



## Achieving STEMM Equity & Excellence in the Tech Industry

Hosted by Snap Inc.

May 23, 2023 | 10:00 am - 3:00 pm

### Workshop Summary and Readout

The STEMM Opportunity Alliance (SOA) and our host, Snap Inc., hosted a convening on advancing equity and excellence in the U.S. STEMM ecosystem, and the role of the tech industry in making progress. The convening brought together practitioners from across the country to engage in groundbreaking discussions, hear from trailblazers in the tech sector, identify gaps in support in the field, and explore unique ways to attain meaningful and sustainable change. The event also featured facilitated breakout sessions, in which participants engaged with and helped to co-construct a draft national strategy for achieving STEMM equity and excellence.

#### *Plenary Session:*

Participants heard from leaders in the tech sector who have made considerable contributions to advancing the issue of diversity and equity in STEMM, as well as from a representative of the White House Office of Science and Technology Policy (OSTP). This session also featured a panel discussion which underlined the urgency of seeking equity in STEMM fields and issued a call to action for tech organizations to work in tandem to advance equity.

#### Welcome and Opening Remarks

- *Oona King, Vice President of Diversity, Equity, and Inclusion, Snap Inc.:* In her remarks, King reiterated the importance of this once in a generation opportunity to make seismic changes in STEMM. She highlighted Snap Inc.'s recent \$10 million investment in the training of 1,000 teachers at Georgia State University, serving primarily Black students, and California State Dominguez Hills, serving primarily Latinx individuals. She closed her remarks with a call to action that reflected the critical need for universal alignment across tech fields to boost the odds of successful progress.
- *Sudip Parikh, CEO, American Association for the Advancement of Science (AAAS):* Dr. Parikh spoke to the long history of AAAS, noting the organization's vision of a world in which the scientific community is reflective of the broad diversity in the U.S. and a world in which all children will feel welcomed and nurtured by the STEMM community. He

described the promise and potential for SOA and the efforts of these cross-sector partners working together to act as the vehicle for helping achieve this vision.

- *Sam Gill, President, Doris Duke Foundation:* Gill’s remarks emphasized the need for radical innovation to solve the issues of today. He reflected on the life and philanthropic accomplishments of Doris Duke and noted how her commitment to advancing social causes that were at the time taboo can serve as a lesson for all interested in advancing STEMM equity and inclusion today. He stated that to advance the mission of SOA, partners will need to be bold in their action and unwavering in their commitment to the cause. Gill also recognized several new partners who will join SOA and its 100+ existing partners.

#### Keynote Address

*Kei Koizumi, Principal Deputy Director for Policy, White House Office of Science and Technology Policy (OSTP):* Koizumi outlined OSTP’s national vision for transforming the American STEMM ecosystem, highlighting SOA’s launch at the White House STEMM Equity and Excellence Summit as a key step in pursuing this vision. He emphasized that equity and excellence in STEMM are critical precursors to America maintaining global competitiveness and meeting impending challenges, such as the climate crisis. Koizumi underscored the Biden-Harris administration’s commitment to this goal, telling participants “STEMM equity is a guiding light for this administration’s approach to the U.S. science enterprise.”

#### Panel on Equity in Technology

King moderated a panel on equity in the technology ecosystem, focusing on the greatest challenges and opportunities anticipated in efforts to advance equity in STEMM fields. Panelists included the following:

- *Dr. Shirley Malcom, Senior Advisor to the CEO and Director of SEA Change, AAAS:* Dr. Malcom highlighted diversity, equity, and inclusion as the nation’s competitive edge, explaining that these characteristics set the U.S. apart from every other country across the globe. She also described the need for alignment and systemic change across the entire STEMM pathway, from early childhood education all the way through careers.
- *Dawn Jones, Chief Diversity and Inclusion Officer, Intel:* As part of her comments, Jones spoke of the biggest challenge she sees for corporations when it comes to advancing STEMM equity and excellence: access to talent. She noted tech companies can think creatively about how to get their talent pipeline “directly from high school into [the] company.”

- *Ruthe Farmer, Founder and CEO, Last Mile Education Fund:* Farmer described challenges in the STEMM talent pipeline, noting that while more underrepresented students are entering STEMM education pathways, they aren't necessarily making it "out" into long-term STEMM careers. She pointed out the importance of ensuring STEMM students have support outside of the classroom, including for basic needs such as access to food banks.
- *Shijuade Kadree, Director, Technology Accountability Coalition:* Kadree emphasized the incredible socio-political power, resources, and human capital that tech companies in the U.S. possess, underlining that these characteristics make them ripe for effective change and progress towards STEMM equity and excellence. The first step, as Kadree explained it, is bringing these powerful tech companies together in a coalition and asking, "what if we actually work on these issues together?"

### Moving an Industry

*Brenda Darden Wilkerson, President and CEO, AnitaB.org:* Wilkerson underscored the power of activating diversity, equity, and inclusion in tech companies, challenging participants to consider what it takes to move an industry forward. She shared that moving the tech industry forward poses a unique and difficult challenge because it requires "people change" – changing inequitable systems that are deeply rooted in human behavior. Wilkerson advocated for an emphasis on removing barriers to belonging for underrepresented groups in tech fields, noting that belonging is correlated with many positive outcomes such as job satisfaction, work life balance, and decreased feelings of burnout. Wilkerson posited, increasing belonging contributes to psychological safety, enabling STEMM professionals to take the risks necessary to bring about new innovations and progress.

### *Breakout Sessions*

In breakout sessions, participants gathered to discuss SOA's draft national strategy framework for how to achieve equity in STEMM by 2050. This draft framework spurred discussions about the role of the tech sphere in advancing equity and excellence and about the potential obstacles that may hinder the industry and the nation's progress in this regard. Key themes and relevant ideas from each breakout session are included below.

#### Breakout Session 1: Teacher Preparation and Diversification

Discussions for this group centered around how to best recruit, train, and prepare STEMM teachers. Using the teacher shortage crisis as an anchor, participants worked together to envision a teacher workforce that is reflective of the diversity that exists within the American populace and provides culturally relevant, rigorous training to eager minds.

*Key Goals:*

- In the future, the hope should be that industry partners will work with local actors and organizations to provide resources that will enable more robust training programs for teachers and reduce cost barriers that hinder individuals from entering the field (i.e. teaching credentials, college admissions requirements, testing requirements, etc.).
- By 2050, computer science should be viewed as an essential skill on par with reading and writing. Students must be exposed to computer science learning at early ages by teachers who have undergone rigorous training.
- An increase in the prestige associated with being a teacher is essential to reducing the teacher shortage. Teachers should be paid handsomely for their work, and they should be viewed as specialized professionals delivering essential skills.

*Barriers to Success:*

- The current system in place to educate, train, and prepare teachers is not inclusive of groups from differing socioeconomic, racial, and ethnic backgrounds or of those with disabilities. In order to produce different outcomes, a shift is needed to ensure that all individuals feel valued and nurtured.
- Educators are not widely viewed as specialized professionals and this is reflected in their training and pay. So long as this view persists, there remains a risk that individuals will be discouraged from pursuing education as a career and teacher shortages will continue to threaten the quality of education throughout the country.
- Teachers do not currently have the resources and space needed to engage students in authentic STEMM learning. For it to be productive, this learning must be synergistic inside and outside of classrooms. Funding remains an obstacle to achieving this goal which must be addressed to facilitate success.

Breakout Session 2: Industry and Workforce

This session explored the role of industry and the workforce system in advancing STEMM equity and inclusion. Participants brainstormed unique ways to promote an inclusive culture in the workplace environment that not only intentionally recruits members of underrepresented and marginalized groups, but institutes programs that ensure their retention and long-term success.

*Key Goals:*

- A full systems review approach should be implemented to measure success and enable analyses to take place across structures within industry. Moreover, DEI must be viewed as a top priority within companies, and the employees doing the work to make these

spaces more inclusive must be recognized and appropriately compensated for their efforts.

- Firms should contribute to the relocation costs for new hires and interns joining their team. Given the obstacle that relocation fees may pose for marginalized groups, eliminating this barrier will provide additional access to those who may not otherwise take advantage of the opportunity presented to them.
- Comprehensive parental leave should be afforded to all parents. To achieve equity in the workforce and workplace, family planning and advancing one's career must not be viewed as being in conflict, but are rather complementary pathways that provide additional freedoms and that can increase employee satisfaction and retention.

*Barriers to Success:*

- Target groups are not always consulted when decisions are being made about how to best reach them. Without the input from these groups, opportunities arise for misunderstanding the dynamic needs of underrepresented communities and implementing programs that fail to achieve their goals.
- Depending on the state, DEI efforts are being undermined by policy developments. In states where DEI is not viewed as an asset but rather a hindrance to advancement, marginalized groups are at a significant disadvantage. Companies must maintain incentives to pursue DEI efforts in the face of these challenges.

Breakout Session 3: Data and Metrics

This conversation explored the need for improving data and metrics to better track and measure progress and to understand the success of efforts to advance equity and inclusion and STEMM. The conversation coalesced around the need for de-siloing within the tech industry and for using data in a meaningful way to tell the stories of marginalized individuals.

*Key Goals:*

- Data that is collected should be comprehensive and inclusive of the many identities that exist in the American populace. Moreover, this data must be used to tell stories that are reflective of the experiences of the communities the data describes and to provide insights into the nuances that shape outcomes.
- Relevant benchmarks must be set that enable individuals to assess the progress being made, identify shortcomings, and address them appropriately. Achieving STEMM equity cannot be viewed as an individual race to win, but rather a collaborative effort that, when secured, will advance outcomes for all.

*Barriers to Success:*

- Though tech companies produce reports that measure diversity efforts within their organizations, there is no widely agreed upon definition of diversity, equity, or inclusion that permeates throughout the industry. Moreover, there is no consensus on which groups are considered marginalized. This makes it difficult to effectively analyze the field and identify where gaps exist.
- The fullness of identity is not currently reflected in most of the collection of data. Multiracial, intersectional, and other identities that are usually erased or collapsed into other categorizations must be reflected in data to paint a complete picture of the unique experiences of individuals and what needs must be met to ensure their success in STEMM.
- Though significant data is being produced, the lack of a centralized hub where it can be housed hinders efforts to aggregate and disseminate it. Without aggregated data, synthesis of the field will remain fragmented.
- Education has shifted significantly in recent years, such as the significant rise in remote learning that has accelerated as a result of the COVID19 pandemic. When planning for an equitable ecosystem in 2050, stakeholders must consider the potential that the education model may continue to shift in major ways, disrupting the traditional STEMM pathways and opportunities. Innovation is needed to ensure that students are met where they are most comfortable learning and nurtured in that setting.