How Mini Grants Impact Student Learning

Jenna D'Angelo and Karen Hansen
Sacred Heart University
College of Arts and Sciences, Isabelle Farrington College of Education

NOYCE Scholars' Grant Impacts:

Hands-On: Some real mini grants being implemented at the Discovery Interdistrict Magnet School allow for hands-on learning experiences and engagement for students. These include hands-on Solar System models, gardening tools and construction materials, and digital cameras students can use.

Interactive and Connection with Students: The mini grants gave preservice teachers the option to choose different materials for the classroom. Scholars chose to buy products such as a 3D printer or white board stations on the wall. By purchasing these materials, pre-service teachers are able to work one on one with students and build deeper connections with them as they interact more.

Improving Student Skills: Along with the improvement seen among pre-service teachers in regard to mini grants, it as well helps to impact student learning. We are able to bring in many different skills students may not get to learn without the materials we are able to provide through use of the mini grant. These include collaboration, creativity, problem-solving, and more.

Overview:

As recipients of the Robert Noyce Teacher Scholarship, we have been lucky enough to get the opportunity to provide our clinical classrooms and schools, both located at the Discovery Interdistrict Magnet School, with materials and/ or resources that foster growth in STEM education. Before our acceptance into the Noyce Program, neither of us were aware of what a mini grant was, how to apply for one, nor how it can be beneficial to the school's community. This learning was possible through our application and acceptance of mini grants that we developed and presented during the end of the Fall 2023 semester. Both of our mini grants are different in content and implementation in the classroom, but all align with the STEM curriculum and focuses, as well as the standards for Bridgeport Public Schools and the Next Generation Science Standards. Through this process, we were able to grasp a better understanding of the processes necessary in creating, applying, presenting, and implementing a mini grant. These mini grants are not only benefiting us as future educators, but it is benefitting teachers as well as the numerous students for years to come who will be able to experience STEM education in a more hands on environment. Students at this school will experience the benefits of these mini grants throughout their time at the school, which will emphasize the importance of science and foster a greater appreciation and interest for STEM as they continue their educational careers. Furthermore, mini grants are impactful for students and schools beyond STEM. Any and all subject areas can use mini grants to grow the student knowledge and support new learning. Mini grants overall are a fantastic way to impact student learning and are assets for the continual growth of our students.

Many elementary teachers find it difficult to incorporate science instruction in the classroom everyday. By implementing a mini grant into schools, teachers may find more opportunity to use hands-on materials, interact and connect with students, and improve their own and students skills in STEM. The grants discussed are actively deepening student engagement and interest in STEM subjects.

In-Service Teacher Opinion:

What do you as an experienced teacher think about the impact of mini grants on schools and students?

"Mini grants offer flexibility. Schools and teachers can find mini grants for specific needs and the applications are relatively short. Also, because mini grants focus on specific needs (learning experience, projects, special events, etc) they directly affect student engagement. When students are actively engaged their learning improves. Lastly, mini grants allow creativity. They provide opportunity for schools and teachers to apply for things more out of the box and enhance creativity and teaching methods. Student learning is positively affected from these grants." - **Mary Servino, STEM Specialist, Discovery Interdistrict Magnet School, BPS**