

Reflection Essay

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IDS 493

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Introduction

As a cybersecurity major there are different applicable skills that I have gained or improved throughout my academic career, however I think that the most valuable skills to include and continue to improve are my researching, software expertise, and critical thinking skill set. These three skills provide me with the tools and knowledge for a well-rounded approach to most situations in an academic, workplace, or life setting.

Researching

I think the value of this skill is immeasurable because like many skills there is always room to improve but the most important part of this skill, I have learned is the potential ways of using it. Researching is common when beginning to perform certain tasks which may involve figuring out something new or an unfamiliar project and how to go about that will increase efficiency along the way in terms of the progressing along the task. The different methods of research can also have value due to a variety of approaches creating a better conclusion to the problem. This skill has allowed me to perform various assignments and gain a better understanding of what I was going to do as I completed them.

IT 464 Term Paper

I have written many papers over time on a wide variety of topics and I have some that stick with me for different reasons, this is one of those that I gained some value from more than others. It is about project management and the value of an adequate group leaders as well as the qualities that those people possess in order to success carry out a project. There are underlying lessons that I tried to include within the paper which some were incorporated from classroom specific teachings. I have included different reasons for how a project manager can include certain aspects within their groups to improve morale and increase efficiency. This example right here was one of the great takeaways to me personally because I was improving to be a better researcher on positive things in an assignment that I feel like I had lesser knowledge about. I would not say this is the best content I have produced but the research value I gained for future products was important.

ENGL 231C Research Paper

Returning to an earlier time in my academic career I was tasked to research a topic and chose social networking or media and the effects of it on society today. The key focus about

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this paper was how intrusive social media can be in terms of affecting ads that show up, information being entered on profiles, and other privacy issues that people do not think about day to day. As I entered this assignment with a subject that I was familiar with using social media every day and thinking that I knew a lot I was reluctant to think I would have to do a deep dive in research. Not thoroughly researching a topic can lead to poor results or unsatisfactory assignment follow through meaning I would have created a shallow product. I had to cover certain topics within the assignment and quickly realized that a quality researched subject will lead to an easier route for success.

Parental Child Abduction Assignment

Knowing about a topic normally leads to a better path for beginning research and this was one of those assignments that caught me by surprise due to having little knowledge about it and not knowing where to start looking. Creating something from nothing is what I had to do although not that extreme due to many searching sites available, but the premise of learning how to take information and the confirm the validity of the source to present to an audience was a value I had not seen before. Being able to create an information piece to provide insight on a topic that I had previously not known about through new research techniques showed me from there onward the value in researching.

Software Expertise

In a field of cybersecurity using technology is most likely going to be a daily operation and in order to perform work duties successfully then there will be needed to know knowledge as more is learned over time. I have done projects that taught me new programming languages or introduced me to pieces of software I had not heard of before and after using these I gained more knowledge about not just how to use them but why they are used. Various tools are used to help with efficiency as well as convenience and learning about them continues to make me more successful in my field.

Wireshark

A common tool used within networking is Wireshark and it comes with an abundance of uses that I did not realize a tool could contain at first. It is a packet sniffer along with other capabilities that taught me a lot more indirectly about networking than I had previously known. I used this tool primarily in one class however it led me to outside discovery as I continued to improve by experimenting with this software. The benefits of learning about this software is how applicable they can be in a real world setting along side other tools that professionals use. It helps me gain a broader view of the tools used in a work environment that would be helpful when used together. As I did assignments using Wireshark also added to the reason why I would use the software because there were multiple tasks that I could compare to a scenario in real life.

Nessus & Nmap

I combined these two software programs because they perform similar objectives in terms of being vulnerability scanners and providing other tools within the software in order to assess a system. These tools took me to a different route of understanding about computers in general and communication between them. The information I gathered from this software showed how I can apply it to current websites and other situations creating vulnerability reports gaining a small insight on how this can come together. Uses of these pieces of software in conjunction with other common cybersecurity programs can combine to either prevent, maintain, or improve upon a system. Learning how to use these software programs taught me value in not relying on one tool and how to take data from software to actual application of it.

Digital Forensics

A class that lead me to different software uses that I ended up gaining a lot of information in compare to some of the other programs I have used. This interested me in different ways because of the software being used such as FTK Imager, Hex Editors, and other forensics tools that allowed me to really understand how to go through a computer thoroughly. Being able to assess files or images that may have been deleted and go through the process of digging them up in order to see what it was or what may be pulled from it expanded my knowledge on the importance of a tool. Not only recovering the data being hidden or deleted but also knowing how to extract the information and determine what is valuable as well as its use helps me understand why it is vital to use software capabilities the fullest extent.

Critical Thinking

Often seen in job ads and potentially asked by employers is the need to think critically within the workplace which is skill that I have and will continue to improve as time goes on. This skill is often paired with problem solving and the approach one takes in order to find a proper solution which comes with the territory in cybersecurity. This field includes an ongoing effort against trying to prevent security issues from arising as well as handling current issues that will happen in any aspect. To get this done those who want to get into a system will continue to figure out new ways to by pass the cybersecurity's efforts to keep them out and thinking critically is going to be needed as trying to come up with innovative ways to over come this.

CYSE 494 Final Business Plan

One of the most valuable assignments I have ever done took place in this class during the whole semester in creating a fictional business and understanding the insights of what goes into a business. In order to figure out where to begin although given guidelines, being able to produce a plan that has some accuracy to how in the real world a business proposal led me to

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value critical thinking. I would have to think deeper and expand how I would approach this assignment like any before because although this a surface level plan and in real life there was even more work to be done if this would have been applied in that instance. Overwhelming comes to mind as I began the project but learning how to take a large task like this and break it down into an organized and disciplined plan.

IDS300W Course Management Case

Learning about interdisciplinary disciplines and the importance of it in the workplace as over time projects that involve multiple disciplines are at the top of my list as important lessons. This is due to how critically thinking is involved during the whole process in breaking down a case and why it went wrong as well as other factors that include positives or negatives about the group. The cases I covered taught me the importance of perspectives and the way to think about them rather than seeing them at the surface level. Also, the discipline aspect provided me with insight into individual disciplines that made me think about how different ones were applied to different project scenarios. The critical thinking skill is used in a wide variety of situations and in a case assignment like this, there was plenty of room to expand and think in depth.

MSIM 470 Cyber Risk Assessment Project

As I have mentioned there are various reasons to use critical thinking and this project was more helpful than I had originally thought it would because it turned out it gave me a glimpse into potentially career reports as well as hands on experience. The task was to assess virtual machines for vulnerabilities and create a report with detail. I proceeded use the software as normal and began noting down what was required however as I came to uncover vulnerabilities, I started to relate it to how I could apply it in a job setting. Risks may have been mild or severe but the takeaway I got was how I would think to solve this actually and the levels that some threats presented may require deeper knowledge. This project provided me with insight that included multiple skills of mine, but critical thinking was a factor that began to lead me to expand the skill.

Conclusion

Interdisciplinary methods have led me to an overall information improvement that has created new skills and strengthen previous ones because through courses and my academic history. I used to view course work as one dimensional meaning this is how to approach it when I began this journey and as I have gone through the motion of academia I have come out thinking everything in life with a new outlook. Reflecting on myself is something I think I had done in the past, but this assignment has pushed me as person to dig into not just one area of me but an overall assessment. Interdisciplinary courses, especially IDS300W opened avenues that I had not thought about because before taking that course or any other like it for example I was not sure what it meant. Now, I can confidently say using these methods and looking at it

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from different perspectives, I have grown as person and the skills I possess can continue to improve as I go through life learning more about myself.

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