

Psychology in STEM? It Makes Sense!

Career Readiness Online Challenge

Camila Colon and Brianna Napoles

18462A

Doral, FL

STEM: Science, Technology, Engineering, Mathematics. Many careers fall under this category. One that particularly interests us is psychology. This is the study where the human mind and its functions are analyzed. Personally, we find the human mind to be fascinating and intricate. As we all know, STEM involves engineering. There is a career called engineering psychology.

Engineering psychology focuses on “improving and adapting technology, equipment, and work environments to enhance human behavior and capabilities.” They arrange buttons or specific parts of the machine, making them more comfortable for the one using the machine. They are particularly interested in “understanding the capabilities and limitations of human behavior and developing and adjusting systems to maximize these abilities and prevent errors.” They prioritize the use of machines, remaining safe and efficient. They minimize human errors and accidents. These engineers also try to enhance machines to make them accessible to those with disabilities. They accomplish all of this by “Implementing user feedback into future iterations of product design.” This is key. User feedback is important because they are the ones who are tampering with the machine firsthand.

These engineers go through trial and error. As we all know, we make mistakes. We do not get everything on the first try. They think they got the right spot but when it is tested, it makes it more uncomfortable. They do not just give up though. The engineers keep trying until they find the perfect spot. Although their job may seem easy, it is harder. The number of mistakes made, or coordination required, is insane. Think of it like this. One button can mess up the entire machine. One wrongly placed button leads everything to be wrong, just like a trail of dominoes falling. This applies to my robotics class. One piece that I placed wrong messed up my entire robot. We had to rip it apart about five times. While I

was making it, I thought those little pieces were the most pointless pieces. Yet it came back and bit me in the butt.

Another thing these engineers go through is receiving feedback. Feedback is a critical step in engineering. Since these engineers are not operating the machines, they are designing, the user's feedback is what determines whether they misplaced or got the spot right on. It is just like this with my teacher. Obviously, I have learned stuff in class, but she is a true expert. Sometimes I do not realize I am wrong, and when she realizes, she tells me how to fix it at lightning speed. The same applies for psychologist engineers. The user tells them what feels uncomfortable, and the engineer quickly strives to fix.

VEX Robotics is going to help me in my future. Psychologists go through the same thing as I do. The VEX programs helps us experiment with teamwork, creativity, and strategy. We learned to work with others, even though we are typically independent workers. Throughout this experience, we also learned to be creative. We were given a manual to follow to build a robot, but we made several adjustments to make it our perfect fit. Along with that, strategy is key. We learned how to build, perfect, and remain patient. All these qualities can help me reach my dream career in STEM, all thanks to one robotics class I took in the 7th grade.