



The Workforce and Education Alliance to Realize Equity in STEM and CTE (WE ARE STEM & CTE)

In September 2018, the National Science Foundation (NSF) issued new awards that represented the next major step for its NSF INCLUDES program -- the development of a national network to enhance U.S. leadership in science, technology, engineering and mathematics (STEM) by broadening participation in those disciplines. The NSF INCLUDES program recently sought a new cohort of applicants that can contribute to the NSF INCLUDES national network. In response to this call, the National Alliance for Partnerships in Equity Education Foundation (NAPEEF) organized a broad coalition of organizations from around the country to form the **WE ARE STEM & CTE** Collective Impact Network, which submitted a proposal to NSF in early April 2019.

WE ARE STEM & CTE (The Alliance) represents a Collective Impact Network of Career and Technical Education (CTE), STEM education, and workforce development stakeholders from government, education, and community-based organizations from across the nation supported by a backbone organization, NAPE. Drawing on the experience of the NSF INCLUDES DDLP: IM STEM grant, the Alliance will drive systems change by influencing education policy, practices, and resources that positively impact the critical junctures in the STEM education pathway—middle school, high school STEM and CTE course completion, and entrance to STEM majors—where significant challenges for women, underrepresented students of color, and persons with disabilities create barriers to their participation, retention, achievement, and transition. The lack of participation of women and girls, students of color, and students with disabilities in STEM education in the formal education system creates a limited pool of potential employees that leads to the lack of diversity we now see in the STEM workforce.

The Alliance's core strategies¹ will include the following:

- Build a common agenda: based on shared vision, mission, and organization capacity.
- Support shared measurement: identify common metrics to measure and report on progress, collect data, and use data in an online data dashboard to monitor progress toward stated objectives.
- Implement mutually reinforcing activities: coordinate workgroup creation and strategy implementation, identify assets and resources to support the Network, and identify effective practices to scale.
- Facilitate continuous communication: use technology to commit to frequent, structured communication to build trust, assure mutual objectives, and create common motivation.
- Provide backbone support: NAPE will provide backbone support to guide vision and strategy, support aligned activities, establish shared measurement practices, cultivate engagement and ownership, and advance policy and mobilize resources.

In addition to NAPE serving as the backbone organization, the Alliance infrastructure includes four co-PIs serving as Regional Hubs distributed across the country – Utah STEM Action Center, Iowa Governors STEM Advisory Council, Tennessee Board of Regents, and West Virginia University. Each of the Regional Hubs will have a full-time staff member supporting the Alliance Network members in the region. A Steering Committee of 20 organizations from 17 states across the nation, 8 who are NSF INCLUDES DDLP

¹ Juster, 2017 Jennifer Juster, FSG. Backbone Organizations in Collective Impact. Retrieved from https://www.napequity.org/nape-content/uploads/NSF_backbone-memo_FINAL_03-02-17_kjf.pdf.

grantees, will provide strategic leadership to grow the Network. They will lead workgroups working on strategies in response to the Grand Challenges to broadening participation in STEM identified by the Network. A Council of Alliances, representing the leading national collective impact organizations, such as 100kin10, the Collective Impact Forum, and StriveTogether, will serve as a brain trust of expertise to help solve Alliance problems and to provide advice as the Alliance grows.

The goal of increasing diversity, equity, and inclusion in STEM undergirds all of the objectives of the 2019-2023 Federal STEM education strategic plan, “Charting A Course for Success: America’s Strategy for STEM Education”². The Alliance’s proposal is purposefully aligned with and advances the goals and objectives of the Federal STEM strategic plan. Consistent with the objectives of this strategic plan, by bringing the STEM and CTE community together in a collective impact alliance, **WE ARE STEM & CTE** will foster a STEM ecosystem with the capacity to inform and empower educational stakeholders to create the needed systems change that will ensure the participation of underrepresented students.

² United States. National Science & Technology Council, Committee on STEM Education. (2018). *Charting A Course for Success: America’s Strategy for STEM Education*. Retrieved from <https://www.whitehouse.gov/wp-content/uploads/2018/12/STEM-Education-Strategic-Plan-2018.pdf>