Proposal Title: Convergence Accelerator Phase I: Empowering a digital technology workforce through alignment and coordination of upskilling and reskilling opportunities
Institution: Business-Higher Education Forum
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The NSF Convergence Accelerator supports team-based, multidisciplinary efforts that address challenges of national importance and show potential for deliverables in the near future.

The broader impact/ potential benefit of this Convergence Accelerator Phase I project is to increase the number of affordable digital technology (DT) pathways for upskilling/reskilling so American workers can improve their careers and American companies have access to a highly skilled, diverse talent pool. This work will examine how three organizations ― the Business-Higher Education Forum, the Greater Washington Partnership, and the Business Roundtable ― can bring together two dozen employers and higher education institutions in the Washington, D.C., Maryland, and Virginia region to develop a partnership model which will deliver new DT upskilling/reskilling pathways at scale. These pathways will be focused on increasing the skills of American workers in the areas of cybersecurity, cloud computing, networking/IT, and artificial intelligence/machine learning in order to the meet the demands of employers. Given the rapid pace at which technology changes, there is tremendous need for a model that brings together education and workforce stakeholders to develop new DT upskilling/reskilling pathways rapidly and at scale.

This Convergence Accelerator Phase I project will address how intermediary organizations can accelerate the speed and impact of upskilling/reskilling efforts in DT by aligning and coordinating companies, higher education institutions, third-party education/training providers, and STEM professionals. The majority of studies done to date in this field are narrowly focused on intermediaries working between education policymakers and implementation partners, or between employees and employers. DT upskilling/reskilling for STEM professionals requires collaboration between a broader group of education and workforce stakeholders, which can be coordinated through trusted intermediaries. This research will examine the intermediaries? effect on: addressing gaps and opportunities; conducting relevant research in order to provide recommendations on how to address these gaps and opportunities; communicating with all stakeholders to create a common framework for action; supporting aligned efforts and mobilizing resources; establishing shared metrics and identifying success; and disseminating the results of the collaboration on DT upskilling/reskilling efforts. The proposed effort will result in a replicable model for collaborations to support DT upskilling/reskilling rapidly and at scale.

This award reflects NSF's statutory mission and has been deemed worthy of support through evaluation using the Foundation's intellectual merit and broader impacts review criteria.