

Editorial: Five myths about writing about teaching natural history

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Yes, the title of this editorial is a mouthful. Yet it makes an important point. Over the past year and a half since the Natural History Network launched the *Journal of Natural History Education*, I've had the opportunity to talk with numerous people about developing articles for the journal. Some of them contacted me at the suggestion of an NHN board member or colleague; some simply came across the journal on the web and thought they had an idea for an article.

Without exception, all of them had interesting and important stories to tell about teaching natural history. But also without exception, my conversations with them, both initial discussions about how a story could be developed into a manuscript as well as follow-up conversations about how manuscripts could be improved, revealed that teachers are enormously intimidated by and uncertain about telling their stories.

Five key myths emerge repeatedly. I call them myths because they are fundamentally incorrect, but I could just as easily call them barriers because these myths stand in the way of telling our stories in ways that share knowledge and experience, as well as empower other teachers to participate in the natural history renaissance (Trombulak and Fleischner 2007).

Myth 1: Nobody really wants to know about what I do with my students.

Wrong. Imagine that you come across an article that talks about teaching natural history to the same kinds of students you teach and with the same kind of emphasis you make. What is your reaction to that article? Do you say, "No, I don't want to read it because it is too relevant to my life as a teacher"? Of course not. As teachers, we are always looking for

better ways to communicate, educate, and evaluate. We are well aware that there are a thousand different ways to construct an exercise or activity, most of which we know we would not develop on our own. So we are always talking to our colleagues about what they do and how well they think it works.

Your colleagues are no different than you. Just as you want to learn from them, so too do they want to learn from you. Maybe they will listen to your story and adopt your approach in their own class, and maybe they will decide that they prefer what they are currently doing. But that's not the point. What matters is that you are giving them the opportunity to consider alternatives and improvements. The truth is that they *want* to know what you are doing with your students because it gives them the opportunity to improve as educators, whether or not they agree with you.

Myth 2: Big-picture philosophy is more important than practical advice.

Wrong. Big-picture philosophy is great, of course. It's what provides a pedagogical grounding for what we do, and the field of education is rife with big-picture philosophies: people learn more by doing than by seeing; children benefit by spending time outdoors; collaborative learning is good; and so on. But picture yourself as a novice educator, armed with *only* these philosophies. What will they actually empower you to do with your students on Monday morning? How can you translate them into a lesson plan? A field-trip itinerary? A wish list for equipment and supplies to put together a new exercise or museum display? For philosophies to translate into anything useful, they have to be followed up with practical, detailed advice on what to do and how to do it. The truth is that the details of your experiences translating

philosophical truisms into educational activities are a critical part of educational theory. Without practical advice, philosophies will never come to life and bear fruit, and your detailed stories are precisely the kind of practical advice that others need.

Myth 3: I should only write my story if I am sure that what I do is unique and significant.

Wrong. I suspect this myth is ingrained in us from the body of publications that we are used to reading in the course of our research on new findings in education and natural history. Although we may accept that a core principle of the scientific method is that results must be repeatable – and hence saying something that has already been said is a key part of science – we typically do not see publication of such results. This has unfortunately led us to believe the same is true of for *all* publications, or even that it is *desirable* for all publications.

But this is not the case. For a renaissance in natural history to occur, we need to foster an explosion in the prevalence of natural history education in classrooms and community nature centers everywhere. Publications in this journal are not simply about novel ideas. They are about *your practices*: what did you try, what worked, what failed, what would you do differently? And there is value to reporting on activities that others have reported on ... or even reporting on activities about which you have no idea whether or not they are novel. If someone reads about your practices and says, “Well, will you look at that. That’s the same exercise I heard about elsewhere,” then they are more likely to remember it and be empowered to try it. The truth is that your story is worth telling simply because it is your story, regardless of how unique it is.

Myth 4: My story is only worth telling if I describe everything I do in my entire class.

Wrong. The more you try to describe with your story, the more complex it becomes and the harder it is for someone to learn from it. I realize that effective teachers usually plan classes as complete and distinct constructions, where exercises and field trips connect logically one to the other to support overarching themes and standards. Yet this does not mean that the component parts of the class are not useful or important on their own. Other teachers could easily incorporate a single new exercise into their own class construction to support their own educational goals.

I experience this regularly in my own school. I am blessed with colleagues who teach classes on other

taxa and with other conceptual emphases than I do, yet who share my interest in natural history. We commonly talk with each other about what we do with the students in lecture, field, and lab, and more often than not, we each find aspects of what the others do that we want to incorporate into our own class. This does not change the taxa we focus on or the concepts we emphasize, but it provides for steady improvement in the quality and effectiveness of our instruction, whether it is something as simple as how to keep a field notebook or as complex as how to introduce students to a statistical technique for interpreting behavioral observations in the field.

The truth is that you make more of a contribution, not less, if you focus your story on one simple thing: an exercise, an activity, a discussion, a technique, a field trip. Here the dictum “*Minor est magis*” (Less is more) is relevant: tell a detailed story about one thing. The fact that you have many such stories to tell simply means that you can write several different articles; it does not mean that you need to find a way to compress all your stories into one.

Myth 5: I should not try to write my story unless I can write as well as <fill in the blank with the name of your favorite nature writer>.

Wrong. Of course, it would be great if we all wrote with the grace and precision of Barry Lopez, Terry Tempest Williams, or Peter Matthiessen. But the fact that we don’t should not, and cannot, be used as a justification for why we don’t share our stories about how we teach natural history. The truth is that the ways in which you help your students engage meaningfully with the natural world are worth describing even if your descriptions take the form of a series of sentences with little more than a subject-verb-object construction. You will be surprised at just how useful simple declarative sentences can be in conveying to others exactly what you did with your students and why. The editors and reviewers of the *Journal of Natural History Education* will, of course, be happy to suggest improvements to your prose, but I suspect that you will be surprised by just how little your writing voice will be critiqued.

These five myths stand as barriers to telling our stories. They stand as barriers to us being able to learn from each other and enabling the creation of a community that will help reconnect students of all kinds with the natural world. They are not impenetrable barriers; like all myths, one only has to look at them with an altered focus to see a different reality. I encourage you to shift your focus and tell

your stories with confidence. I promise you, what you once saw as barriers will crumble at your feet.

References

Trombulak, S.C., and T.L. Fleischner. 2007. Natural history renaissance. *Journal of Natural History Education* 1: 1-4.

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