Every year people all over the world are hit with cyberattacks. Cyberattacks are one of the most rising forms of attacks in the world. The world is changing, and everything has moved or is moving digital. Thus, everyone's information is at risk, so how better to combat this than to inform our younger generations? Our best attempt to stop cyberattacks starts with our youth. When we start informing our youth, the cyber world becomes a much safer environment. When we educate young people on the importance of cybersecurity, society becomes more aware. That’s why all high school students should be required to take one cybersecurity course before they graduate high school.

Firstly, all high school students should be required to take one cybersecurity class for their safety. When using the internet everyone's location can be tracked in many ways. One way hackers can track your location is through your IP (Internet Protocol) address. Tracking someone's IP address is not as hard as you think. A publication done in February of this year states that “ tracing an unprotected IP address is as simple as a single line in the command prompt ” (Barber). In terms of safety, this is an issue because somebody being able to access your IP address can track your whereabouts. However, there is something you can do about it. You can disguise your IP address using a VPN (Virtual Private Network). This is a way you can keep your IP hidden from hackers and keep your location unknown. This is a very fundamental and easy solution to combat cybercriminals. Safety is one of the most important things when browsing the web and how not better to teach our younger generation than classes in high school.

Secondly, all high school students should be required to take at least one cybersecurity course for their security online. When going online and surfing the web you spread all types of information about yourself. Whether that includes credit cards, social security numbers, or medical records. All of this information can be stolen from you at any point during your time browsing the web. All it takes is one click and you are vulnerable to a cyber attack. Many attacks specifically specialize in stealing information like phishing attacks. Phishing attacks are one of the leading forms of cyberattacks in the world right now. These phishing attacks mainly occur through email and can look real, but with knowledge gained through a cybersecurity course, these attacks are easily avoidable. During the covid pandemic, everyone was locked indoors, and technology was used more than ever during this time. A report done by PurpleSec, an IT service and computer repair company states, “Cybercrime Up 600% Due To COVID-19 Pandemic” ( Firch, 2021 Cyber Security Statistics The Ultimate List Of Stats, Data & Trends ). This further supports the stance that security is one of the most important things to consider when using the internet. Requiring one cybersecurity course for all high school students will apply basic cybersecurity skills. These skills will prevent these easily avoidable mistakes that can ruin a lot of what people use every day. It can happen to anyone, but with the knowledge gained by high schoolers that number of 600% will fall over time.

My third point is that cybersecurity classes would help students with their opportunities during and after high school. When in high school, most students have trouble finding out what to major in or even what job they want to get after high school. This is a great way to spread awareness of various job opportunities provided by the cybersecurity field that students would not know about otherwise. Cyberseek, which is a government trusted source, recently put out a map that shows jobs available all over the nation. They state that “ Cybersecurity talent gaps exist across the country” (cyber seek, cybersecurity supply, and demand heat map). This data provides information about what cybersecurity jobs need to be filled. While also giving a look at each state in the US and an estimate of how many jobs are needed. Usually, more jobs are needed in states like Virginia, Washington, and Maryland, but there are opportunities in every state that encompass many jobs in the cybersecurity field from cryptology to cyber criminology. Taking a class in high school would help young adults explore an additional avenue that could lead to success in life after grade school. This source gives an overall look into what is possible while pursuing a career in cybersecurity. While this source is the only piece of evidence I used on this point there are many other sources and pieces of information that further point to the opportunities that are possible. No matter where you live there are jobs in cybersecurity that range from cryptologist to being an information security analyst. While there are many jobs there are also many types of cybersecurity jobs listed above.

Cybersecurity courses will help students develop their knowledge of our future technological world. Cybersecurity is incorporated into all of the technology we use today and in the future. This is a crucial step to internet safety and security when using all of the electronic devices we use today. Cyber security will become more important with every technological advancement that is made. Learning more about cybersecurity fundamentals will not only help you understand how to use current technology, but it will also help people understand why updating people on the importance of cybersecurity is so crucial. As stated in the article by Disruptordaily, Darren Gallop stated, “ Additional privacy and cyber regulation will continue to be developed forcing businesses to take cyber security more seriously.” (Mire, What's the Future of Cybersecurity? 40 Experts Share Their Insights). This quote alone is an indicator of why cybersecurity will develop the knowledge of high schoolers taking a cyber class. Cybersecurity is changing every day. That's why it's crucial that we update our younger generations on cybersecurity, and how it's affecting our future with technology. Even with an example like phones and the new 5G capabilities. This new technology comes with a lot of vulnerabilities that have unknown consequences. This is just an example of cybersecurity will help highschools students understand what they are using and how important it is to understand what you are using as technology advances.

My fifth topic states that cybersecurity courses in high school will help reduce the amount of cybercrime in the US yearly. In the US every year people are hit with various cyber attacks due to their lack of knowledge about cyber security younger kids are more likely to run into cybercriminals looking to steal their information as talked about in one of my previous topics. Helping students become more knowledgeable in high school will dramatically decrease the amount of cybercrime that happens not only to high school students but to everyone around them as well. Once students know how to defend themselves against cybercriminals, they are more likely to share that information with their family members. According to cloud wars, “phishing attacks account for 90% of breaches” (Pitchkites, 26 Cyber Security Statistics, Facts & Trends in 2022). With this knowledge, we know most of the attacks that breach defenses are phishing, so if we required a cybersecurity course in high school students would know what to look for, and how to defend against phishing attacks which is an abundant source of cyberattacks. The fact that 90% of breaches are phishing attacks states that if people become informed of the threats of attacks like phishing cybercrime would go down a lot.

Finally, making cybersecurity courses required in high school would give students a safe and lucrative option right out of high school. One of the upcoming fields in the world right now is cybersecurity in terms of how much is to be made and how many jobs are needed. A study done by Cybersecurity Ventures states, “the number of unfilled cybersecurity jobs grew by 350 percent, from one million positions in 2013 to 3.5 million in 2021.”(Morgan, Cybersecurity Jobs Report: 3.5 Million Openings in 2025). This shows not only how many positions there are right now compared to 9 years ago but also shows how much the cybersecurity field has grown and how many people are needed. Various companies have realized the importance of cybersecurity and this number shows how quickly they realized it. Cyber security will only grow more in the future, hence why it's important to allow high school students to learn about this rapidly growing field.

The counterargument to why students shouldn't be required to take at least one cybersecurity course before they graduate high school is that it will take money and resources from other classes and the overall high school budget. The main focus of every school is money and the overall state funding for their school. This is the basic foundation upon which a high school is created and each high school is allotted a budget. If cybersecurity were to be introduced to every high school in the US, this would take mass amounts of money from other organizations and programs. This could be more of a detriment to a high school than a help. An article written by a school director states, “ One of the biggest things I've learned is the challenges we face as school directors with the budgetary uncertainties… “ (Pearce, *The problem of cyber charter school funding in Pennsylvania*). This school director later goes on to explain how much it costs to develop cybersecurity programs in schools and how it takes away from other resources. This author accounts from her own experiences on how difficult it is to introduce a new program like cybersecurity into the budget. However, this does not mean it's impossible, for example in my local high school we had a cybersecurity class. This is evidence of the fact that it's hard, but not impossible to introduce a new program to all high schools around the nation. Furthermore, covid-19 has made situations worse for any aspiring programs. While High Schools are trying to fund all of the programs they already have. It's much harder to add more programs when funding the current programs is already hard enough. As stated by ChalkBeat, “Now, the coronavirus has brought much of the American economy to a halt. Another recession is possible, even likely.”(Barnum, School Budgets Are in Big Trouble, Especially in High-Poverty Areas). If another recession happens in the schooling budget in the US like before this will impact the chance for other programs to be established.

In conclusion, all high school students should be required to take one cybersecurity course before they graduate. Requiring students to take at least one cybersecurity course before they graduate will help students maintain their security, and safety, as well as give each student more opportunities than they otherwise would have had. As well as help develop students' knowledge of the future of technology, reduce cybercrime, and give students a safe and lucrative option for a job right out of high school. One of the only downsides is the cost of the courses that are implemented in high schools. In the future, school boards all over the nation need to take notice of the importance of cybersecurity and the rise of technology. Requiring one course for all high school students will dramatically decrease the number of cyberattacks in our local communities. This not only will help students be safe, secure, and have more opportunities, but it will also help the world. It will help the world through the spread of information, through high school students other generations will learn about cybersecurity and make using the internet much safer. Overall cybersecurity is very important and adding a cybersecurity course in all high schools and making it a requirement will benefit many generations in the future. If we as a system don't deal with cybersecurity one day it might be too much to bear. But if we take control now and inform our younger generation we will be better off in the future.

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