2019 K12 Computing in Science Visioning Report

Integration of computation must **emphasize values native to the discipline in which computing is being integrated** and demonstrate a clear alignment with existing standards

Educational leaders need to **recognize that relevant computing content differs across the sciences**, ruling out a "one size fits all" notion of integrating computing in science.

Diversity, Equity and Inclusion must be built into all efforts to integrate computation with science education.

K-12 teachers need **sustained professional development and support** to learn and teach science while leveraging computing.

Research is needed to understand and assess computational integration. There are **relatively few theories of how computation impacts science learning.** There are also **very few useful assessments** for charting progress.

https://www.aapt.org/Resources/upload/Computational_Thinking_Conference_Report_Final_200212.pdf

Advancing Interdisciplinary Integration of Computational Thinking in Science
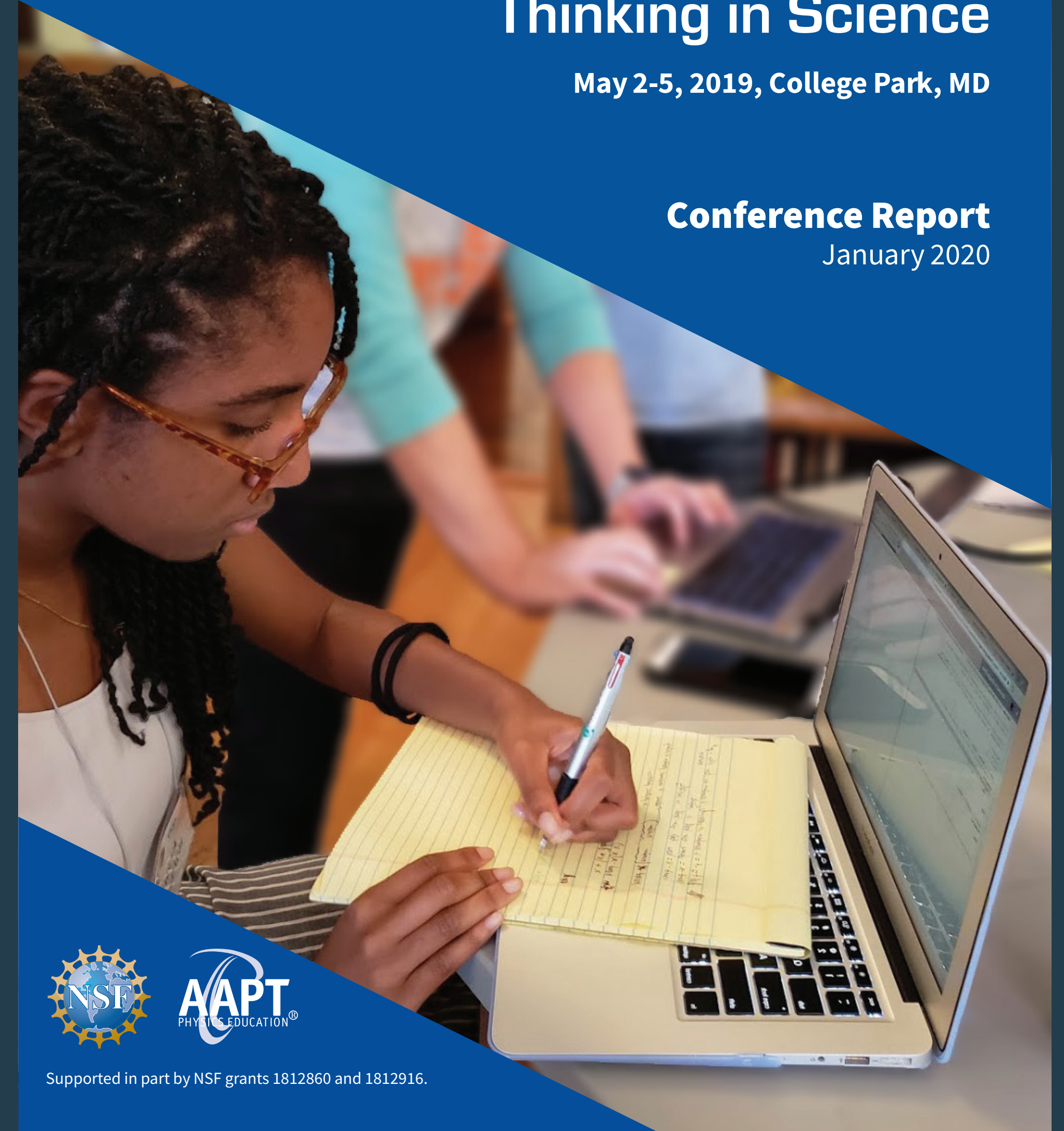
May 2-5, 2019, College Park, MD
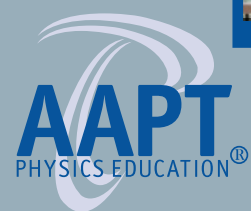
Conference Report
January 2020

2021 PICUP Virtual Capstone Report

2021 PICUP Virtual Capstone Conference Report

"Directions for the next decade"

- Better defined learning goals for computation in each course.

- Development and testing student assessments

- Developing and testing department-wide integration

- Expanding number and diversity of departments and faculty