

Dear Rob,

On Your Own is an engaging, well-written article. You do a great job of incorporating details that will spark the interest of less-scientific minded readers. You make good use of attention grabbing quotes, and also of analogies with familiar cultural icons such as Legos and the Maker Faire. There's a lot of good human interest; I was particularly intrigued by the Genetically Engineered Contraption competition.

I do have some concerns, mainly in the areas of clarity and flow. While the individual facts are interesting and often well presented, I'm worried that readers will find the main idea difficult to pin down.

I notice this in the first couple of pages in particular. This is where you really want to capture a reader's attention and set a clear expectation of what he/she will learn from the piece. I'm concerned that's not yet happening. This may be in part because the thought process doesn't unfold naturally. The narrative feels a little confused as we zip around from philosophical questions to jet packs to supermodels. Also each of the first few paragraphs seems to start a new thought. I wonder if you were exploring multiple approaches to the same information? It might be worth considering whether you could pare these down to improve the flow. You might start right in with the quote about the supermodel, then transition into the third paragraph, which begins "sometime in the middle of...."

I felt this disorganization continued throughout the text, as it rapidly skipped around from the contributions of various scientists to technology, politics, and invisible backyard scientists. I have a few suggestions as to how you might improve the logic and flow:

- Consider drawing a storyboard to chart the progression of ideas, reorganizing where necessary. For instance, I love the explanation of the Biobricks on page six, and the example of the *E. coli*, but I wonder if you could introduce those earlier in the piece? They seem integral.
- Insert clearer and more logical section breaks, to further organize the information and simplify the train of thought.
- Shorten up any overly long sentences, to aid readers in quick comprehension. One example of a slightly unwieldy sentence occurs on page twelve, and begins, "Meanwhile, 2009 saw...."
- Carefully evaluate which details/characters are important and which ones could be streamlined or eliminated. Some of the details included are interesting, such as the reference to the Quantified Self people on page sixteen, but do they contribute significantly to the main idea of the paper? And the reference to the path of plastics on page thirteen is

just one sentence. If it has a place in the article, it deserves more than a passing reference.

- You might look at whether you can pare down the number of people who are referred to by name. This article introduces a great many scientists and tinkerers and girlfriends. If this is for a scientific journal where a certain level of familiarity is expected, it might be fine. Otherwise I worry readers will get lost in all those names.

In evaluating the language of *On Your Own*, I find places where it might be unnecessarily complicated, such as the sentence on page two that begins “[deleted]” I’m concerned the reader may need to back up or slow down to sort out what you mean to say.

Also you’ve dealt with a scientific subject using a lot of very creative prose. In some places I think that works well, such as in the passage on page three that reads “[deleted]” In others I think it may obscure meaning. On page four, the phrase, “[deleted]” seems a notch too poetic. Other examples where the language might be complicating the text include the sentence on page nine, “[deleted]” and on page ten, “[deleted].” It might be worthwhile to look carefully at where the more poetic language enhances the meaning and where it does not.

Another thing I notice is that in at least once instance the language swings toward very informal. The phrase, “ [deleted]” on page four might be so informal as to seem at odds with the subject matter and the tone of the rest of the piece.

Lastly, there are couple of places where I worry the tone might be construed as a little disrespectful, such as the reference to “[deleted]” on page three, and the lines on page seven, “[deleted]” A slight rewording here might avoid any misunderstanding.

Overall I really enjoyed looking at this piece, and look forward to reading the next draft.

Sincerely,
Kellelynn H. Riley