



AIMing for Appropriate Student Materials

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AIMing

- 1) What is the AIM tool?
- 2) Why AIM?
- 3) AIM Background
- 4) The AIM tool
- 5) Questions



What is the AIM tool?

- AIM= Assessment of Informational Materials
- Assesses the readability of informational student materials
- NorQuest students



CALE NDAR



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AIM Background

Instrument	SAM	AIM
Acronym	Suitability Assessment of Materials	Assessment of Informational Materials
Context	Patient materials	Student materials



SAM

- 1) Use readability statistics with Microsoft Word
- 2) Use at least 12 point font size
- 3) Do not use all caps
- 4) Simplify words e.g.) administer → give, notify → call
- 5) Be consistent in the words you choose e.g. Don't refer to "medications," then "medicines," then "pills." Pick a word and use it throughout the material.
- 6) Turn the passive voice into active voice

(Aldridge 2004)



Critique of SAM

- Lacks directions on how to calculate reading level
- Lacks reviews of general characteristics of educational materials
- Lacks evaluation of whether graphics improve clients' motivation to read and understand
(Clayton 2009)



My Birthday Card?



The AIM Tool Reading Levels

- Grade levels and CLBs
- Sentence complexity: Flesch-Kincaid Grade 8 and lower is appropriate (approx. CLB 6)
- Vocabulary: Dale-Chall word list Grade 4 (approx. CLB 3)

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Research Method

- Reliability: ability to produce consistent scores across multiple raters
- Validation: degree in which scores represent meaningful measures of reading ease for NorQuest's students



Reliability Test

- Used two different materials: 1) a poorly designed handout currently in use by NorQuest and 2) a handout of superior quality specifically created for the test.
- Had multiple raters (faculty and staff from NorQuest and the University of Alberta) use an online version of the AIM tool to score both reading materials.
 - Assigned both handouts to each rater in random order to remove learning effect.
 - Used an online tool specifically created to compute the Flesch-Kincaid reading grade level and the percentage of words included in the Dale Chall list (we did it for them).
 - Used Microsoft word to compute the percentage of passive voice (we did it for them).



Validity Test

- Used two versions of the same material: 1) a handout of lower quality that would not meet most of the AIM requirements 2) a handout of superior quality that would meet most of the AIM requirements – both handouts contained the same information and were specifically created for this test.
- Had students read the handout and complete a comprehension test that consisted of 5 multiple choice questions.
- Had students complete a self reported survey that assessed:
 - Ease of understanding
 - Overall brochure evaluation
 - Quality of specific handout elements evaluated in the AIM instrument.



Reliability Results

- The superior quality handout had a median rating of 90/100 versus 65/100 for the low quality handout. The medians were statistically different.
- Ratings for the superior quality handout were more consistent, with half of the scores varying by 16 points, versus 43 for the low quality handout.

	Number of Participants	Median	25 th percentile	75 th percentile
MyMail & MyQuest - superior handout	32	90	83	99
Learner access bursary - low quality handout	42	65	34	77



Validity Results

% correct responses	MyMail & MyQuest Lower quality	MyMail & MyQuest Superior quality
Overall score	51% (n=27)	59% (n=27)
ESL 200/300/400	40% (n=7)	40% (n=5)
ESL 500	44% (n=10)	55% (n=13)
ESL 600	66% (n=10)	73% (n=9)

- While in general the scores for the comprehension test were higher for those students evaluating the superior handout, the difference is not statistically significant. The lack of difference in the ESL 200/300/400 level could be attributed to the lack of understanding of the comprehension questions.
- Students stated in the self reported survey that the superior quality brochure was easier to understand.



The AIM Tool

- 1) Content
- 2) Word and Sentence Complexity
- 3) Page Layout
- 4) Building Self Efficiency
- 5) Cultural Relevance



Let's AIM

- 1) Look at the AIM tool
- 2) Use the AIM tool to evaluate handouts



THAN

kyou!



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Conclusions and Implications

- The consistency of the ratings given by the NorQuest and U of A staff confirmed that the AIM tool was reliable.
- The results from the student self reported survey support the validity of the AIM tool. While the comprehension test results didn't show strong evidence of a difference in understanding, this could have been influenced by the low literacy of some students.
- To better differentiate between low and high quality information materials, a higher weight could be assigned to factors that have a direct impact on readability such as reading grade level or vocabulary.
- Reading grade level & vocabulary ranges may need to be modified for ESL students.

