2021 FINAL REPORT SUMMARY

UNIVERSITY OF THE DISTRICT OF COLUMBIA
COLLEGE OF ARTS AND SCIENCES

Project Firebirds Reinventing STEM Teaching (Project FRST)

University of the District of Columbia
Robert Noyce Scholarship Program
National Science Foundation Award 1540799

Project FRST, funded by NSF's Robert Noyce Teacher Scholarship Program, implemented the sixth and final year of a project designed to certify and support middle school science teachers. A team of scientists and education faculty from UDC, science and science education experts from the Carnegie Academy for Science Education, the District of Columbia Public Schools, and academic language specialists from the Center for Applied Linguistics worked collaboratively to implement the program.

Project objectives included:

- Addressing the need for effective secondary level STEM educators
- Increasing the number of women and underrepresented minorities in STEM areas
- Addressing the need for more effective approaches to STEM education among students who are diverse in their culture, language, or learning abilities and preferences
- Addressing the need for students that do not traditionally select STEM careers to choose STEM as an area of study in high school and beyond
- Enhancing the infrastructure for research and education through partnerships within and across disciplines and sectors

Project highlights:

90% of Fellows are African American

64% of Fellows are female

100% of Fellows are teaching science and engineering in public and charter schools

100% of Fellows have leadership roles in their schools

81% of Fellows serve as peer coaches

100% of Fellows are members of professional science and teaching organizations

Publications:

- Wendt, J. L., & Barlev, M. (2019). Communicating through science: Disciplinary literacy. Virginia Association of Science Teachers (VAST).
- Duguay, A., Renn, J., & Wendt, J.L. (2018). Promoting language and literacy in the science classroom: Pre service collaboration. Association of Science Teacher Educators (ASTE).
- Duguay, A., & Wendt, J. L., Willis, W., & Jackson, Q. (2017). Communicating through science: Disciplinary literacy.. Virginia Association of Science Teachers (VAST) PD. Williamsburg VA.
- Renn, J., & Wendt, J. L., Wilson, M., & VanStory, J. (2017). (accepted). Building oral academic English in the science classroom.. Virginia Association of Science Teachers (VAST. Williamsburg VA.
- Wendt, J. L., & Huderson, B (2016). Science Teacher Candidate conceptual Understanding of the practice of Science: The influence of Metaconceptual Teaching activities. Virginia Educational Research Association. Willaimsburg VA.