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Aspects of Successful Research

Research has no limit, and that is why it is important to know how to locate reliable information and how to correctly put the information to use. I have learned about what it means to be information literate and about the incredible importance of research ethics. Throughout this unit of study in my First Year Experience course, I have had the opportunity to devise a plan to further develop my research competency.

Prior to this class, I had never heard of the term “information literacy,” so I first had to identify a definition. According to Patricia Senn Breivik in *21st Century Learning and Information Literacy*, being information literate means efficiently recognizing when one needs information, identifying the relevant information that is needed to address a problem or issue, locating the information, and justly using the information to solve the specific issue. In today’s society, information literacy is very rare. Today’s students are ill-prepared to do research regardless of the amount of technology they have access to. For the most part, students rely solely on the internet to find their information, but they rarely question the reliability of the information they are finding. The percentage of educational and scientific resources that can be accessed on the internet is only 6% (Breivik 22). For students to recognize this issue, they have to use critical thinking skills. Critical thinking skills must also be utilized when determining when and where to find appropriate information, and then how to identify, retrieve, and efficiently utilize it. Breivik says, “information literacy is a kind of critical thinking ability; often the terms are used interchangeably” (Breivik 23). However, just because someone is a critical thinker, does not mean they practice information literacy. Critical thinking means finding a way to solve the problem while information literacy means questioning if the answer you got is the best answer. According to Breivik, being information literate is incredibly important because time and productivity loss can be lessened dramatically (23).

With the importance of information literacy comes the importance of ethical research. Conducting research entails knowing how to treat the data you accumulate correctly. According to the National Academy of Sciences in *On Being a Scientist: A Guide to Responsible Conduct in Research,* when someone doesn’t treat the data correctly, they “are violating both the basic values and widely accepted professional standards of science” (8). With today’s technology and internet access, it can be difficult to watch for misleading data. Poor experimental design and careless measurements also make it hard to recognize misleading data. When someone is conducting any form of research, it is vital that they record their methods accurately. Regardless of how outstanding the methods are, they will not count for anything if they are not recorded correctly (National 9). Furthermore, research ethics are important because mistreating research, the time of other researches is going to be wasted (National 14). Researches that tend to be irresponsible jeopardize their reputation, the work of their research partners, and the trust in science. The science field is “self-regulating community” (National 19), which means it is essential that researchers alert others when they become suspicious of irresponsible actions. Failing to practice ethical research can be detrimental in many ways. Punishments vary greatly, so there is no way to predict the consequences of research misconduct (National 20). This is why it is best to simply follow procedure and make sure research is ethical and correctly conducted.

Now that I have been taught how to be information literate and properly conduct research, it is time for me to act and practice my research skills. In my first year here at Minnesota State University, Mankato, I have been and will be required to write several research papers. I recently changed my major from nursing to psychology. Both of these fields are science and require research. Recently, I completed an in-depth, lengthy research paper on a man with a disability. I had to do a large amount of research in order to accurately explain his disability and my reactions to him. In my later years at Minnesota State University, Mankato, I plan to find a mentor to help me with my undergraduate research. Once I find a mentor, I will begin helping other researches with a certain project, or I will come up with my own project. I can base my decision on who my mentor is and what it is that they are researching. Eventually, I will present my research at a conference using a poster presentation. I look forward to all of the research skills I will acquire throughout my journey.

Today’s internet and technology has several benefits, but it also comes with some downfalls. Students today need to utilize critical thinking in order to find scientific and educational data. Their information literacy skills can lead them to finding reliable data. Additionally, practicing ethical research can lead them to successful results. By putting information literacy and research ethics together, I have discovered how I will eventually be able to conduct my own research correctly.

Works Cited

Breivik, Patricia Senn. (2005). *21st Century Learning and Information Literacy.* Pp. 20-27. Web. 9 Nov. 2016

National Academy of Sciences. (2009). *On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition.* Washington, DC: The National Academic Press. Web. 9 Nov. 2016