

CSC: CoR: Chapter 4: From Questions to Problems

The 10 salient sentence strings presented below are lifted from the chapter as is, without modification (except, perhaps, for a bit of punctuation here or there). They are presented in order of appearance in the chapter.

Ten Salient Sentence Strings

1. The significance might at first be just for yourself, but you can join a community of researchers when you can state that significance *from your readers point of view*. In doing so, you create a stronger relationship with readers because you promise something in return for their interest in your report – a deeper understanding of something that matters to *them*.
2. Put in general terms, a *practical* problem is caused by some condition in the world that troubles us because it costs us time, money, respect, security, opportunity, even our lives. We solve a practical problem by *doing* something to eliminate or at least migrate the conditions creating these tangible costs.
3. In research, a *conceptual* problem arises when we do not understand something about the world as well as we would like. We solve a conceptual problem not by doing something to change the world but by answering a question that helps us understand it better.
4. But in academic research, a problem is something we seek out, even invent if we have to. Indeed, a researcher without a good conceptual or research problem to work on faces a bad practical problem because without one a researcher is out of work.
5. Practical problems and conceptual problems have the same two part structure:
 - a. A situation or *condition*, and
 - b. Undesirable *consequences* caused by that condition, *costs* that (or better your readers) don't want to pay

What distinguishes them is the nature of the conditions and costs.

6. When you write, readers judge the significance of your problem not by the cost *you* pay, but by the cost *they* pay if you don't solve it. So what *you* think is a problem they might not. To make your problem their problem, you must frame it for *their* point of view, so that they see its costs to *them*.
7. Practical and conceptual problems have the same two-part structure, but they have different kinds of conditions and costs.
 - a. The condition of a practical problem can be *any* state of affairs that has a tangible cost for you or, better, for your readers.
 - b. The conditions of a conceptual problem, however, is *always* some version of not knowing or not understanding something.
8. The consequences of a conceptual problem is a particular lack of ignorance: it is a lack of understanding that keeps us from understanding something else even more significant. Put another way, because we haven't answered one question, we can't answer another that is more important.

9. We call research *pure* when it addresses a conceptual problem that does not bear directly on any practical situation in the world, when it only improves the understanding of a community research problem. We call research *applied* when it addresses a conceptual problem that does not have practical consequences. You can tell whether research is pure or applied by looking at the last of the three steps defining your project.
10. What distinguishes great researchers from the rest of us is the brilliance, knack, or just dumb luck of stumbling over a problem whose solution makes all of use see the world in a new way.