Technical Communication in Work, School, and Society

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Abstract

This paper attempts to explore how Technical Communication is used in the workplace, in schools, and in society. My hope is that I show the importance of accurate data and how it affects others as well as the importance of providing enough information to readers. I also wish to provide information that may be relevant to students who have an interest in Technical Communication. In each one of my scenarios, I try to explain how a person must be familiar with technology in order to succeed in specific tasks. I provide examples of how I myself have used Technical Communication in different settings. I then give brief information on the direction that Technical Communication appears to be taking and how it will benefit us in the future. Finally, I try to show how I am using Technical Communication for potential career goals and how I will continue to use it even after I have settled into a career path of my choosing.

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Before I began this English 5220 Technical Writing course, I hadn't realized how much Technical Communication plays a part in so many facets of life. Most of us are introduced to Technology from a very young age whether it's by using the internet or communicating over the phone. When we get older, we find that the forms of Technology evolve from simple to more complex uses. In society, we use Technical Communication to keep in touch with others who live far distances away. As students, we are motivated to use Technical Communication to correspond with professors and submit course work. Finally, in the work force, we use Technical Communication to improve work processes, communicate with large numbers of employees, and relay information that effects the company the employees work for. However, these examples barely scratch the surface on how we use Technical Communication in our lives. In the following essay, I will attempt to show how Technical Communication has become a necessary tool in improving on more precise forms of communication for all of us.

Technical Writing in the World of Students

In today's time, the year 2018, it seems that Technical Communication has filled itself in every aspect of the real world. Perhaps no one is exposed to technology more than a student. I recall, when I was a student in high school, being asked to handwrite essays with paper and pen. Now I write and send the files digitally and save them to flash drives for safe keeping. Author David H. Hargreaves details how Information, Communication, and Learning Technologies (ICLTs) have changed the assignment process. He writes, "They may make the work easier. Redrafting an essay is much easier to do with computer-based text than with written text, where the whole piece has to be rewritten, slowly and painfully. The Internet or the use of some commercial software can make the task of finding relevant material to support or illustrate an argument much more efficient than searching through books" (Hargreaves, 2004, p. 48). This example illustrates the objective of Technical Communication-to write something more quickly, more efficiently, and in one simplified format that everyone can use. Perhaps the very first introduction a college student has in the world of University learning is filling out an application to attend a school. Although paper forms do exist, a student might find it easier to access the information they need from the internet as opposed to traveling to the campus and finding the correct department to pick up a form. The process is much easier now in that a student goes to a University's webpage, clicks on Register, and then fills out and submit the forms online. Once a

student has become enrolled in classes and begins their coursework, they might find that format is another important component of good Technical documentation. Depending on what the document is for, writers are expected to follow certain template styles that the readers would expect to see. In college, one of the elements that professors expect to see from their students is correct format usage. I have written many papers in my college career. Most of them required MLA format. Although I'm familiar with the format, I always refer to a website called https://owl.purdue.edu/owl/purdue_owl.html which answers questions and gives examples on correct MLA style papers, citations, and other elements. Recently, in this English 5220 Technical Writing class I am taking, I was asked to present this paper and citations in APA format. I am using https://owl.purdue.edu/owl/purdue_owl.html for a resource on that as well. Ironically, I am presenting you now with a form of Technical Communication- a site that gathers knowledge, examples, and answers questions (they even have a link for their page to a Facebook and Twitter account) in order to complete a Technical Communication assignment.

Technical Communication in Social Settings

Computers and digital files are just two small examples in a vast world of humans. Social media has become a resource which although initially was only used for fun, has now evolved into a place where people can learn as well. Students might be prompted by teachers to do visual assignments. Perhaps they'll use Skype to orally present a report or maybe they'll record a video on platforms such as Vimeo to present "how-to" directions. I was once asked by a teacher to memorize a scene from a Shakespearean play (I chose Othello) and record a video of it. Then, I was asked to upload it to Vimeo. The teacher graded the piece by several guidelines, but the following ones are the ones that I recall. Most importantly, I had to accurately quote the scene. Secondly, I had to incorporate props into the scene. Finally, I had to write a report explaining my interpretation of the scene and why I chose certain props. For my props, I chose a candle burning in order to represent that time period, a wedding ring in order to represent the doomed marriage of Othello and Desdemona, and a red blanket in order to represent the murdering of Desdemona by Othello. My professor at the time was making use of Technical Communication by asking us to record a scene. Although some of the students knew about YouTube, students such as myself had never been exposed to Vimeo. This semester, Dr. Chesley had us meet online for conferences via Web Ex. I had never used this tool before, so it was my first time being exposed to it. The tool allowed all of us to be connected via video screen. I also discovered that there was a function that allowed students to upload materials so that all the participants could view them. I was happy that we were shown this program because many companies use Web Ex for conference purposes. As a result of these types of assignments, I learned how to navigate new Technical Communication tools.

Universities such as the one I attend, Northwestern State University, have programs in place where students can interact with other students and instructors online. I have used a program called "Moodle" which allows instructors to post directions for assignments and for students to submit their assignments. There are also areas on the site where instructors can post forum questions and students can post answers. Colleges now require that students immerse themselves in technology in order to learn.   Author Adam J. Copeland (2015) writes, "Becoming

digitally literate requires you to pursue questions like, How are God's people communicating today? On what platforms is digital writing occurring? When is technology mediating our lives? Digital literacy does not require you to be cognizant of every text-messaging initialism out there (OMG, no!), but it does warrant a basic understanding of how digital communication technologies affect our life together" (p. 88). Through the use of learning platforms, students aren't just encouraged to post their own knowledge, but also review the knowledge of other students, thus sharing and generating more communication amongst each other.

Examples of Technical Writing in the Work Place

The next logical place for Technical Writing to exist is in the workplace. Although jobs can vary from one set of requirements to another, one thing that remains relevant to them all is the need to provide consistent information which all employees can follow. Technical Writing is unique to other forms of writing in that its goal is to provide correct information. In a past work position, I myself was tasked with providing a training manual for Sales Reps. The manual had to include screen shots so that the Reps could see visually the processes they needed to follow and it also had to be saved in a Power Point format so that trainers could use it in a classroom setting to train multiple Reps.   What I found during the process was that it was important to have multiple days to work on the project so that I could create it, edit and proofread it to make sure no steps were missing and that the information was correct, and time to have a peer review it as well as my supervisor. However, nothing was more important than making sure that the steps were fool proof and that the content was completely correct. Author Carolyn R. Miller (1979) writes, "This way of talking about technical writing is the legacy of what I am going to call for convenience the positivist view of science. This is a complex and varied tradition, extending in some forms back to ancient Greek philosophers, but reaching its most extreme expression in the logical positivism of the early twentieth century. Put simply, positivism is the conviction that sensory data are the only permissible basis for knowledge; consequently, the only meaningful statements are those who can be empirically verified" (p. 612). In other words, real Technical Writing is information that is not applicable to opinion or deviation. It exists for the purpose of delivering documentation that others can rely on and follow with ease.

Company Intranets, Community, and Technical Documents

One type of technology that typically only exists in work place environments that also pertains to Technical Writing is an Intranet, not to be confused with the Internet. Intranets are pages via internet connection which can navigate users onto the web, but also provide pertinent workplace data on a home page that employees might be interested in.   For instance, there might be links to an Employee Holiday Calendar, Human Resource documents, or information about the company itself. All of these are examples of Technical Communication in that they are provided for a specific audience and are meant to be accurate data that employees can trust. Through Technical Communication, companies provide information to their workplace community. In my personal experience in two separate work environments, both had Intranets. Not all work environments do. The first place was at an Advertising company. I noticed that the Intranet there had several resources. It showed links to measurements for different kinds of ads,

it had a link for employees to log on to check their pay stubs, and it had news on how the company was doing financially. All the information was relevant only to employees because it was built for employees. The second company was a company that produced and ordered checks for consumers. That company had more of a sparse Intranet. Employees could link to the database to create orders or they could view other "how-to" documents for training purposes. Author Carolyn R. Miller (1979) writes, "We can teach technical or scientific writing, not as a set of techniques for accommodating slippery words to intractable things, but as an understanding of how to belong to a community. To write, to engage in any communication, is to participate in a community; to write well is to understand the conditions of one's own participation—the concepts, values, traditions, and style which permit identification with that community an determine the success or failure of communication" (p. 617). Reliability isn't the only important factor in technical writing, it is also important for the author to write their documents clearly. After all, confusing information in a document could lead to miscommunications with employees that could in turn cause issues in the workplace. If mistakes occur, the document could not be considered accurate data and its validity would come into question.

Gathering Information: The Speaker and the Listener

One of the basic comprising factors of communication is the ability to effectively give directions and to hear them as an active listener. An employer might choose to give directions to an employee in person rather than over the phone or computer, but the result could still be a technical document of some kind. Regardless of the method used to pass on information, how we pass on that information verbally is just as important as how we write it. If a makeup and hair artist posts a YouTube video about how to curl hair, but she skips steps when she speaks, the result might be that a viewer tries it and burns their hair imitating the video. If a mechanic is trying to talk to a person over the phone about how to fix a car, but forgets to mention turning the car off first, the other person would probably burn themselves. When verbal communication is relayed in Technical situations, the key is always in the details. In an office setting, an employee might decide to interview other employees for an assigned project. They would verbally communicate questions and listen for the participants' answers. The objective would be to gather data from participants who have experience in or would be affected by the project in some way. Once the data is collected, the employee would try to provide a result that would accurately represent the information the participants provided. I was once in a job position where I had given my two weeks' notice. My superior was understanding about the situation, since the new job I would be taking was higher paying, but she requested that I leave "how-to" type documents for the new employee that they would eventually hire to replace me. One of the documents I created was on how to do a monthly report with Microsoft Excel listing all the money we had received from physicians for seminars and listing all the refunds we had issued for physicians who were unable to attend the seminars. In the document, I included numbered steps, screen shots of examples, and a link to existing spreadsheets. When I was finished, I printed a copy of the directions and left them on the employee's desk and I also saved the directions on a shared drive on the computer where she and other employees could access it if

they needed to. The goal was to make the process as smooth as possible for the new employee which would also help the company to continue to function effectively after my absence.

Surveys and Interviews

Although I have never been the head of a project that required participation from a large group of employees, I do remember an employee at the Advertising company I worked for who did. The girl was tasked with finding out what employees wanted most at the company. She then was supposed to present the results to the CEO of the company, the managers of the Client Services department, and her supervisor. She chose to send out a link for a survey to everyone in the department. When she presented, she presented the results of the survey. Unfortunately, the people she presented to were very unhappy with her results. She only presented the thing the employees wanted the most which was more vacation time. Through this Technical Communication course that I am taking at Northwestern and using our textbook "Solving Problems in Technical Communication" I can surmise why her audience was unhappy with the results. By reviewing Case Studies in the text, I could come up with ideas of how the presentation could have been better. First and foremost, the girl did not present much information. She was given the tasks several months in advance. This means they were expecting her to gather a lot of data since she was given a lot of time. A survey can be created quickly with such technology as websites like monkeysurvey.com. The audience knew that, so immediately her presentation would be viewed as somewhat lazy. What she could have done was first researched online examples where other companies had gathered data on what their employees would like the most. Another thing she could have done was incorporate visuals of the survey results. For instance, a bar graph showing the number of people who wanted vacation, the number of people who wanted more pay, and etcetera. She could have also chosen to pick a random number of participants in the group and interviewed them in person to see if their requests matched up to the requests in the survey. Lastly, she could have gathered information to justify the employees' request for more vacation time. She could have pulled statistics of local companies in the area who are competitors and showed if they had more vacation time than that company. In that way, she would have been showing that the employees' requests were justified because they were competitive with other companies.

Digital and Audio Note Taking

In order to accurately gather data in person, it is important for the person interviewing to record notes. Relying on memory would not benefit readers because information could be remembered incorrectly and if the information is remembered and recorded incorrectly, it could result in a flawed technical document. Author Jim Henry explains why taking field notes is an important part of the process. He writes, "As time passes, you will want to revisit all the notes you have taken and systematically comment on them in the left-hand margin. Adding these comments can help you remember to take certain steps, as in the case of procedural notes, and they can enable you to start connecting the dots among observed events, comments by colleagues, and written artifacts" (Henry, 2013, p. 83). If a project is a substantial one that takes a long period of time such as over a year, notes can play an important role in data not getting lost in the shuffle. An additional component to consider would be to include audio recordings used

with the participants' consent which can help ensure that meticulous notes are taken for the data gathering process. If the interviewer would like to go a step further, he or she could gather the notes they had hand written and compile them into a document saved to their computer. The upside of this would be that anyone could review the notes taken thus far if they are saved to a shared drive. I myself have gathered notes and compiled them into a document in order to visualize the data in a quick manner. For instance, I sometimes compile an outline showing what the objective of an assignment is, my main talking points, what subtopics I'd like to talk about, and finally what my conclusion would be. Compiling data in this format is a common way for English students to plan out essays to present to their professors.

The Future of Technical Communication

The evolution of technology continues to amaze me. Once phone calls with video sounded like a science fiction story, but now it's a standard feature called "Face Time" on the iPhone. In the past the internet was connected by using phone landlines, but now we use cable connections that download at much faster speeds. Technology is now seeking to make communication between different language speakers easier. Devices such as Babel-Fish Earbuds assist in creating translations in real time. These devices could help employees of international companies communicate more easily with partners in other countries. Faster communication could lead to quicker decision making, documentation among different language speakers that is more streamlined, and more efficiency over all. The devices aren't mainstreamed but could easily become so down the road. An advancement that hasn't been fully developed yet but could lead to greater things in communication is AI technology. It is predicted that in the future, humans will have fully immersive computer interfaces available to them. With that technology, they will be able to interact with entertainment, web surf, use VR/AR, and use brain-computer interfaces. Perhaps eventually this would allow us to speak directly with projections of people who live thousands of miles away, immerse ourselves in Star Trek style holographic worlds, and interact with hologram guides who could assist us with projects. These tools help us to communicate and share information more quickly and in more efficient ways. Because Technical Communication continues to change and grow, it's impossible to expect people to immediately become experts on it. As a result, people find themselves continuously having to train themselves on new technology. Author Brad Mehlenbacher (2013) writes, "It is exceedingly difficult to find individuals we can label, with any degree of confidence, as "experts", that is, if we are defining an expert as someone who knows "everything" about a database we are accessing, a similar version of the same software application, a particular corporate policy or procedure for managing an unusual employee situation, or the features of a genre that is uncommon to our corporate setting" (p. 193).

Technical Communication and My Career Path

As a student about to graduate, I have looked at different career paths I could take. I haven't decided on one because I would rather give myself several options as opposed to just one. Some resources I have used in order to research careers are message boards and Facebook

groups. For instance, I have looked into online ESL teaching. With the advent of faster DSL connections, online ESL teaching has become more prominent only recently. More companies are growing that provide online tutoring services. I joined a Facebook group which discusses the different companies and gives advice to people who want to become tutors. I have recently implemented advice that other members suggested such as creating a colorful background on my wall that children would enjoy and buying a good pair of headphones that have audio and microphone. This Facebook group also gave me a list of several companies I could apply to. With this knowledge, I hope to find at least one job. If I am successful in obtaining a job, I would continue to look at the group page because they still have many ideas that would help me in that career path. They often contain advice for online teachers such as dealing with difficult students and parents who live in far away distances, the process to follow if you are sick and unable to teach, and ideas of different ways to teach lessons using props or interactive teaching tools like drawing on the computer screen. Another route I have investigated is Technical Writing. I have applied for a few positions, although unfortunately there aren't many in my current location of Birmingham, Alabama. I checked message boards for advice for entry level Technical Writers. The advice they gave is very similar to what Melenbacher points out-there really aren't many experts out there. People must become experts pretty much on the job. Seasoned Technical Writers recommend that if a job posting asks for a writer to be familiar with programs, they should research those programs. Several programs now a days have Introduction Tutorials that people can take free of charge. Once a person studies it, they can honestly say that they have familiarized themselves with it. If I were able to obtain a position in Technical Writing, I would have to be proactive about continuing to research the field. I would go to podcasts which discuss ideas, for instance Dr. Chesley provided us with a link to this particular podcast which I think would be helpful to subscribe to: https://www.stitcher.com/podcast/uah-technical-writing/10minute-tech-comm.   I would also search for articles that updated writers on different techniques, formats, and news in the field. Lastly, I would buy books so that I could have information handy at my fingertips if I needed to review guidelines or standard format uses.

Through this article, I hope that I have successfully illustrated how Technical Communication effects today's world. My hope is that through what I have learned in our text, through assignments, and through my daily use, that I can successfully implement what I have learned in whichever career path I choose to embark on. Technical Communication is something that we not only use in our everyday lives but is also something that continues to grow in today's job market. Becoming an expert in the field means continuing to keep yourself familiar with current and new technology.

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