



## Uni-edit English Writing Tip 015

### When do I have to define my acronyms?

#### **Difficulty: Intermediate**

These days, it's almost impossible to read an academic paper without encountering acronyms. The intention is to make papers easier to read, and to create new lingo for new concepts. However, as time goes by, more scholars are worrying that acronyms are impeding communication, rather than helping it.

So, when should you introduce acronyms to define a full term, when shouldn't you?

#### **Use the Acronym without the Full Term**

##### *Case #1: "Well-known" Acronyms*

Do you immediately understand the technology described by "light amplification by stimulated emission of radiation"? What about "self-contained underwater breathing apparatus"?

Some terms have become so widespread, that it is unnecessary to define them: in fact, defining them might be confusing! Which was easier to understand: the language above, or the everyday words "laser" and "scuba"?

A good rule of thumb is if you have heard an acronym spoken aloud by people outside your workplace, laboratory, or classroom, you can probably use the acronym without defining it. For example, not only molecular biologists know what DNA is, not only mathematicians know what 3D is, and not only international relations experts know what the UN is.

##### *Case #2: Standard Abbreviations and Acronyms*

However, there's no absolute consensus on what constitutes a "well-known" acronym. For example, organic chemists immediately know what DMSO is, while mechanical engineers wouldn't look twice at EMF. But the former rarely need to measure or quantify *electromotive force*, and the latter rarely deal with the low-toxicity solvent *dimethyl sulfoxide*: so, it seems unreasonable to say either is "well known" in a universal sense.

Check if your target journal provides a "List of Standard Abbreviations", "List of Standard Abbreviations and Acronyms", etc. For example, if you were looking to publish in the *Journal of*

*Organic Chemistry*, you could consult their [Standard Abbreviations and Acronyms](#) and find out that “DMSO” can be used without abbreviation.

Within your field, it is also good practice to see what other authors are doing. If you can find more than five that use an acronym without defining the term, then it is probably safe to do so yourself. Remember, they are also your primary audience: if you met at a conference, and just used the acronym, you would understand each other perfectly.

### **Define the Term and Use the Acronym**

#### *Case #1: Uncommon or Perhaps Unfamiliar Concepts (to your Readers)*

This is the most common case in academic writing: it is so common, some writers are (mistakenly) taught it as an absolute rule. If an acronym isn't in a standard list, you should probably define it the first time you use it in your paper, especially if the acronym is the grammatical subject of the sentence.

- The Profile of Mood States (POMS) is a commonly used measure of psychological distress.
- In an earlier paper, an acoustic wave propagator (AWP) was proposed to describe the time-domain evolution of mechanical waves in various media.

Even if you expect your readers to know the acronym, it can be useful for several reasons.

- To avoid confusion. This is especially true if the meaning of the acronym is not the main focus of the sentence.
- To save space. An acronym counts as one word for the purpose of word counts. In addition, it is useful in Figures and Tables where space is often limited.
- To attract knowledgeable readers. Sometimes researchers will search databases using the acronym rather than the real term: using the acronym ensures your research will appear and rank highly in their search results.

#### *Case #2: Your Own Acronyms*

Sometimes you'll want to create your own acronyms. You might do this for an important concept to your paper, or a new one you are proposing.

It is also common in the Results section, when you want to compare groups. (e.g. A group, C group). This is fine, especially in tables and figures where space is limited.

Example: Leukemia recurrence rates in patients treated with imatinib+steroid therapy (I+S) were compared with those of patients treated with imatinib monotherapy (IM), and with the conventional treatment (CT).

You won't find these acronyms in the literature on chemotherapy for leukemia. However, since the Results section is devoted to comparing these three groups, readers can more easily understand your data if you create labels to mark the objects of comparison.

### **Use the Full Term Only**

#### *Case #1: Only Used Once*

Even if an acronym is possible, you don't have to use it. If you use a term for which an acronym is possible only once in a paper, you don't need to provide an acronym.

This paper proposes a novel finite-difference time-domain (FDTD) technique to solve multiphysics problems. In the past, researchers have developed the finite-element time-domain (FETD) and boundary-element time-domain (BETD) numerical methods to find solutions to these equations, but these will not be discussed here.

In this case, the acronyms "FETD" and "BETD" are not used again in the paper, so it is unnecessary to define them.

END OF TIP