | 82  | Good |
| **6** | Tooth tips 0-12 months (DHSV) | 7th grade | 62  | Acceptable |
| **7** | Tooth tips 12-18 months (DHSV) | 8th grade | 61  | Acceptable |
| **8** | Tooth tips 18 months-6 years (DHSV) | 7.5th grade | 59  | Acceptable |
|  | ***Resources for oral health clinicians*** |  |  |  |
| **9** | Factsheet 1 -identifying clients of refugee and asylum seeker background (VRHN) | 16th grade | 59  | Acceptable |
| **10** | Factsheet 2 -working with refugee and asylum seeker clients (VRHN) | 16.5th grade | 53  | Acceptable |

DHSV: Dental Health Services Victoria; VRHN: Victorian Refugee Health Network; VicSEG:Victorian Cooperative on Children's Services for Ethnic Groups; NRCH: North Richmond Community Health

**Figure 1**: Modified print communications rating checklist

|  |
| --- |
| **Key** |
| 0 =Does not apply | The item is not present so it cannot be assessed. This applies to two items, which does not have to be present to engage the audience. All other items must be present. |
| 1 =Not done | The material did not follow the item’s specific criteria, or the required item is not present. The material followed some of the item’s criteria but was not consistent throughout the material.  |
| 2 =Done |
| 3 =Done well | The material followed the item’s specific criteria consistently. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  **Writing style** | **0** | **1** | **2** | **3** |
| 1. The material emphasizes and summaries the main points and desired behaviour changes. |  |[ ] [ ] [ ]
| Comments: |  |
| 2. The information is grouped into meaningful sections. |  |[ ] [ ] [ ]
| Comments: |  |
| 3. To make the material appealing and easy to understand, the material is written in a conversational style (e.g. we, us) and in an active voice (the subject is performing an action e.g. ‘Children should eat fruits’ instead of ‘fruits should be eaten by children’). |  |[ ] [ ] [ ]
| Comments: |  |
| 4. The material uses devices to engage and involve the reader, such as stories, case studies, dialogues, or question and answer format. |  |[ ] [ ] [ ]
| Comments: |  |
| 5. The words and sentences are generally short, simple and direct. |  |[ ] [ ] [ ]
| Comments: |  |
| 6. If medical (e.g. dosage, monitoring) or difficult terms are used (consider whether words would be familiar to intended audience), they are clearly explained with helpful examples. |[ ] [ ] [ ] [ ]
| Comments: |  |
| 7. The reading grade is that of the average 6th grade or below (Fry readability graph) |  |[ ]   |[ ]
| Comments: |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  **Organisation and design**  | **0** | **1** | **2** | **3** |
| 8. The material uses clear headings or other devices to signal what is coming next and to provide message repetition. |  |[ ] [ ] [ ]
| Comments: |  |
| 9. The material looks uncluttered, with plenty of white space. |  |[ ] [ ] [ ]
| Comments: |  |
| 10. If diagrams, tables, charts and graphs are used, they are relevant, explained clearly and are placed near the text that introduces them. |[ ] [ ] [ ] [ ]
| Comments: |  |
| 11. The font size is 12 points or greater. |  |[ ] [ ] [ ]
| Comments: |  |
| 12. There is good colour contrast between the printed text and the paper. |  |[ ] [ ] [ ]
| Comments: |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  **Appeal** | **0** | **1** | **2** | **3** |
| 13. The text uses CAPITAL letters only when grammatically needed (words in capital letters are not used to emphasise a behaviour or action as it may offend readers). |  |[ ] [ ] [ ]
| Comments: |  |
| 14. The material does not use exaggerated cartoons, humour and caricature, which may be misunderstood.  |  |[ ] [ ] [ ]
| Comments: |  |
| 15. Photos, illustrations and other visuals are used to reinforce key messages. |  |[ ] [ ] [ ]
| Comments: |  |
| 16. The people and activities shown are relevant to intended audience, in their physical appearance, behaviour and cultural elements.  |  |[ ] [ ] [ ]
| Comments: |  |
| 17. The material shows awareness of and respect for diversity, by using culturally appropriate words and examples relevant to intended audience.  |  |[ ] [ ] [ ]
| Comments: |  |