

Reflective Essay

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Before coming here to Teachers College, I had made a couple of career changes: I am an electrical engineer, I worked as a software developer for microcontrollers and web services, I was a high school teacher, and I worked in an educational NGO improving their technological products offered to help disadvantaged schools in Chile. Prior to taking this course, I had had experience programming and applying statistics. In 2016, I used Python a lot, especially to program a network of internet network managers, but it was quite different of what we did in this course. I used a little bit of Python, as well, to calculate a statistical index to measure school students' performance in standardized tests and do some predictions. I took this course because it is a required course for my master's program, which is in Learning Analytics. I was looking forward for this course because I think it is in the core of the things I would want to do in my future working in education.

In this semester I was able to apply techniques to real data and educational problems, I asked myself reflective questions regarding the possible usages of the contents of this course and thought about what to do with this to improve school education. I learned about predictive techniques that I have heard about, but I didn't understand them too well and neither applied them before.

I think that the approaches that I took for ACAs 1 and 4 were very interesting to me, because I felt that I could use different ideas and techniques to address interesting situations. The other two ACAs were interesting as well, but I think I was more creative in 1 and 4. I especially used ACA 4 to discuss potential applications of Social Network Analysis with different friends and people that I know that work in education. It led me to very interesting conversations which helped me to create an initial approach with many further potential applications. I look forward to developing new things related to that and apply it to current real environments.

I achieved what I was looking to learn, although I would've liked to go a little bit further in a couple of things or topics. The creative project was important because I was able to get to know new people and think about an interesting real problem with real solutions together. They were a good team, and that's not a usual thing everywhere. I think I taught stuff to my team as well as they taught me things too.

My interests, developed in the last 5 years (since I started the program Teach for All in Chile), are to work in education and combine education with my engineering experiences.

So that is the way how I got into learning analytics and why I like data science, math, statistics programming, and especially education. I would want to apply all what I learned in this course to improve the school education of disadvantaged children by helping school principals and teachers to take data-driven decisions.