Reflection Paper for Big Data & Learning Analytics

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The Most Surprising Thing I Learned

The most surprising thing I learned through this course is how Big Data is being used by higher education to improve student outcomes. Prior to taking this course, I only thought of Big Data being used for businesses; more specifically, how the data is used to market goods and services to consumers. I was pleasantly surprised at how higher education institutions such as the University of South Florida are using data collected from their Learning Management Systems (LMS) in order to identify students who are struggling by simply evaluating how often they interact with their classes in the LMS- are they logging in often? How much time are they spending interacting with their classes through the LMS? Are they turning in assignments on time, if at all? But beyond organizing the data, USF, for example, created a Persistence Committee to evaluate the data and use it to determine which students may be struggling and are in need of extra support in order to pass their classes and, ultimately, complete their degree (Raths, 2019). The data was used to assist in personalizing the needs of the struggling students and allowed the Persistence Committee to direct the student to the appropriate resources.

There are so many stories about Big Data being used to manipulate or take advantage of technology users. It is nice to see how it can be used to create positive outcomes for students who might otherwise have fallen through the cracks and given up on their education altogether.

Information I Will Use in the Future

Also due to this course, I will be extra cautious to consider different ways that Big Data could be used when creating a Learning Management System (LMS) or Curriculum that relies heavily on technology. Questions such as:

What kind of data would these programs collect?

Who will have access to the data?

How will the data be used?

I will be especially mindful of the ethics involved in the collection of such data, such as making sure that students are informed about the data being collected through their use of the course technology, and how that data could potentially be used.

On Group Discussions

I really liked that the group discussions were not the typical, "make a post and reply to two of your classmates" type of posts. My favorite discussion was the one in which we were given a set of graphs to evaluate and determine what types of changes we would make to the curriculum based on that data and discuss who has the best idea (Module 8). I appreciated that it included actual data and allowed me to use my skills to analyze the data and come up with a solution to the problem it represented. I feel like that discussion allowed me to apply what I am learning in the Big Data & Learning Analytics class to my program of study in Learning Design & Technology.

What I enjoyed

While I did not get to take full advantage of the Python portion of the course, I enjoyed it and was pleased to see it as an option, though I found the Python exercises to be incredibly challenging. I have no doubt that it would have proved to be a particularly useful addition to my data analysis skills, and I regret that I was not able to take full advantage of the opportunity to partake.

References

Raths, D. (2019). How Personalized Support and a Culture of Data Can Jumpstart Student Success. Retrieved from https://campustechnology.com/articles/2019/09/12/how-personalized-support-and-a-culture-of-data-can-jumpstart-student-success.aspx