

Qualia

Can you explain your research using only the 1000 most common words?

February 4, 2013 | Author: Summer Allen, Graduate and Postdoc, Brown University



Do you think you can explain your research using only the 1,000 most commonly used words? It might be harder than you think.

One way to test your skill at clear and simple communication is to try out the [Up-Goer Five text editor](#). The text editor was created by parasitologist Theo Sanderson who was inspired by this truly excellent [xkcd comic](#). The comic explains a diagram of NASA's Saturn V (or Up-Goer Five) using only the one thousand (excuse me, ten hundred) most commonly used words.

To use the text editor you simply pick a topic you'd like to explain—how water boils, your thesis project, or some international diplomacy challenge—and begin typing. Words that don't make the cut on the 1000 most commonly used words list will be underlined in red squiggles and will show up in red below (and then you try, try again).

I tried my hand at explaining my research, which in scientific jargon involves “**studying how** alternative splicing regulates **the** functions **of** calcium channel proteins” (I've highlighted the only allowed words). Considering most of my highly educated friends and family don't understand this explanation, I knew I had work to do.

Here's what I came up with using the Up-Goer Five text editor:

“I study little doors in brain cells. When they are open, these doors let stuff go into the cells. The in-coming stuff makes it so brain cells can talk to one another. There are different types of doors in different parts of the brain. There are also different types of doors in babies and big people. There are tiny little things that control which doors are found in different brain parts and at different ages. I want to know how these tiny little things make there be different doors in different brain parts and in babies and big people.”

Whew, that was hard!

The best part of Up-Goer Five is that it's become a web phenomenon, with many scientists from various fields explaining really complicated topics (like atomic physics, how the ear works, and discovering new galaxies) in very simple speech. To see a great compilation of these, check out the [Ten Hundred Words of Science tumblr](#) and follow new explanations on Twitter via [#UpGoerFive](#). There's even an [Up-Goer Six](#) text editor, which is a twist on the concept—instead of limiting you to ten hundred words, it color codes your words by how common they are. Why am I most excited by Up-Goer Five? Maybe soon my two year-old will be able to understand what I do!

3 comments

IRVING JOFFEE

February 8, 2013 - 1:17pm

I think this is excellent.

Maybe the explanation does not have to sound like you're talking to a kindergardener but it is important for scientists (and people of all professions) to be able to discuss and explain their ideas without using jargon.

This is important for several reasons. First, some people begin to get unnecessarily pompous using very technical language, thinking that only they or a selected few are capable of understanding what they mean. This prevents scientists in other disciplines from benefitting from the work and turns off the general public to the point of being fearful of science.

Second, describing the ideas only in jargon is like using circular reasoning or defining something by itself. Having to resort to jargon can let one fool one's self into thinking one understands the topic more than one actually does. It's a way of hiding what you don't understand. Many primitive cultures believe that if you use someone's name you have some power over them. Likewise scientists give names to things they really don't understand and glibly use these names as jargon as if they understand them completely.

ROBERT BUNTROCK

February 8, 2013 - 3:46pm

Jargon, as opposed to argot, is essential to effective and efficient communication within a field or discipline (I've written on this previously). However, effective communication of science, by scientists, with the public (including friends and family) is also necessary. I'd suggesting ramping up the word limit by a couple of thousand and see what happens. For example, not allowing words like "adult" lowers the bar too far.

ZHANG WEI

February 10, 2013 - 10:12am

I came from China, I majored in the subject of vegetable, now ,I am interested in DNA methylation and epigenetics ,and microRNA,I want to make more friends to research in these scientific problems together, I would be a good friend.