

Pinecrest Academy Tavares

2550F - Team Name

VEX IQ Career Readiness Online Challenge

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# TECHNICAL WRITER

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When you think of robotics and technology, who do you think of? The scientists? The engineers? The so called, “problem-solvers”? Write from the git-go, our society thinks about the people who stand out. The people who make the news networks and streaming channels. The people who do the work. Well, did you ever consider the people behind the scenes? The decoders? The explanation hunters? Right behind the technological curtain, there hide the “freaks” [1] of technology:

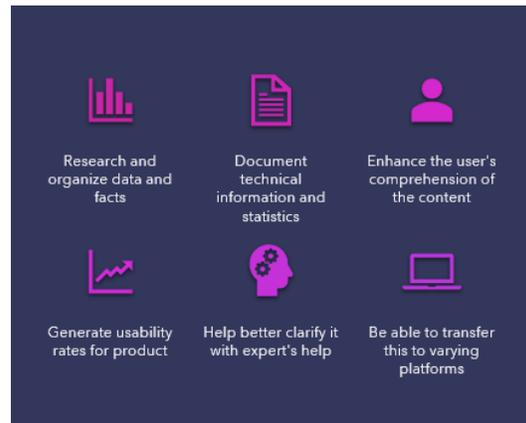
Technical Writers. Though they aren’t as popular, and definitely not as appraised of as aerospace engineers or video game designers, they are still changing the understanding of the technological world piece by piece. And by participating in robotics, it is preparing me for the rapidly changing future of this career.

A technical writer is a collaborator who works with other collaborators and professionals to discuss and revise as a team, which then leads to them sharing the information across multiple platforms. The goal is simple: It is, “communicating complex information to those who need it to accomplish some task or goal.” [2] Therefore, for any audience who needs that information, or those statistics can have it, with the help of technical writers of course. You don’t hear about technical writers much. But if there wasn’t one technical writer on this Earth, engineers and

video game designers couldn't do their job. If there were no technical writers, you probably wouldn't be able to play your Mario and Luigi game on your Nintendo Switch right now or fly to your next vacation to Disney Land this summer. And even if you did, it probably wouldn't work right. So, to make it easier for the companies and professionals to comprehend the information and do their job even better, technical writers focus on these 4 components in their documentation: Audience, Context, Document Design, and Purpose. Let's start off with audience. Audience means that technical

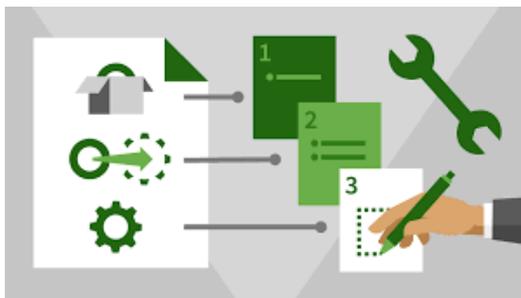
writers, "must understand how their audiences use and read documentation." [3] Therefore, in order to deliver a nice, perspicuous documentation, the technical writer must be able to perform the task of identifying who the reader is in order to present the information the best way possible. For example, if the person is somewhat an expert with the material, then maybe the way they explain it would be different then how they describe it to a

unfamiliarized person. This then leads to the next element, which is Context. Context is the type of situation of communication that the reader is involved in. Whether the reader's in a hectic business failure, or they are trying to start a business, context will help with knowing the, "physical and temporal circumstances in which readers use communication" [4]. Now, let's talk how the information is displayed. This is called Document Design. There are six elements to Document Design. Let's start with Arrangement, which is when a technical writer considers the "order and organization of visual elements". [4] This is when the overall structure of the document really matters. Now, Conciseness is similar. It's, "The 'visual bulk and intricacy' of the design". [4] This is when the technical writer thinks about how everything looks and appears. We then have Emphasis, which is stated to be, "How a document displays important sections" [4]. It could be from bolding certain words, to making the letters enormous, they know how to do it right. This leads to tone, which is basically the attitude of the document. In other words, it is, "The sound or feel of a document" [4]. Furthermore, it's the way the information is supposed to be presented, so users know how to think towards it, and comprehend more clearly. Speaking of more clearly, let's talk about the final one: Clarity. Clarity is simply the form in which the audience can fully understand the accurate, deciphered information. In the end, the technical writer wants the person to be able to, "understand it quickly and completely" [4]. If the clarity level is low, then the technical writer failed at what their task was. Another important factor is Ethos, which is the credibility. Asking yourself, "How much can you believe?" Technical writers will always, "strive to create professional and error-free documentation". [4] Technical writers want to make sure that 100% of the time, the users know that they are getting the most accurate information. Finally, there is Purpose. Purpose is key. It is the goal of the information. When they find the purpose of the information, a technical writer, "analyzes



the purpose (or function) of a communication to understand what a document must accomplish” [4] So, it is crucial for a technical writer to find the purpose, so they know what, how, and why they are presenting the content.

Now, not only do technical writers think about the qualities of their documents, but they have required skills and qualities of their own. Skills include business analysis, computer scripting and coding experience, content design, information architecture, and more. [6] Qualities include being an active problem solver, curious mind, critical thinking, able to take constructive criticism, etc. [7 & 8] Part of their personality really puts towards how they communicate the information. Optional skills include things like indexing and graphic design. [6] The overall sense for the qualities and skills is for the technical writer to, “create a document that communicates information in clear, useful terms.” [9] But, before any technical writer writes the document in the most accurate format, they should, “thoroughly research the subject material.” [9] This will help them to explain it more fluently and precisely, so the information isn’t hectic. For example, if I was given a project in school to discuss zebras, I couldn’t just start writing. I don’t know what to write about, and I barely even know anything



about zebras. It’s the same thing with technical writers. They can’t talk about anything if they don’t understand it themselves. Furthermore, there are certain studies that are required. Most of the time, having “a bachelor’s degree in journalism, English, or communications” [7] will boost your chances of getting the job and succeeding at the job. Also, depending on what

you are writing about, you would need some type of degree or experience with it. For instance, if you are providing medicine reports or data, it is urged for you to have some type of experience with it, preferably medicine. [7] Technical writers should additionally have a bachelor’s degree in Technical Writing, Computer Science, Software Engineering, Curriculum Development, and Scientific Publications. [8] This is supporting their task of gathering and presenting the information. As well as all of these, having a degree in Teaching [8] is optional, but will help with the task of explaining things clearly. With all these skills, qualities, and degrees, technical writers can create in-platform instruction and system operation documentation [8], as well as assembly instructions and “how-to manuals” [7]. They will put the decoded information into customer-facing documentation for products [10], or journal entries and articles, [11] all while working with experts and other writers to build the best explanation for it.



Competing in competitive robotics is preparing me for this field in multiple ways. One way is that it is enlightening me with the experience of what I am going to be writing about. It is not going to be the exact thing, but it will help me explain it better. For technical writers, they, “must be able to understand complex information and communicate the information” [7] Therefore, in order to deliver the information clear and explicitly, I would have to have experience or knowledge to what I was going to talk about. Also,

competitive robotics is guiding me towards this career by having me take part in teamwork. Robotics is all about working as a team, and cooperation is vital to have. Technical writers consistently, “consult with technical staff to manage the way information circulates” [11]. So, if I’m going to be a technical writer, I must be able to collaborate with others to get the job done. Now, how will this career evolve over the next 10 to 20 years? Well, I believe that job applications will expand, and more people will be applying for this occupation, since people at the U.S Department of Labor believe that the occupation employment will increase by approximately 11 percent between the years 2016 to 2026 [12]. A reason for this could be that there are more written documents and overall technical writers needed. Another reason could be that the desire for “Web-based products” could also drive the need, want, and number of technical writers. [12]

Tons of people would write about the “cool” and “interesting” careers. The one’s the make you go “ooh” and “ahh”. No one even considers technical writers. But that’s why I picked them! They needed some credit. We need them, no matter how hard you think about it. So next time you’re playing your video game, remember the people who made it all happen.

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