Persuasive Essay 7-4

Tiffany McDonnell

Southern New Hampshire University

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Dr. Clough

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Every day that passes STEM education is becoming more and more essential in our everyday life. Just like every other argument, there are two sides. There are people for it and others are against the argument. Teachers, students, and parents alike all need to know what STEM stands for and how the concepts are all integrated together. They need to understand that there are many careers out there that require STEM knowledge. The last important point that people need to know is how so many issues in today’s world can be benefitted by people who have a background in STEM education.

The people who are not for STEM education feel that technology is taking away jobs more than it is creating them and therefore ruining our society. There are also many people within our society for STEM education since we are evolving more into a digital world. The more we as people of today’s society evolve with the technology that is developed, the more essential it is for us to incorporate get a better understanding of stem fundamentals. The other problem that some people have with STEM is that they really have no idea what it is or what it stands for.

There are so many aspects and concepts that revolve around STEM education. With all the different concepts some people feel discouraged about what it really stands for. STEM itself is a known acronym short for science, technology, engineering, and mathematics. (Barkatsas, et al., 2018) These concepts alone don’t mean STEM, but when they intertwine is when they become one bigger picture STEM. (Barkatsas, et al.,2018) We have physical technologies that are developed daily. There are different programs people use all over the world that help with the understanding of all the different concepts. With the way technology is growing, job fields and careers are growing as well, creating interest to upcoming inspired students. These fields have a very large variety revolving around: math, science, technology, and engineering. All these inspired students deserve an education related to their field of study as well as we need more graduates in these careers to help with everyday problems.

Parents should all be educated on the importance of STEM and know why their children should be educated as well. Students with an interest in technologies and sciences can benefit highly from well-developed STEM education. Students and parents alike will be dependent on getting their information on the teachers and other programs providing the education. Teachers themselves, all had to be educated on the different concepts around STEM in order to provide the information to the students. There is a link in a teacher’s capacity to teach STEM that is connected to their educational background (Barkatsas et al., 2018). Teachers try and expand their knowledge so they can teach but, most are specialized in only one of the core concepts and find it difficult to integrate all of the core values of STEM. (Barkatsas et al., 2018) Organizations all over the world are trying to encourage STEM education in order to fight different challenges including things like climate change and clean water sources (Barkatsas et al., 2018) Other information parents should learn about is how developing STEM skills can really help develop everyday skills in their children. These skills include becoming a better leader, problem-solving, communications, and creative and critical thinking. (Barkatsas et al., 2018) Based on a survey conducted in 2021 involving the replies of 255 teachers the STEM programs should be upgraded to a more professional level. (AlMuraie, E. A. et. al., 2021)

Math and science absolutely are both needed subjects in the world around us but, people need a better understanding of the different technology and engineering concepts (Barkatsas, et al., 2018). These two subjects coincide with what the world is and continues to grow into. STEM really is important nowadays to help with real-life issues people face all the time (Barkatsas, et al., 2018). With the right amount of knowledge, the importance of STEM education should become known as a majorly relied-on part of today’s everyday education. Once people are educated, the hope will be to inspire upcoming students to want to advance their knowledge in STEM that will make a difference in their dream line of work. Students will start to realize there are relationships between the different fields and a lot of jobs can’t exist without another. Having a general understanding of different aspects will help in the future overall. Some parts of STEM could then include introducing things like robotics, virtual reality, and even 3d printing (Barkatsas, et al.,2018). These may sound intimidating to some people, but they are used in day-to-day lives for many reasons. They are used for things like entertainment but also can be used in things like different medical fields.

When it comes to everyday life that STEM education can help there is a huge plus in the medical field. Although When people think of STEM they do not usually think of medicine, there are many STEM factors hidden within the field. Not only does it take mathematical equations to figure out the right dose of a medicine someone may have to take, but the machines that help keep people alive are all part of the technical advances within STEM. One example of this would insulin pumps. There is a STEM background that programmed the machine to be able to dispense the correct amount at the correct time. So much of the medical field has also gone digital. Almost every hospital and other medical building now use computers for document records, not to mention the billing aspect. This all uses software that someone with a STEM background had to develop. These advances allow for not only life-saving equipment but can be used for communication and for at-home use, so someone is not stuck at a hospital if you have to be on one of these machines. Within the Healthcare field another huge scientific advancement that gets better and better every year it’s the use of artificial limbs. Creating these instruments uses a bit of artistry as well as engineering knowledge. It is all solid proof that how without STEM we would not be able to live life the way we currently do. It all helps so many people be able to live their life.

There are a ton of topics within STEM that come in all sorts of shapes and sizes, and it all shows the relationship and importance between STEM and the world we live in. One example is written by: AlMuraie, E A, Algarni, N A, and Alahmad, N S. It’s all about the importance of STEM, based on the perspective of a teacher who teaches at a secondary education level. Another good article is written by Christopher Zacher. Although it is written by Christopher Zacher, it’s about a speech given by Commandant David Berger on how important technology and engineering are to the Navy and how it used in everyday missions today. He goes on to talk about one of his commanders at the time and how he used his background in engineering to create a victory in 1943. This knowledge was then used mathematically to measure how close to shore and for how long they could go to ensure victory. (Zacher, 2020) While an amazing source that shows the importance of STEM education is a book by Tasos Barkatsas, Nicky Carr, and Grant Cooper.

The three main key points that were mentioned above should help educate the audience and their entirety about the importance of STEM education and why we all need it. There was a reason why it is needed at an academic level so teachers can pass on their knowledge of it and how STEM is used in everyday life for not just fun and games but important things that make our society run. The last key point helped to explain how STEM isn’t just one thing, it is a collection of skills intertwined together. This all leads up to how without STEM we as people wouldn’t be able to survive today. Next time someone sits in their vehicle, the hope would be that they realize how all the fancy technical stuff it has was designed from someone with a STEM background and that stuff would not exist without an education revolved around it.

Citations:

AlMuraie, E. A., Algarni, N. A., & Alahmad, N. S. (2021). Upper-Secondary School Science Teachers’ Perceptions of The Integrating Mechanisms And Importance Of Stem Education.*Journal of Baltic Science Education, 20*(4),

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Tasos Barkatsas, Nicky Carr, Grant Cooper (2018) *STEM Education: An Emerging Field of Inquiry,* *https://eds-s-ebscohost-com.ezproxy.snhu.edu/eds/ebookviewer/ebook/bmxlYmtfXzE5ODQyNjZfX0FO0?sid=c5df8893-9b67-40bd-b573-3fc7ba7053fa@redis&vid=1&format=EB&rid=2*