

(1992)

The Inveterate Invertebrate Reporter

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Can science be fun? Why not! Often, as depicted by the media, science is a serious business and scientists serious persons. Who among you thinks of Spock as a fun-loving, carefree soul? Not I. He may have a dry sense of humor and those pointy little ears to offset somewhat the seriousness of his visage, but let's face it, he is all work and very little play. I don't think science should be seen in that light and to partially change that view, in the fall of 1988, I had my invertebrate zoology class, a lower division majors course, publish an in-house newsletter.

With me as the chief editor and publisher and the students as cub reporters, the class published *The Inveterate Invertebrate Reporter*, a weekly newsletter devoted to the life and times of the invertebrates. Issue one began with a welcome editorial and a brief biography of the professor, both of which I wrote to inform the students of their future duties and what notable events characterized my life. In that issue I described the three functions of the newsletter: 1. to describe the anatomy, physiology, ecology, and behavior of the different groups of invertebrates; 2. to describe the lives of biologists who chose to study invertebrates; and 3. to provide the members of the class with a chance to develop their talents as writers.

Subsequent issues of the newsletter had three sections, an

article on an invertebrate group in the phylum we were studying that week, a brief biography of a famous invertebrate zoologist, and a review of a book dealing with the phylum we were studying. In addition each issue usually included biographies of the students who had written the articles that week, and bibliographic citations for sources the students used in writing their articles. If time and space permitted, I also included either scanned or hand-drawn pictures of invertebrates. To liven things up, I wrote the headlines for the articles:

"Forams: Our Testy Protozoan Friends" (this group secrets a calcareous test)

"The Molluscs: First-class Foot Shufflers" (molluscs are classified according to the type of foot they have)

"Those Silver Threads Amongst the Gold May Have Been Nematomorphans" (these creatures are called thread worms)

"On the Inside Looking Out: N.A. Croll Takes a New View on the Ecology of Parasites" (Harvard Press has a hit on its hands)

"Water Fleas: Even a Lake Has its Problems"

The Publication Process

Figure 1 shows a student-edited copy of the issue that was published on the 21st of October. I will now describe the process used to get to that stage. Each week three students were assigned to write articles. I told two of the students which group and person to write about, but the third student was free to choose any book, as long as it related to the group being studied. The articles were due in my hands on Tuesday and were then given to three other

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students who were supposed to proofread and comment on the article. The annotations on Figure 1 are the student editorial comments. They were to return the copy with their comments and corrections by Wednesday. The authors were then asked to give me their corrected copy on Thursday. Thursday night I put the newsletter together and xeroxed copies Friday morning before class. Students submitted copy to me as an ASCII text file on a 5 1/4" diskette. I used First Publisher, a low cost desktop publishing program for the IBM computers. The program can use style sheets for newsletters or other common publications, but since each issue had varying amounts of text, I pretty much had to paste-up each as though it were the very first of a new series. The drawings were either scanned and then pasted into the appropriate spot, or space was left empty and I later penciled them in on the final copy.

The articles were roughly 200-400 words long. Authors were noted either in the headline or at the end of the article. When students failed to submit their work on time, their space was left empty, except for a slightly caustic note:

This space is deliberately blank. Copy from a class member failed to arrive in time to meet the publication deadline. The editor regrets the omission and hopes that it will not happen again.

The Editor

This happened only twice.

Evaluation

No evaluation, objective or subjective, was done on this experiment. In the first place, I did it because it was fun. In the second place, I subscribe to the school of writing that believes that the

more you write the better you get, particularly if you get feedback through reading the work of peers and comparing your product to theirs and by listening to what peers say about your work. Thus I expected improvement. As each student had to write one of each type of article for the newsletter, he or she ended up writing at least 600-1,200 words for this part of the class.

In retrospect, there are a few things I will do differently if and when I do this again. The first is that I would write a brief guide for the student editors. This guide would include a list of things for them to comment on as they read the articles. As shown by Figure 1, most of the editorial comments were about simple errors: spelling, lack of italicization of scientific names, etc. The comments on structure and overall competence were too general; they didn't say what was good or bad. Second, I would lengthen the process. Although the students had enough time in the initial stage of composing the text of their article, the time period between submission and publication was too short. In as much as I was the paste-up person, artist, headline writer, and printer, I spent many Thursday nights staring into a computer screen trying to integrate the various components. Sometimes this was a very difficult task.

The reader might ask "Why didn't you have the students do the page layout, paste-up and artwork?" True, it would have been much easier for me if I had handled it that way, but the purpose of the newsletter was to provide an outlet for student writing and to have the students read material from non-textbook sources, not to learn how to use a computer program to produce a newsletter. I was worried that if students had to do the mechanics of newsletter production, they would lose sight of the main objectives.

Would I do it again? Sure, but I don't like doing the same thing year after year, so it will probably be a few years before the newsletter gets resurrected. Until then, there are plenty of other

ways to make science fun and at the same time get students to become better writers. How about having them write articles for a scientific journal simulacrum, *The Northern New England Journal of Functional Zoology*? Hm, maybe I'll do that next.



(1997)

The Inveterate Invertebrate Reporter— A backwards glance

Should every piece of writing a student does be graded and corrected? I don't believe so and much of the writing I have my students do is read, but not always graded or corrected. My contention is that writing is partly a skill and like any skill, practice makes perfect. I also believe that writing exercises should be fun. Many PSC faculty would also agree with that contention and the *WAC Journal* has published some of those "fun" exercises. Lastly, I believe that students should compare his/her work with that of his/her peers. This essay demonstrates how I followed those principles a few years ago and where I have gone in the present.

The Inveterate Invertebrate Reporter was an attempt on my part to provide pertinent writing experiences for lower division biology majors. I asked students to find information on invertebrates, invertebrate zoologists and books written about the different invertebrate groups. The topics were specific rather than general and thus forced the student to not only write, but to use library skills to find appropriate materials. The newsletters were published on a weekly basis and thus provided the author with a captive audience (his/her peers) and at the same time provided the his/her peers with direct evidence of how their work compared to

others in the class.

Did it work as promised? Yes. Did I continue the process in subsequent semesters? No. Why not? A long time ago, I decided that one way to avoid burnout was to not teach my classes the same way each and every year. Now, one could say that by sticking to a pattern one would use up less energy, which might be true, yet at the same time, by sticking to a pattern, one gets stuck in that pattern and never explores other options. Thus, even though the newsletter idea was fun and successful, I have moved onto other ways of getting students to write.

Today that new approach involves the use of a homepage on the internet. Students are assigned topics to research, books to read, etc., and then are asked to send me written material via e-mail. I then incorporate their contributions on the homepage for the class they are enrolled in. A specific example is appropriate. This semester I am teaching *Perspectives on Wilderness*. It is an upper level "I" course. Students are required to read four books and write two papers. In addition to those requirements I want them to read other books and written materials. With the requirements as given, asking each student to read additional books would be an onerous task. To accomplish that goal, I simply assign each student a chapter in a book and ask them to write a short synopsis of that chapter. I then take each of the chapter summaries and put them on a homepage for that book. Each synopsis is a signed synopsis. All students are asked to read the other synopses so they can get a first hand feeling for a sense of the book and at the same time have a chance to compare their writing abilities with those of their peers.

How do I know that they will read what the rest of the class has written? I have no way of certifying their perusal of the homepage material, but one component of their class grade is that they must rank written and oral contributions of their peers to the class. The

form I use for this assignment indicates that they must read their peers' work on the homepage. Hopefully when they fill out that form, they have done that before developing their rankings.

Another way that I involve students in comparing their work with that of other class members is that I have them bring a rough draft of each major term paper to class one week before the final draft is due. I pair the students and have each pair exchange drafts. As they read the draft they are to fill in a feedback form that they return to the other student, along with their oral response. The form asks very specific questions.

Anyone interested in viewing this approach to getting students to write can visit my personal homepage and click on the links to either *History of Science* or *Perspectives on Wilderness*. My homepage is at: <http://oz.plymouth.edu/lts/>