

Using *Tech Directions* to Teach Technical Writing and Motivate Your Students

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In the past, I have published articles in *Tech Directions*, and it feels good knowing that colleagues throughout the U.S. and Canada are reading my work and, in some cases, using my lessons to teach their students. Sometimes colleagues disagree with your suggestions, but that's fine, because you know they at least read your article.

One topic I have written on in the past, which I feel

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strongly about, is technical writing. I have also read many articles from colleagues on the same subject in *Tech Directions*. However, we all take different approaches. Some of us like the short one-page assignment, while others like a five-page research project. Whatever your approach, the bottom line should be, "Get your students to write."

I recently gave a writing assignment, a short one, and not a technical paper but a critique. And—are you ready for this?—they had to critique articles from *Tech Directions*. The assignment succeeded so well that I had to share it with everyone.

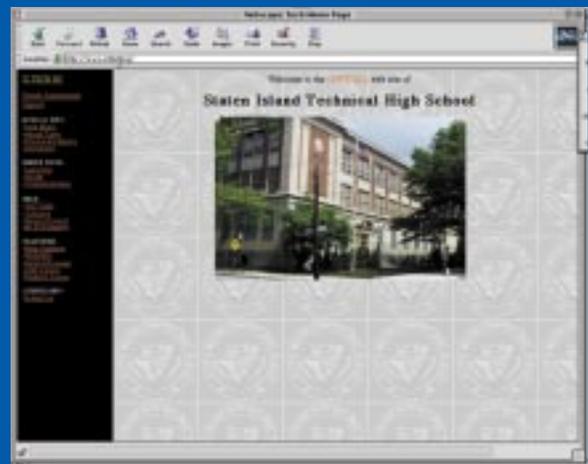
Website Link on Staten Island Technical High School Web Page

www.siths.org

Raile's Reviews: "Learning Technology Through Technology." This link is where you will find Mr. Raile's class critique of *Tech Directions* and other magazine articles.

Tech Directions is a monthly technology publication for educators, distributed throughout the U.S. and Canada. Articles range in subject matter and by author. However, all articles pertain to technology and education.

Mr. Raile has given his students the assignment of reading and



critiquing these articles. The students first submit their critique (good or bad), report about what's happening to their classmates, and then post their critique on this site.

Whether you are the author of an article, an interested instructor wanting a quick review, or a student interested in technology, this site is for you.

You are also welcomed and encouraged to leave your own critique of these critiques.

Students selected an article from *Tech Directions* and submitted a typed critique. (I keep all my past issues in one area, so there were no problems finding an article of interest for everyone.) After the papers were corrected and graded, students reported to their classmates on the new technologies, techniques, or lessons they learned. The last step took them to the Media Room, where they posted their work on our school's web page (www.siths.org).

I ask students to type their critiques for two reasons: they're a lot easier to read (especially if you give this assignment to more than one class) and it forces students to use the technology available for their use. Remember that part of this lesson concerns learning about technology. Using a disk makes transferring work easier and allows me to teach students how

to use our school's equipment and various software products.

Surprisingly, students really enjoy this assignment. They find it interesting to see what other teachers are doing in their classes and what the new technologies available are. They are also interested in sharing their findings with their fellow classmates.

In conclusion, I would like to thank *Tech Directions* and my colleagues for allowing me to find a new way to inspire my students to write. My students not only now know where the Media Room is but they have lost their fear of it. Who knows? Perhaps some day I will be reading an article written by one of my students in *Tech Directions*!

Full-size assignment sheet and sample critiques appear on the following pages.

LESSON: Learning and Reporting about New Technology by the Use of Technology

Aim: Using the internet to be heard

Introduction: Did you ever imagine what it would be like to have a best selling book, go on a book signing tour, and have people tell you what they thought about your writing? Okay! Let's wake up. We know this is not going to happen. Well — maybe not yet.

Today we are going to start by critiquing someone's work, then, via the internet, have someone critique our critique. Learning about technology by using technology.

Material: Class set of technical magazines (*Tech Directions*), school website (home page), link on *Tech Directions* web page, instruction sheet for assignment.

Procedure:

1. Select an article from *Tech Directions*.
2. Read the article and follow instruction sheet for critique.
3. Write a critique of the article.
4. Submit for grade.
5. Take graded assignment with corrections and post on school's web page.
6. Periodically check for feedback on your critique.
7. Report all responses to instructor.

Follow-up:

1. Students report in class about any new technologies they have learned.
2. Students report to class any interesting feedback they received on their critique.
3. Students follow the same instructions and critique a second article later in the term.

Instruction Sheet For Technical Critique

1. Heading: Author, title, magazine, issue, page number
2. Article overview content
3. Your critique of the article will include the following points:
 - a. The way it was written (ease of reading)
 - b. Knowledge of subject matter (yours, the author's)
 - c. Your opinion (good or bad; why)
4. What you learned (or did not learn)
 - a. New concepts or ideas

Format

- 1-1.5 typed pages
- NO double space
- 1" borders
- 12-point type size

Student Sample Critiques

#1: Elena B's critique of Matt Anderson's "Time Clock—A Real-Life Classroom Management Tool," *Tech Directions*, February 1997, page 24.

A public school teacher in California was shopping at a local flea market one day. As he was browsing, he stumbled upon an old time clock that was once used for checking in and out of work at some business. At the sight of the time clock, a light bulb went on in his head and he knew that he should purchase the time clock.

The teacher taught a wood shop class in a middle school and frequently heard the question "What does this have to do with real life?" Students were always questioning the importance of the material they learned, and Mr. Anderson knew that he could use the time clock as a tool to give some real life experience.

The previous year, Mr. Anderson assigned his advanced class the job of building toys for some needy children in the area that they lived in. The students built about 60 toys, which wasn't nearly enough to satisfy the 4,000 needy families in the area. Mr. Anderson saw the low interest that students had and decided that the time clock could help him spark some new motivation.

The time clock helped him organize a "toy company" in the school. School was the job of the students, and as the employer, Mr. Anderson needed ways to be able to keep track of their time on the job. Students were required to punch in and punch out of class, and for their effort and hard work (just as in a real job), Mr. Anderson paid them with points.

The idea was creative and did more than just motivate the students, it began to teach them responsibility and better work conduct. However, after being open for only a week, the business was forced to close down because the time clock stopped ticking. Mr. Anderson tried to fix it, but no matter how many times he tried, it was useless and too expensive to get fixed at a store.

Mr. Anderson could not be easily defeated, however, and conducted some research. He came across a company called Desert Time Clock in Lancaster, CA, and called the owner. He explained to the owner his idea of using the time clock as a real-life classroom management tool. The next day, the owner was at the school with a new time clock and time cards, free of charge, and once it was installed the business was up and running again.

Personally, I believe the use of this time clock was a great idea. When students are forced to realize that work has to be done promptly and efficiently in order to be paid, a real life lesson is learned. Once the time clock was up and running in the school, students no longer let time pass. Their responsibility increased because they had to make sure they punched in and out correctly, they couldn't lose the card, and they had to work during the class period or they would not be "paid" for the day.

Their work ethic improved and they learned how to work in teams. "Out of the desire to accomplish the goals we set, all students helped each other in their groups." Their behavior in class also improved. Mr. Anderson doesn't allow the students to punch in until he's done with roll call and announcements, and he won't take roll call until the students are ready to listen. The longer it takes him to do his job, the less time they have on their cards. The students feel successful when they punch in and out correctly and they get something for their time and effort.

I think it would be a good idea if other schools adopted this method of classroom management. Having a daily goal to accomplish as much as possible in a given time creates high motivation, and while the students think of the time clock as something fun about the class, they are subconsciously learning "real life" working habits. The program was successful for Mr. Anderson's class and he is making their transition from school to work, which is only a few years down the road for many of his students, a much easier task to accomplish.

#2: Steven S's critique of "The Web; or, How to Change Corporate Thinking without Really Trying," by Michael E. Scozzari, *Tech Directions*, February 1997, page 40.

The internet can be used as a very valuable tool for education, both during school and in the workplace. Mr. Scozzari's experience with the internet, and HTML (hypertext markup language) programming ability, has made him a vital asset in his company. In this article, Mr. Scozzari talks about the many advantages and problems of using the internet to teach other employees. Some of the advantages include younger workers being able to learn from the personal experiences of older employees. A disadvantage of this process is that competition can easily profit from your work.

In my opinion, however, this is a small price to pay for the many benefits of the open web page idea — letting all employees access any information they want. This enables the younger employees to take over where the older employees have left off, thus allowing them to make a positive contribution to the company, as opposed to simply reinventing the wheel.

For security concerns, their company made sure a user name and password can be given out to all employees, thus making sure those who work outside the company cannot access the valuable information. It is true that this security isn't much, but it will make access by competitors harder, and bring the law on the side of the company.

In Staten Island Technical High School this year, we are being offered a pilot program from Cisco Systems, which is very similar to what Mr. Scozzari's company has done. Cisco has provided an online version of their two-year computer networking course — which normally costs \$15,000 to take — free of charge to select high school students. While in the short term, Cisco Systems loses money from those who would have paid if this course was not available, in the long run, Cisco does benefit greatly. Most of the students enrolled in the course would not have even considered paying such a high amount for this course but now have become interested in it, and many will pursue a job in this field. In the past, the number of employees with Cisco training has been much less than the number of employers seeking to hire them. Through this course, the number of employees with this training will greatly increase, and thus Cisco will earn much more than they would have if this course was not available.

I commend this company for placing their knowledge and experience on the internet, where it can be available to everyone. This act will benefit the entire industry, for new employees will be able to build on the accomplishments of those who came before them. As the great Isaac Newton once said, "If I see far, it is because I stand on the shoulders of giants."