Building Aquatics: Telling Your Story

An idea merely thought is an idea limited. An idea shared is an idea enhanced. I believe that our need for books, newspapers, blogs, podcasts, wikis, and especially scholarly journals revolves around the basic premise that our own ideas need to be shared and disseminated with others. Sharing an idea or telling a story out loud reaches all within earshot; writing down and publishing a story can extend its reach almost indefinitely.

Haven’t we all had good ideas or insights that we either forgot or that seemed less brilliant when we tried to articulate them than when we first formulated them in our minds? (Interestingly, I most often get my ideas in the solitude of the morning shower for some strange reason. Other colleagues have mentioned the shower phenomenon as well. I am not sure if it is because it is solitary, it is early in the day, or whether the flowing water has some link to creativity.) I firmly believe that our ideas do need dissemination for them to have a fuller meaning and purpose. We need to articulate them in spoken or written form to really give them life. Certainly until we share our ideas in some form with other people, they don’t really do much good. Private thoughts may be the fallow earth in which ideas germinate, but unless watered and nurtured through public discourse, they don’t really bear their full fruit.

Of course, as I explained in last issue’s editorial, the form of sharing and disseminating ideas and research findings usually takes on a particular form in the scholarly literature. Importantly, research findings and ideas need to be evaluated using structured and rigorous assessment criteria. What I described last issue was a set of six criteria suggested by Ernest Boyer and published by the Carnegie Foundation (Glassick, Huber, & Maeroff, 1996) of which I am particularly enamored. Regardless of the evaluation criteria used, scholarly literature involves sets of judgments, usually rendered by peers, as part of the vetting process to allow readers to have a certain degree of confidence in the study.

Writing Scholarly Papers

What does it take to get an idea or story published and disseminated? In one sense, writing a good story or scholarly article can be rather complicated and challenging, especially for novice writers. On the other hand, there are a few simple rules that I think most writers can follow to create a successful paper. Any solid scholarly paper starts by (a) identifying a good idea or story and the purpose for telling it, (b) having done your homework to be familiar with the historical background behind the topic, (c) approaching the story methodically and logically, (d) analyzing the implications for the story and its results, (e) writing appropriately for your intended audience, and (f) considering both the benefits and limitations of the story as they apply to the purpose of the paper.
Identifying Your Purpose

One of Stephen Covey’s “habits of highly effective people” is to “begin with the end in mind” (Covey, 1989). One of my favorite academic supervisors echoed the same sentiment: Start with the outcomes. My wife frequently cautions those of us impulsive family members who are inclined toward rash judgments to take the time to identify what you want to happen in a situation. For example, she often wonders aloud, “Do you want to simply vent and perhaps inflame a situation or do you want to improve the situation?”

Composing any manuscript is like that: You first have to articulate your idea and frame what you hope to accomplish from sharing your idea. The more clearly you can state your purpose, especially in terms of concrete outcomes or “hypotheses,” the more likely you can compose the story to reach those goals. I also like to think of the introduction and statement of the “problem” as one bookend to the story while the wrap-up and conclusion is the other bookend. They should be parallel and frame what you have written in between.

Doing Your Homework

A good idea is only as good as how well you can understand what other people have said or written about it before. In the Old Testament, it is written in the Book of Ecclesiastes (1:9) that “there is nothing new under the sun.” While one’s idea or story may have some uniqueness, it is almost certainly the case that someone somewhere at sometime has contemplated a similar idea or problem. Taking advantage of learning as much as possible about what else has been written about your topic or idea is critically important. Failure to show that you have taken the time to inform yourself about a topic reflects badly on a writer and researcher. Equally important, investigating what others have already explored about the topic from different perspectives can bring you important personal insights that you may not have considered.

Employing an Appropriate Method

Most topics can be approached in a variety of ways. Different fields (often called “academic disciplines” or bodies of knowledge) have unique ways of approaching questions. It is important for authors to be able to employ the techniques of a particular field in order to demonstrate to peers that they have sufficient expertise for their ideas to be taken seriously. For example, a natural scientist such as a biologist, chemist, or physicist typically needs to employ an appropriate version of the “scientific method” in order to conduct a satisfactory study that other scientists will recognize. In contrast, a historian or artist typically uses very different ways to inquire in their field that does not involve inductive hypothesis testing as much as it does drawing upon and examining historical or aesthetic principles. Regardless of the method, one’s reasoning and logic behind the story ought to be apparent to the naïve, intelligent reader.
Analyzing Your Results and Their Implications

This step in any paper, whether it be a typical “research” paper or a scholarly review or educational article, answers the “so what?” question. This step is often minimized or superficially addressed in less rigorous pieces of writing. In a typical scientific paper, the results may rely upon inferential statistical analyses to demonstrate that the findings are not just an occurrence that could have happened by chance. Papers that use simple descriptive statistics such as means or medians, standard deviations, or ranges can be adequate if the intent is not to convince anyone that real meaningful differences exist between times or groups. Even experienced researchers sometimes find themselves wanting to argue that some observed differences are meaningful despite a lack of overwhelming statistical evidence.

One of my favorite classic scientific papers, “Strong Inference,” was written by John Platt and published in *Science* in 1964. Platt recommends a scientific strategy that is based upon the use of multiple hypotheses and an approach trying to disprove each of those hypotheses. He acknowledges the all-too-common human tendency to fall in love with one’s own favorite solution, thereby ignoring or neglecting other alternative explanations. In “Strong Inference,” Platt urges scientists to consider each explanation as plausible until disproved using a decisive, disconfirming experiment. A particularly strong analysis allows the writer to demonstrate why one solution makes the most sense while also eliminating other alternatives because they fail to make sense. It is a well-rounded, reasonable approach that gives each potential solution its due. It is a tough read, but I recommend it to curious readers.

Communicating With Your Intended Audience

Perhaps one of the hardest parts of good writing is to keep one’s audience in mind at all times. I have heard good radio announcers say that they envision speaking to a single listener as if in a conversation with them. A good writer is able to do something similar: Hold the vision of a reader in front of them, choosing words so that the reader can understand what the writer intends to communicate.

Three writing lessons I have taken from my mentors over the years are (a) write so that any naïve, intelligent reader can understand and follow your reasoning; (b) keep in mind that above all you are telling a story; and (c) good writing is really just rewriting and rewriting and rewriting. The first lesson suggests avoiding jargon as much as possible. That is a challenging task because we each have learned multiple vocabularies that are unique to different “language communities,” or groups that understand a topic using specialized terms (Facione, 2010). Certainly, aquatics represents such a “language community” with “insider” terms such as front or prone float, front and back crawl, butterfly, flip turns, buoyancy, even Bernoulli’s principle. It is important to make sure that the uninitiated reader can still understand your vocabulary.

Writing a paper as if it is an interesting story you are telling a friend is another important lesson. If we have not really identified our purpose or goals for the paper, then our telling of the story can wander and get off topic too easily. Finally, the understanding that to be a good writer is to be able to self-edit and to rework your writing over and over again is essential. No one is a “born” writer. Writing is a learned skill just like swimming. And like swimming, it requires continual practice to stay in shape and improve.
Reflectively Self-Evaluating Your Story

One reason scholarly writing uses various forms of peer review is that we each can be somewhat blind to our own writing, both its strengths and weaknesses. Even non-scholarly writers such as newspaper journalists still employ editors as a means for providing a mirror with which to view and review their writing. Being willing to step back and honestly look at one’s own writing to determine the degree to which it meets the purpose or goals established and any limitations associated with the paper is another challenging, learned skill. I find myself irritated when students turn in papers that are obviously first drafts, indicated by the number of typographical errors and poorly constructed sentences and paragraphs. Usually the writers of those same papers have not taken the time or risk of exploring the possible limitations of the story they have composed. Good writers include some means of exploring the degree to which they have met their purpose.

Building the Aquatic Literature

An ongoing personal theme of mine that regular readers have heard me restate in various ways is that we authors, reviewers, readers, and other contributors to the International Journal of Aquatic Research and Education have a responsibility for expanding the quantity and quality of the aquatic literature. We all realize that the field of aquatics has not always been held in the highest esteem because our literature has not always represented the best of which we are capable. I am proud that IJARE has made significant strides in addressing that need to disseminate high quality, evidence-based research and writing. And yet, there is more to do.

Do you have a question or an issue that you want to share with other aquatic professionals? Are you willing to take the risk to share your idea? As we say in my family, “So, what’s the worst thing that can happen if you do!” Would you be crushed forever if your paper is rejected? Would you “perish” if someone disagreed with your idea? On the other hand, would the field of aquatics be better off if you don’t share your idea? What if your thought gives another aquatic professional an idea upon which they can build?! Come on, tell your aquatic story! Write it down and submit it.

Steve Langendorfer, Editor
International Journal of Aquatic Research and Education

References