**STEMx Brief for Office of Science and Technology Policy**

Overview:

STEMx is a membership organization with representation from 21 states. STEMx focuses on state and national policy, STEM advocacy and partnerships. We believe in the strength of a network configuration, allowing us to gather information on those issues that impact students, teachers and policy makers vested in STEM education. The network also allows us to tap into high quality talent from across the country to provide valuable insight into those topics that drive STEM education and shape STEM education policy.

In terms of strategic planning, the membership of STEMx views the following topics as critical to ensure our nation has the necessary resources to support future workforce development and our nation’s security.

* **STEMx would propose a revamping of Career Technical Education to better meet the needs of today’s career fields** with educational partners fully engaging employers to ensure alignment, funding based on outcomes, and incentivizing those fields that will enhance our nations technological capabilities in national security and workforce development. Although the work of the Administration’s Task Force on Apprenticeship Expansion should help inform recommendations, federal programs should be aligned to maximize engagement for employers & employees.

* **STEM Policy: STEMx believes both state and national policy should be derived from the ground up, focused on removing barriers to progression through the K-12 system of education**. These policies include, but are not limited to, project -based instruction, mastery and credit flexibility. Credit flexibility can be defined as any alternative coursework, assessment or performance that demonstrates proficiency. Many states used credit flexibility to increase student’s interest in learning more & using competency-based systems that can help to create multiple pathways to graduation. Outdated public policy needs to be reconsidered under the lens of capability, not mandated time restrictions.
* **STEM Degrees: It is well-documented that our nations’ future is directly tied to our ability to produce the talent necessary to support high tech growth industries such as cyber security and defense.** STEMx believes that talent development in the STEM fields needs to be purposefully designed, creating a pipeline to two-year and four-year degrees, stackable, technical or micro-certifications that can meet a plethora of employers’ needs through an aligned K-16 system of education. STEMx believes there is a critical need to focus our attention on underserved and underrepresented student populations and sees this as an untapped resource to unlock talent that has previously not participated at a level to ensure equity and access for all.
* **STEM Programming: STEMx believes that high quality STEM programming needs to be available to all students, with an intentional focus on urban and rural areas, ensuring all students can participate in next generation learning.** Government resources should be used as incentives to drive programming to students who are currently be left behind in the technology revolution. STEMx also supports the current proliferation of computer science and coding in the K-12 system to ensure students have the skill necessary to participate in today’s economy.

Battelle, the managers of STEMx, has been at the forefront of STEM education for over ten years. Our experience has taught us that STEM education is a national challenge that requires a national solution. We welcome the opportunity to have a seat at the table to engage in this critical discussion.