Are Kinesiologists Ready to Communicate? Merits of a Practicum Course on Plain Language Communication

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What is the Purpose of this Presentation?

Health education materials purportedly for use with lay audiences are rarely written in plain language (Thomas et al., 2018, *Quest*). This is inconsistent with the U.S. government's *Plain Writing Act* of 2010 and healthcare providers' *moral imperative* to communicate using plain language (Thomas et al., 2021, *Quest*). **PURPOSE**: This demonstration project solicited exercise and health science students' and professionals' input on one way of reducing this disconnect vis-à-vis a skill-building course.

Methods

- A mock web article was created to be around the 11th grade reading level, as well as to have a casual and personable writing style (Thomas & Cardinal, 2020, *Quest*).
- Eight undergraduate students/alumni unaffiliated with the project assisting the first author in research were solicited for feedback, using a 100% anonymous and optional online survey (response rate = 75%, window = 5 days; summer 2020).
- The SMOG protocol was selected to revise the mock web article to an 8th grade reading level, the maximum level recommended for lay material (Thomas et al., 2021, *Quest*). The SMOG protocol focuses on the removal or reduction of words with 3+ syllables, as well as creating shorter sentences (Figure 1).
- Three paradigms for effective instruction were used to develop exercises on designing and selecting helpful lay resource material:
  - Suitability Assessment of Materials - SAM (Figure 2; Doak et al., 1996)
  - Bloom's Taxonomy of Learning (Figure 3; Bloom, 1956)
  - Universal Design for Learning - UDL (Figure 4; Kennedy & Yun, 2019, *JOPERD*)
- The three paradigms were used to design exercises that promote skill mastery using two protocols for effective lay communication: the SMOG and the SAM.
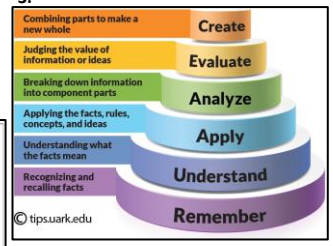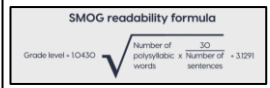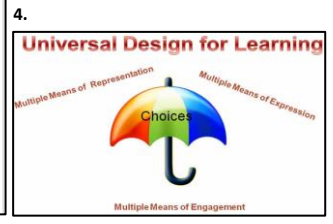

1. SMOG readability formula

Figure 1. presents the SMOG formula for computing reading grade level (Kelly, 2020, Readable.com).

2.

Figure 2. illustrates the SAM protocol.

3.

Figure 3. depicts the components of Bloom's Taxonomy of Learning (Shabatura, 2013, TIPS).

4. Universal Design for Learning

Figure 4. presents the 3 principles of Universal Design for Learning (NSTA).

What Were The Results?

The mock web article was produced with seven iterations, and the final product had a reading grade level of 11.05 (word count = 562), which is typical of lay material on physical activity (Thomas et al., 2018, *Quest*; Thomas & Cardinal, 2020, *Quest*). The web article's content was found to have face validity (i.e., helpful, interesting). In accordance with the SMOG formula, it took 3 iterations to revise the mock web article to an 8th grade reading level. **Figure 5** shows a list of 15 words with 3+ syllables that were removed from the mock web article's main text body, and it presents their replacements. **Figure 6** shows how a decrease in the number of words with 3+ syllables improved readability (i.e., from a 11.78 to a 5.93 reading grade level). Regarding the skill-building exercises created using the 3 paradigms, a total of 19 exercises were created. Several examples appear in **Figure 7**.

Figure 5. Screenshot image. The list of polysyllable words and their replacements.

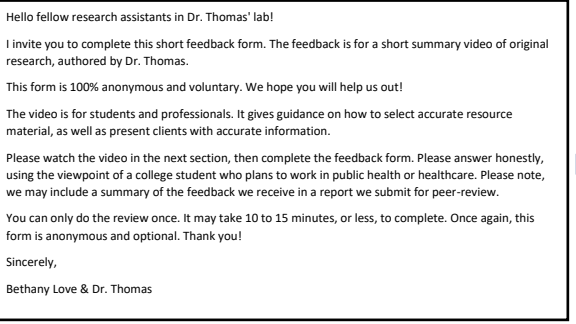**Figure 6.** Screenshot image. Example text revision using SMOG.

Figure 7. Screenshot image. Sample list of created practicum exercises.

What Did You Gain from This Presentation?

This poster **modeled** how to create exercises to help pre and current professionals practice a crucial and overlooked skill: plain language communication.

First, you learned about two methods for plain language communication: (a) the SMOG formula to measure reading grade level and (b) the Suitability Assessment of Materials (SAM) method. Both were designed for everyday use (Tse et al., 2020, *SWACSM*). This means they can be learned easily and take little time to use (e.g., 10-minutes or less).

Second, you learned (or were reminded) that lay material should not exceed an 8th grade reading level. This poster showed how the SMOG formula can be used to revise material to meet an 8th grade cut-point.

Finally, you received two free exercises (see right-side panel). These can help you develop your plain language skills. Moreover, you can adapt the exercises and references in this presentation into your own practice or service work. This latter step would respond to calls for greater equity in physical activity policies *and* practices (Ross et al., 2020, *ACSM*; Thomas et al., 2020, *IJKHE*). Similar work focused on relaying physical activity guidelines is needed (Love et al., 2021, *Cal Poly*; Thomas & Cardinal, 2020, *TJACSM*; Vermeesch et al., 2020, *MSSE*).

Challenge Exercise: Apply Your Knowledge

There are 2 challenge activities: First, to revise the reading grade level of an informed consent document, and second to revise a mock web article using the SAM guidelines.

Challenge 1: Revise a Letter for Informed Consent
The main text body of the letter below (Figure 8) has a reading grade level of 9.21, as well as 16 words with 3+ syllables. Your challenge? Reduce the 3+ syllable word count within the main text to be 12 words or less. This would get the reading level down to at least 8th grade per the SMOG. Tip: Make a table of the words you might consider removing (Figure 5). For further help, see this citation: National Literacy Trust, 2008.

Challenge 2: Mock Web Article
Your challenge? Review the article below (Figure 9), then revise it to better suit a lay adult audience using the SAM guidelines. For guidance, see Chapter 4 of *Teaching Patients With Low Literacy Skills* (Doak et al., 1996). For a demo, see timestamp 4:18 of this video: Smith and Thomas, 2020, *Cal Poly*.

Hello fellow research assistants in Dr. Thomas' lab!

I invite you to complete this short feedback form. The feedback is for a short summary video of original research, authored by Dr. Thomas.

This form is 100% anonymous and voluntary. We hope you will help us out!

The video is for students and professionals. It gives guidance on how to select accurate resource material, as well as present clients with accurate information.

Please watch the video in the next section, then complete the feedback form. Please answer honestly, using the viewpoint of a college student who plans to work in public health or healthcare. Please note, we may include a summary of the feedback we receive in a report we submit for peer-review.

You can only do the review once. It may take 10 to 15 minutes, or less, to complete. Once again, this form is anonymous and optional. Thank you!

Sincerely,

Bethany Love & Dr. Thomas

Figure 8. Draft Solicitation Letter

Remove or replace at least 4 words with 3+ syllables.

How to Exercise

Figure 9. Mock Web Article

List ways to revise the article per SAM guidelines.

Get the Latest Updates on this Project

The work presented in this poster is part of a manuscript in preparation for publication. To learn when the full report becomes available, follow the first author's social media accounts, which are hyperlinked below:

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