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Investigating the Influence of the CSU Robert Noyce Teacher Scholarship Program on College Students’ Teaching Plans

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The Robert Noyce Teacher Scholarship Program (CRAFT-STEM) at Columbus State University offers academic and financial support for students pursuing secondary teaching certificates in STEM fields. In return, students commit to teaching in high-need K-12 school districts in Georgia. Here we provide preliminary results regarding influences of programmatic elements on students’ reasoning to pursue careers in STEM teaching and to commit to teach in high-needs schools.

Noyce Scholarship Program

The Noyce Scholarship Program supports the work of 900 current and 1,500 past Scholars. This document intends to provide preliminary data that can provide insights into the influence of Noyce scholarships on the decision to commit to teaching at high-needs schools.

Case Selection & Methods:

All Noyce applicants who had completed at least one year in teacher education during 2010-2014 were invited to complete a questionnaire regarding the impact of the Noyce Scholarship Program. A thematic analysis of returned questionnaires and original scholarship application essays reveals a better understanding of the experiences of a graduate who was teaching in a high-needs school and a current student. Data was collected by an additional questionnaire, a 45 minute interview, and follow-up clarifying questions via telephone interviews, and thematically analyzed and compared to all data collected for all Noyce applicants.

Case I: Adams -- A Current Scholar

Adams loves science. Adams entered college with no desire to pursue science teaching, but found himself on a path leading to a teaching certificate and a job in a high-needs school.

Pre-Teaching Teaching Experience. For Adams, who entered college determined to earn a science degree, there was one specific catalyst that moved him to make this change: tutoring peer on an advisor. For Adams, being just a job, it means earning a little money to make things easier.

Teaching was a good fit because he loved the content and knew it well, but he had no idea that becoming a science tutor would “change [his] life.” Adams enjoyed sharing his content knowledge with other students and was most pleased by the positive evaluations he received as a tutor, which he states were “the first and main reason why I want to be a science teacher.”

While Adams is excited about pursuing a teaching certificate and is firmly committed to teaching at a high-needs school to fulfill his obligation to the Noyce Scholarship, he does not believe his future lies in education.

“I do not wish to pursue education at all...teaching for me has only really been, I don’t want to say the ‘back up plan’ because I like teaching at the same time I’m getting a teaching degree for job security.”

Adams plans to teach for only the required amount of time and then moving on to a Masters in science.

Influence of the Scholarship. For Adams, the Noyce Scholarship did not influence this student to consider teaching as a career since his decision was made prior to his application. He believes the scholarship’s positive effect on his capability to pursue teaching by academically preparing him to teach in a high-needs school. Adams thought the Noyce Connections Seminars helped him more than the UTeach curriculum alone to “see the different aspects of what it is like to have your own classroom and teaching.” Of the seminars he states, “Oh I definitely would not think as much about implementing high-needs children into my lessons.”

The financial benefit also allowed him the freedom to commit myself to teaching. “I just focused on all my education courses and it really has been a blessing.” While the scholarship has been successful in securing the commitment of this student to fulfill his obligation in a high-needs school, it looks as if continuing in a teaching career beyond the commitment is unlikely.

Case II: Ford -- A Noyce Graduate

Ford successfully completed his degree and was in his first year teaching at a high-needs K-12 school in Georgia. Ford loves science, but teaching was always a consideration, not an afterthought. While he did consider teaching, it was not his first endeavor when he came to higher education. He chose a degree path in research chemistry because there were many options.

“I could go to med school, I could go to vet school, I could go into teaching, or work in industry with an undergraduate degree.”

Ford does love his content area, it is most important to him that he acquire the knowledge with other students and is most pleased by the positive evaluations he received as a tutor, which he states were “the first and main reason why I want to be a science teacher.”

While Adams was always a consideration, not an afterthought. While Ford had no doubt in his mind that he would one day turn his love of science into a career, he needed the push to explore the world of science education. He became committed when conducting a homeschool science lab as part of his UTeach requirements.

It was then that I realized, I really wanted to go into teaching because I thought it was really cool to see students learning something.

Influence of the Scholarship. Ford applied for and was awarded the Noyce Scholarship his last two years at CSU. With a firm commitment to teaching at that time, he does not believe the scholarship influenced him to become a teacher. Instead, he credits the seminars for preparing him to teach in high-needs schools and the scholarship for sustaining him financially as he could “really focus” on his student teaching.

"The money was essentially there to help me...pay for any other expenses one had,...it is really what put through student teaching. That was one of my worries that I had. How am I going to pay for student teaching because that is five or six months that are unpaid."

While Ford does love his content area, it is most important to note that teaching was always a consideration, he was always a consideration, not an afterthought. While he thought about possible future careers. For him, science and teaching go hand-in-hand and are not separate career steps. He believes his “passion for science fueled [his] desire to become an educator, and it was an easy step to take toward a career in teaching. While Ford had no doubt in his mind that he would one day turn his love of science into a career, he needed the push to explore the world of science education. He became committed when conducting a homeschool science lab as part of his UTeach requirements.

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