5 Steps To Write the Abstract of Scientific Writing
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Have you ever struggled with writing the Abstract of your paper? I have read dozens of books on scientific writing and academic writing; but I could not find a simple solution to this task. Through many mistakes and failures, I have got to the point where I can summarize 5 steps to do this intimidating task, i.e., writing the Abstract of your paper. This task will be easier if you follow these 5 steps, which I will share with you today. But before I mention, here’s the most important rule:

**Write the main body first. Then, and only then, write the Abstract.**

“I should mention that some experienced writers prepare their title and Abstract after the paper is written, even though by placement these elements come first,” says Robert A. Day, the author of *How to Write and Publish a Scientific Paper*. And that’s true.

OK? Let us look at these 5 steps. Here they are:

**Step 1:** Write why you have done it
**Step 2:** Write how you have done it
**Step 3:** Write major results
**Step 4:** Write outlook or implications of your work
**Step 5:** Rewrite for brevity
That’s it. Now let us look at each step at a time.

**Step 1:**
Write motivation or background of your work. In other words, write the reason why you have done it. If you find it difficult
to write motivation or background, then go back and ask yourself, why have I done this research? Is it because your research is an urgent issue? Is it because it will have a high impact on a particular industry? Is it because it is a long-sought topic in the history of science? You get the idea. You have at least some reason. When you write motivation or background, it is acceptable to try to reach as wide audience as possible. Remember, if your audience reads the first sentence and then lose their interests, they may not read any further.

**Step 2:**
Next, write how you have done your research. Write your computational methods or experimental designs and settings. However, do not try to include every detail because it will distract the reader.

**Step 3:**
Write your major results or summary; but do not try to include everything. You may have many results you want to mention. In your Abstract, however, you pick up only two or three important results of your work. Alternatively, it would be even better to write the single most important result out of the three. As you can see, the process of Step 3 is much easier after you have already written the main body of your research paper.

**Step 4:**
Write outlook, benefits, or implications. Or write why and how your work has an impact on current scientific knowledge. This is an important point. Because, like it or not, your reader has one question in mind: “What’s in it for me?” So you have to answer to this question in your Abstract. Remember, the main purpose of your Abstract is to get potential audience actually read your paper. To do so you not only write your conclusions but also include outlook, benefits, or implications reasonably derived from you work.

**Step 5:**
Rewrite for brevity. After you have done Steps 1-4, now is the time for rewriting. Most Abstracts are limited to 100-200 words, depending your target journal. Therefore, you should be short and concise sentence by sentence, word by word. You can do this by (1) eliminating unnecessary words, (2) using short, familiar words, (3) avoiding jargons, terminologies, and references, and (4) using simple sentence structures.

At the same time, please keep in mind what Quintus Horatius Flaccus, a Roman poet, said: Brevis esse laboro, Obscurus fio. Which means, if you try hard to be succinct, you merely become obscure. Be careful about that.

By Teppei Suzuki, Ph.D.