**Succinct Writing and Dealing with Jargon**

**Pre-Class Activities**

As scientists you will likely have to communicate at least some technical information to non-specific audiences, so knowing how to do this effectively is another important skill to master. In this unit, you will focus on improving the succinctness of your writing. In addition to looking at techniques and tips that will help you write clear, simple sentences, you will gain specific practice with the use of scientific jargon.

One golden tip that you should try to put into practice when editing your work is this: Read your sentences individually and ask yourself whether every single word is necessary. Ask whether a friend with no science background could read your work without being confused. Often, when thinking like this, you will be able to reduce the length of your sentences and replace certain words to make things flow more smoothly.

**Questions 1, 2, 3, 4 and 5 (1 mark each, 5 marks total)**

The goal here is to make you think about every single word in your sentences, so that you write things as concisely as possible. Pay particular attention to ensuring that each sentence does not contain unnecessary words or phrases. You can often make things more concise by writing in the active voice; this will help you keep your sentences clear and concise (for more information on this, see the student resource on UBC’s website Active vs. Passive Voice).

Each of the following five sentences are less concise than they could be; some could be re-written in the active voice, while others contain **unnecessary** words and/or phrases that could be removed. Try to re-write each sentence by **using at least two fewer words,** and without losing/changing the sentence meaning (1 mark). Target word counts are provided for each sentence. *Hint: There are multiple potentially correct ways of re-writing these sentences more concisely.*

**Q1:** A new metabolic pathway has been created by chemical engineering researchers that is likely to have implications for the biofuel industries. **Target: ≤ 19 words.**

**Q2:** In essence, the breakthrough could cause a 50% increase in biofuel production. **Target: ≤ 10 words.**

**Q3:** Previously, two out of every six carbon atoms that entered the pathway were lost, which was seen by researchers as inefficient. **Target: ≤ 19 words.**

**Q4:** The new synthetic pathway ensures that all six carbon atoms that enter the pathway are converted into the product that is a pre-cursor to many biofuels. **Target: ≤ 24 words.**

**Q5:** The researchers responsible for making the discovery of this new pathway believe it can be used to successfully convert many different types of sugars. **Target: ≤ 22 words.**

**The Importance of Using Simple Words**

One of the greatest misconceptions in writing is the idea that you need to use intellectual-sounding words to give your work a sense of power. Your only goal should be to write something that is easily understood by whoever reads it. The best way of achieving this is to write short sentences containing words used frequently by everybody.

So, instead of ‘**elucidating** a concept to change the views of your **myopic** readers’, why not just ‘**explain** a concept to change the views of you **short-sighted** readers?’ Similarly, why tell your audience that your invention will have ‘universal applications across the globe’ when they already know that ‘universal’ means that something will apply to every situation? Redundant qualifiers such as this should always be avoided, so, in the previous example, the author should simply have written: ‘universal applications.’

**Question 6 (5 marks)**

Try to spot the **five** errors in the paragraph below. These errors include overly fancy words and redundant qualifiers. Copy and paste the paragraph and bold the **five** errors (1 mark for each correctly bolded error).

It is absolutely vital that researchers do not know which group of subjects receives the drug in medical trials. This is because such knowledge can implore researchers, often subconsciously, to record and analyze data in a subjective way. Also, if researchers were aware, others could then question the final outcome of such experiments. People would likely be reticent to trust the ultimate conclusions made by the researchers in these circumstances.

**Eliminating Ambiguous Words**

The goal of this activity is to highlight how important it is to eliminate ambiguous (unclear) words from your writing. A word (or phrase) is ambiguous if it could potentially mean different things to different people.

For example, the statement that ‘Male salmon grew *frighteningly* quickly’ could mean they grew much more quickly than expected, or that you were actually scared by their speed of growth. Similarly, the statement that ‘these males grew *significantly* faster than females’ is also potentially problematic because ‘significance’ means something different when it refers to a statistical comparison than when it is used to convey something noticeable; so, a scientific audience and a non-scientific audience might interpret the meaning very differently.

**Question 7 (6 marks)**

In the following short paragraph, there are **three** potentially ambiguous words. Copy and paste the paragraph and **bold** the **three** ambiguous words (3 marks). Then, copy and paste it again with edited versions of these three words. Make sure you **bold** your edits, and that they remove the ambiguity in the original paragraph (3 marks).

There are multiple examples of incredibly important scientific breakthroughs that took decades to be acknowledged by society. Very often, this was because those responsible for the discoveries did not attempt to illuminate non-specialist audiences about the main parts of their work. Devastating discoveries, such as many disease-fighting drugs, could have gone unreported if the gravity of their potential impact was not clearly explained by the talented researchers who made the breakthroughs.

**Dealing with Technical Jargon**

When we talk about ‘**technical jargon**’ we mean words, phrases, abbreviations/acronymsand/or concepts thatare only likely to make sense to someone with specialist knowledge in that field of expertise. For example, the statement that ‘Group A beetles proved to be monophagous’ would make perfect sense to ecologists or crop farmers, who know that “monophagous” means the beetles only eat one species of plant, but without specialist knowledge, you would be very confused.

There are two main ways to deal with technical jargon; you can either explain things by (**1**) using non-technical language instead, or you can (**2**) use parentheses, or commas, to explain what the jargon means. The choice between these two often comes down to circumstance.

For example, if you only need to refer to something once, you can easily use non-technical language to explain what you are trying to say. However, if you will need to refer to it again and again, it is usually smart to use parentheses or commas to explain what the problematic term means. If you do this, you can then use the term throughout your writing in the knowledge that it will no longer be perceived as jargon to your readers.

So, if we use our ‘monophagous beetles’ as an example again, you could either write: “Group A beetles proved to only eat one plant species, so farmers can continue to grow wheat, barley…”, or, you could write: “Group A beetles proved to be monophagous (they only ate one species of plant), so farmers can continue to grow wheat, barley…”

**Questions 8 and 9 (2 marks each, 4 marks total)**

Read the statements that make up the following two questions; in each case, there is **one** piece of technical jargon that could stop non-specialist audiences from understanding what the author is trying to say (this has been **bolded** for you). For each question, your task is to re-write the sentence so as to remove the jargon. Try to write two versions of each sentence by using each of the two techniques described above (1 mark for each appropriate re-write, one using commas or parentheses, one using non-technical language).

**Q8:** Although it might seem hard to believe, **idiopathic** mutations are often responsible for helping individuals adapt better to their environments.

**Q9:** For example, many different butterflies have evolved as **Batesian mimics** this way.

**Question 10 (5 marks)**

Choose **one** of the two journal articles below (the links to these can be accessed by clicking on each article title below, but you can also find them yourself by using a specialist search engine, such as Google scholar).

**1) Avoidance of feeding opportunities by the whelk *Buccinanops globulosum* in the presence of damaged conspecifics. (2012)**

<http://link.springer.com/article/10.1007%2Fs00227-012-2020-8>

**2) Speaking across levels – generating and addressing levels confusion in discourse. (2013).**

<http://pubs.rsc.org/en/Content/ArticleLanding/2013/RP/c3rp20158a#!divAbstract>

Read the **abstract** carefully and try to put the contents into your own words in a way that makes the sentences more concise (2 marks), less ambiguous (1 mark), and less jargon-heavy (1 mark). Write all this in 75 – 150 words **(**1 mark).

**\*\*\* Bring your summary to class for the in-class activity session because you will use it to work with a partner in a peer-review exercise. \*\*\***