

ALI Task Force Brief:

ROLE OF HBCUs, MSIs & TCUs IN EDUCATION R&D



The need to strengthen America’s competitiveness in the world, the quickly changing demands of modern society and economy, and the COVID-19 pandemic’s disruption of traditional learning and exacerbation of existing educational inequities have all placed a spotlight on the importance of supporting all learners and educators across all contexts. To make real progress, we must buttress our current education improvement efforts with a larger and stronger education research and development (R&D) ecosystem that grows the evidence base of what works, for whom, and under what conditions. And we need an ecosystem capable of spurring innovations in educational practices and tools that can immediately impact learner outcomes and are accessible to practitioners working in the varied contexts of our nation’s K-12 education system.

Relatively little money is spent on education R&D when compared with other sectors in the American economy¹, meaning innovative and promising practices in teaching, learning, and technology often go underdeveloped, remain untested, and, even when proven effective, lack sustainability and scale. We must increase the federal investment in education R&D; however, doing so alone is insufficient—more funds must be coupled with key changes to policy and practice at every level. An appropriately-sized, inclusive, and equity-centered education R&D infrastructure at the federal, state, and local levels would help address the longstanding challenges we too often experience today and help the education sector function more like a [learning system](#). Such an approach would help provide all learners with educational experiences that promote economic mobility and support communities, families, educators, and learners with the knowledge and skills to meet the challenges of today and unlock opportunities for tomorrow.

What is ALI?

The [Alliance for Learning Innovation](#) (ALI) brings together education nonprofits, philanthropy, and the private sector, to advocate for building a better research and development (R&D) infrastructure in education. ALI advocates for increased capacity of education R&D and supports the research and development of evidence-based innovation in education that centers students and practitioners, advances equity, improves talent pathways, and expands the workforce needed in a globally competitive world.

¹ For example, the Fiscal Year 2023 budget of the Institute of Education Sciences, the U.S. Department of Education’s research arm, was \$807 million. By comparison, the U.S. Department of Agriculture spends over \$3 billion annually on research related to food and agriculture.

ALI has been advocating for increased federal investment, effectiveness, and coherence in education R&D, and is committed to advancing several other aspects of a robust education R&D ecosystem. To better understand the current state of affairs and chart a path forward, ALI convened three diverse **task forces** during 2023 to dig into three critical, urgent priorities:

- expanding and strengthening the role in education R&D of Historically Black Colleges and Universities (HBCUs)², Minority-Serving Institutions (MSIs)³, and Tribal Colleges and Universities (TCUs)⁴,
- making the education R&D ecosystem more inclusive, and
- strengthening state and local education R&D infrastructure.

This brief summarizes the work of the **HBCUs, MSIs & TCUs Task Force**. [Click here](#) for the parallel briefs on the **Inclusive Education R&D Task Force** and the **State and Local Education R&D Infrastructure Task Force**. The Appendix in this brief summarizes the work of this Task Force and acknowledges the contributions of its members.

Summary of Task Force Recommendations

1. Build and Extend Grant Writing and Management Capacity to Secure and Implement Education R&D Grants.
2. Make the Invisible Visible.
3. Prioritize and Incentivize HBCU/MSI/TCU Engagement.
4. Ensure Representation Among Peer Reviewers.
5. Develop Programs to Grow Scholarship and Expertise.
6. Leverage Networks and Shared Services.

² HBCUs are defined in Title III of the Higher Education Act of 1965 as a school of higher learning that was accredited and established before 1964, and whose principal mission was the education of African Americans.

³ MSIs are institutions of higher education that serve high concentrations of minority students who, historically, have been underrepresented in higher education.

⁴ TCUs are a category of minority-serving institutions defined in the Higher Education Act of 1965 that qualify for funding under the Tribally Controlled Colleges and Universities Assistance Act of 1978 (25 U.S.C. 1801 et seq.) or the Navajo Community College Act (25 U.S.C. 640a note); or is cited in section 532 of the Equity in Educational Land-Grant Status Act of 1994 (7 U.S.C. 301 note).

The Importance of Historically Black Colleges and Universities (HBCUs), Minority-Serving Institutions (MSIs), and Tribal Colleges and Universities (TCUs) in Education R&D

Who decides what is studied, where, and how determines so much in education R&D. Yet these decisions are made too often within the context of racial and ethnic disparities and biases. The National Academies of Science, Engineering & Medicine's 2022 report, [The Future of Education Research at IES: Towards an Equity-Oriented Science](#), reported that "the percentage of applications received from MSIs... between 2013 and 2020 was very small—4 percent of applications to the National Center for Education Research (NCER) and 1 percent to the National Center for Special Education Research and none of NCER's awards was made to an MSI." Similarly, although 13% of the U.S. population is Black, Black researchers comprise just 6% of faculty positions in science, technology, engineering and mathematics (STEM). Meanwhile, a [2018 study](#) leveraging data from the National Center for Education Statistics found that Black and Hispanic students were underrepresented in education research, and that when they were included, they were often portrayed in a negative light. The study also found that research on education often failed to take into account the unique experiences of Black and Hispanic students. **For education R&D to be more effective overall and more responsive in particular to the needs of our most disadvantaged learners, educators, and communities, we must expand education R&D funding to a wider array of institutions and individuals; grow and sustain a more diverse pipeline of R&D professionals; and better incorporate a broader range of communities' assets, needs, expertise, and perspectives.**

To make progress on these goals, ALI focused one of its task forces on expanding and strengthening the role in education R&D of HBCUs, MSIs, and TCUs. According to a 2019 report by the Thurgood Marshall College Fund, HBCUs received just 3% of federal research funding for education in 2017, even though they enroll 10% of all Black students in the United States. MSIs received just 5% of federal research funding for education in 2017, even though they enroll 22% of all minority students in the United States. Meanwhile, these institutions educate a significant portion of the nation's diverse talent pool. In 2019, HBCUs awarded 22% of all bachelor's degrees earned by Black students in the United States despite the fact that HBCUs only make up 3% of all colleges and universities in the country. Similarly, in 2019, MSIs—representing 12% of all institutions of higher education (IHEs)—awarded 32% of all bachelor's degrees earned by Hispanic students, 28% of all bachelor's degrees earned by Black students, and 52% of all bachelor's degrees earned by Native American students.

In sum, although accomplishing our overarching goals for education depends in part on making all aspects of the education R&D ecosystem more inclusive, we must also intentionally focus on institutions that provide some of our most promising pathways to progress: HBCUs, MSIs, and TCUs. This ALI task force convened to better understand the barriers to realizing these IHEs' full potential and to identify high-impact strategies to remove and/or overcome them.

HBCUs at a Glance

Like MSIs and TCUs, HBCUs are a critical pipeline for developing a diverse R&D workforce and an engine for social mobility. According to a 2022 UNCF report, for example, “HBCUs serve more economically disenfranchised students than most U.S. institutions, and they do so successfully, facilitating the upward mobility of the majority of their students.”

<p>100+ Historically Black Colleges and Universities across the nation</p>	<p>Top 10 Institutions where African Americans science and engineering PhDs earned their bachelor's degree are HBCUs.</p>
<p>70% African American dentists graduate from HBCUs</p>	<p>55% More likely to strongly agree that their university prepared them well for life outside of college than Non-HBCU African American grads at 29%</p>
<p>50%+ African American professionals graduate from HBCUs</p>	<p>50%+ African American public school teachers graduate from HBCUs</p>
<p>50% African Americans who graduate from HBCUs go on to graduate or professional schools</p>	<p>39% More likely to strongly agree to be engaged at work than non-HBCU African American grads at 33%</p>
<p>24% Of Bachelor degrees in STEM fields received by black students from HBCUs</p>	<p>More likely to be thriving in purpose and financial well-being than Non-HBCU African American grads</p>

from UNCF; <https://uncf.org/the-latest/outreach-toolkit-about-hbcus>

HBCUs, MSI, and TCUs include a wide array of institutional types and sizes that can contribute to education R&D in different ways. For example, many smaller-sized, bachelor-degree-granting, liberal-arts-focused HBCUs, MSIs, and TCUs are also strong contributors to R&D through their faculty and undergraduate research and internship programs.

Insights from the Task Force

The Task Force explored members' individual and shared **visions** for an expanded and strengthened role in education R&D for HBCUs, MSIs, and TCUs. It identified and unpacked the **gaps** between that vision and the status quo, and then explored various **barriers** that make it hard to fill those gaps and ultimately manifest the vision. The Task Force's **recommendations** emerged from these rich discussions and expertise. Insights from that work are captured below to provide some context for the Task Force's recommendations.



- Any work to expand and strengthen the role for HBCUs, MSIs, and TCUs in R&D must begin with acknowledging the **historical and ongoing limitations of funding, opportunities, and other resources** that hinder these institutions' ability to support students and live out their missions to their fullest potential, including with respect to conducting education R&D. Throughout U.S. history, public policy has funded and supported the growth of the higher education system in an inequitable way, benefiting non-HBCU/MSI/TCU colleges and universities while [under-resourcing](#) these institutions. Smaller private endowments—due to a number of factors—exacerbate the situation. There is a direct line from this history to these institutions' current R&D capacity.
 - A current manifestation of a structural deficit is that **HBCUs, MSIs, and TCUs frequently serve in the subordinate relationship** for federal funding opportunities. This restricts these institutions' overhead share of grants to a percentage of around 15% with a maximum of 22%, while the prime grantees can charge overhead up to 40%. R1 universities commonly use this more generous overhead to build internal capacity for the robust R&D infrastructure that maintains their role as prime grantee.
- There are **important efforts underway** that are making progress on the very topic the Task Force is considering, including several [recent investments](#) and [initiatives](#) by the federal government. The recommendations should build upon this progress: some should be sustained; others might be replicated to have a wider impact on more HBCUs, MSIs, and TCUs.
- Given these institutions' particular commitment to teaching and their relatively lean budgets, there is an open question about the possible (and preferable) **balance between HBCU/MSI/TCU faculty's teaching duties and the time necessary to secure and implement grant-funded R&D projects**.
- There is an ever-present tension between these institutions and major research universities (or "[R1s](#)"), which often offer research fellowships to HBCU/MSI/TCU graduate students but then **siphon off these emerging stars** with higher-paying offers and unique funding opportunities that under-resourced institutions often cannot match.
- One factor making it harder for these institutions (and other underrepresented or new entities) to access more R&D funding is the **coded language and practice** embedded throughout grant competitions—the invisible or hard-to-see rules, tips, and pathways that can benefit more traditional applicants who speak the language and who can see the invisible.
- The Task Force members grappled with the tension between identifying ways to help these institutions have more success **within the existing R&D system versus prioritizing opportunities to dismantle existing structural inequities** to build a fairer, more inclusive system.

HBCUs, MSIs & TCUs TASK FORCE RECOMMENDATIONS

The goal of the Task Force was to articulate recommendations that would help expand and strengthen the role in education R&D of HBCUs, MSIs, and TCUs. The embedded hyperlinks throughout highlight some of the bright spots Task Force members identified in the field. See the Appendix for more information about the Task Force including its roster of members.

1. Build and Extend Grant Writing and Management Capacity to Secure and Implement Education R&D Grants.

Funders can actively address the unique obstacles and challenges compounded by persistent, systemic [underinvestment](#) that can constrain the ability of HBCUs, MSIs, and TCUs to secure and lead education R&D projects successfully. Some recent efforts are focused on this, such as the National Science Foundation's [Growing Research Access for Nationally Transformative Equity and Diversity](#) (GRANTED) initiative, but more must be done. Suggestions include:

- a. Fund a community of practice for HBCU/MSI/TCU grant writers to provide technical assistance and ongoing connectivity to support their professional growth and capacity development modeled after the [Greenlights Grant Initiative](#) or the [Community Funding Accelerator](#).
- b. Provide access to funding during the start-up and/or grant application process for grant writing and management support (with a preference for diverse providers with a mix of basic and applied research expertise). This is equivalent to a pre-seed accelerator in education technology such as Morgan Stanley's [Inclusive Ventures Fund](#).
- c. Convene a private or federally-funded coalition or community of practice with HBCUs, MSIs, and TCUs to provide mutual support and expanded resources to help build internal grant management capacity and achieve greater access to education R&D funding.
- d. When developing research funding opportunities, explicitly provide funds for full-time grant managers so that such requests are not seen as a deficit within the application.

2. Make the Invisible Visible.

HBCUs, MSIs, and TCUs (and other underrepresented R&D applicants) will benefit from a systematic and dedicated effort to demystify and expand access to the R&D funding process that is often hidden or inaccessible. Our taskforce named this consistently as "coded language and practice."

Suggestions include:

- Simplify and clarify the processes and remove exclusionary jargon from grant applications and requirements. This includes consistently defining MSI and MSI eligibility in RFAs and publishing the "success" rate for applications, including resubmissions, by institution and Principal Investigator (PI).

- Develop a way to quantify and calculate the full cost of successfully applying for federal R&D funding. This includes accounting for the necessary R&D staff capacity (e.g., time and effort, potentially releasing faculty from some teaching duties) and infrastructure capacity (e.g., developing the proposal, managing the budget, and preparing reports) to help institutions plan and weigh the potential return on investment.
- Expand access to past successful grant applications to highlight hidden success factors and serve as models for new and underrepresented R&D applicants to consult.
- Offer targeted technical assistance support (not just general sessions) to answer questions, and clarify expectations during the application process, especially for new or underrepresented grantees.

3. Prioritize and Incentivize HBCU/MSI/TCU Engagement.

Funders should prioritize and/or make explicit expectations for grant proposals to formally engage with HBCUs, MSIs, and TCUs as part of the project. Specifically, this could look like multiple strategies across a continuum, such as:

- a. Launch new or expand existing (e.g. [NSF's HBCU-EIR program](#)) grant programs designed to support education R&D at HBCUs, MSIs, and TCUs.
- b. Prioritize grant proposals that HBCUs, MSIs, and TCUs generate.
- c. Give priority to grant proposals that include authentic partnerships with HBCUs, MSIs, and TCUs.
- d. Launch a federal education research institute at an HBCU, MSI, or TCU, building on the recent success of the first-of-its-kind [Department of Defense research center at Howard University](#).
- e. Design federal laboratory competitions such as the Institute of Education Sciences (IES) Regional Educational Laboratory (REL) Program, to prioritize proposals subcontracting with HBCUs, MSIs, and TCUs.

4. Ensure Representation Among Peer Reviewers.

Peer reviewers are a key factor in determining which proposals are accepted. To ensure that the needs and unique contexts of HBCUs, MSIs, and TCUs are accurately understood and considered during the review process, there must be adequate representation among peer reviewers (in addition to complementary efforts to [address reviewer bias](#)). Strategies to increase representation among peer reviewers include:

- a. Ensure that reviewers are adequately paid and trained.
- b. Recruit expert reviewers from HBCUs, MSIs, and TCUs; networks of these institutions, such as through the UNCF and the Thurgood Marshall College Fund; community colleges; or other relevant private, non-profit organizations beyond the more traditional institutions, including proactively recruiting diverse reviewers in addition to accepting nominations.
- c. Adopt a standard definition or provide guidance for peer reviewers of what constitutes a “conflict of interest” with a clear distinction between what might be a “conflict” and what is “subject matter expertise” or “experience with MSI communities” to avoid unnecessarily limiting the potential pool of potential diverse reviewers.

5. Develop Programs to Grow Scholarship and Expertise.

The field must continue to foster connections and networks among HBCU/MSI/TCU faculty, researchers, and graduate students to expand the potential for engagement and leadership in education R&D. Specifically:

- a. Make planning grants available for HBCU/MSI/TCU researchers to work with R1 researchers or researchers with high success rates in winning R&D grant competitions on a prospective grant, including strengthening pathways to position the HBCU/MSI/TCU researcher to be able to sit in the position as prime on the applications. For example, [this NSF planning grant opportunity](#) supports potential applicants to its Emerging Frontiers in Research and Innovation (EFRI) program.
- b. Provide opportunities for HBCU/MSI/TCU researchers to connect with and stay abreast of the latest R&D developments through collaborations with each other and R1 institutions, site visits to applied R&D sites and R1s, fellowships throughout the public and private sector, etc. Build upon emerging partnerships such as the [New Educational and Research Alliance](#) (newERA) led by Binghamton University.
- c. Create multi-year, cohort-based scholar programs designed to engage cohorts of HBCU/MSI/TCU faculty and staff in a professional learning community to build networks for faculty to network, build multi-institution teams, and drive collaborative scholarship.
- d. Allow grant funds to fund postdoctoral fellows at HBCUs, MSIs, and TCUs.
- e. Create a U.S. Department of Education (USED) visiting fellowship program that embeds HBCU/MSI/TCU faculty and staff researchers within high-level offices throughout USED and IES.
- f. Foster mentorships by pairing researchers with high success rates in winning R&D grant competitions with HBCU/MSI/TCU researchers with less experience (e.g., a philanthropy-created fellowship to serve as mentors).
- g. Create public-private partnerships as pathways from HBCU/MSI/TCU programs to internships in high-wage jobs related to the R&D ecosystem, such as data science, artificial intelligence, computing, and bio-engineering, building upon recent partnerships such as [Google and UNCF's investment in building HBCU innovation infrastructure](#).

6. Leverage Networks and Shared Services.

As HBCUs, MSIs, and TCUs grow their capacity and representation within the education R&D space, it is critical that these institutions can effectively leverage networks and relationships with other organizations that can help fill gaps in infrastructure and expertise. Suggestions include:

- a. Allow PIs from HBCUs, MSIs, and TCUs to leverage and utilize institutional infrastructure from other institutions (e.g., finance, human resources, administration, programming, Institutional Review Board (IRB)), possibly even allowing post-award IRB and IUCAC (Institutional Animal Care and Use Committee) negotiations.
- b. Create consortia of HBCUs, MSIs, and TCUs, allowing for shared capacity for communications, project management, IRB support, etc. (e.g., "Shared Services Cooperative/Collective," operated by trusted intermediaries as a repository for business development, strategic contracting, and grants management services).
- c. Fund a centralized resource center to help HBCUs, MSIs, and TCUs apply for research grants.

Considerations About Task Force Recommendations

While considering the Task Force's recommendations, it is important to keep in mind that as a set of recommendations across the three task forces, they are...

Interconnected: Although some recommendations can stand independently, they should also be considered in relation to each other. Some recommendations go together with others from within the same Task Force, while others should be considered alongside recommendations from the other two Task Forces. (For example, any effort to create a more inclusive education R&D ecosystem must include an expanded and strengthened role for HBCUs, MSIs, and TCUs. There is one recommendation, *Make the Invisible Visible*, common to both of those Task Forces' briefs.



Varied: The recommendations come in different shapes and grain sizes. Some are specific and feasible to accomplish in the near- or mid-term, while others are bigger-picture and will require sustained action over the long term. Also, some are new policies, practices, systems, and structures that we need to build *anew*, while others represent efforts to build *upon* some of the many existing bright spots. Building anew can address gaps in the ecosystem or respond to new developments such as generative artificial intelligence. Building upon can replicate and/or adapt promising approaches to support more practitioners and communities.



Broadly Applicable: The Task Force used a wide aperture to explore its topic to keep all relevant contexts in mind. Accordingly, some recommendations may not correspond with everyone's specific definitions of "R&D" or "funders."



- Task Force members included within discussions of "**R&D**" an array of approaches to building knowledge, from basic to applied research, from rapid-cycle prototyping of new tools to continuous improvement implementation of evidence-based interventions. Different R&D methodologies best serve different questions, needs, and contexts; the Task Force envisions state and local infrastructures that embrace a continuum of approaches and regularly employ the "best fit" for any particular challenge.
- Whenever a recommendation refers to "**funders**" of education R&D or state and local capacity, the Task Force means *all* potential funders, whether private (private sector and philanthropy) or public (federal, state, and local governments).

Incomplete: The Task Force generated a much larger number of ideas than the six recommendations listed above. This brief prioritizes those that resonated the most with Task Force members and are most ripe for action over the next three years. But to truly realize the Task Force's shared vision, even more policy, practice, and culture change will be needed.



Conclusion

Expanding and strengthening the role in education R&D of HBCUs, MSIs, and TCUs is a long-term project—as is building, strengthening, and sustaining the institutional and human capacity necessary to take full advantage of any new opportunities. But we can make important progress in the short- and medium-terms, with bright spots to build upon, promising “build anew” efforts to fill gaps in the status quo, and a growing consensus that investing in these institutions must be a central plank of any agenda to improve education outcomes for each student.

For the Task Force’s recommendations to make a difference, we must answer the all-important “So what? Now what?” questions relevant to all collections of good ideas. ALI will organize its coalition around some recommendations, while like-minded organizations will take others up. **Regardless of who leads implementation of each piece, this work will take high levels of collaboration, commitment, and creativity, especially because many of the recommendations will require leadership from multiple actors**, including but not limited to federal, state, and local government agencies, institutions of higher education, community-based organizations, researchers and developers, philanthropies, and of course educators. Readers interested in providing feedback on the ideas laid out in this brief, engaging in the work ahead, or sharing aligned work you are already engaged in, please consider the following actions:

- Share your R&D success story by visiting <http://tinyurl.com/ALI-Story>.
- Interested in learning more about ALI? Email sschapiro@fas.org.

Finally, ALI is so grateful to the incredible Task Force members who shared their time, expertise, wisdom, perspective, and ideas in this endeavor. So many talented and dedicated individuals and organizations are already doing incredible work in this area—we are excited to build upon and build anew together.

APPENDIX: Task Force Overview and Roster

Supported by [InnovateEDU](#) and [EducationCounsel](#), the HBCUs, MSIs & TCUs Task Force comprised a diverse cross-section of education leaders, including perspectives and expertise from across the education ecosystem. The Task Force included leaders from HBCUs, MSIs & TCUs; federal education R&D agencies; non-profit organizations; and other intermediaries, including the following:

Julie Ajinkya	HCM Strategists
Brenda Allen	Lincoln University
Jinann Bitar	The Education Trust
Nikki Edgecombe	Community College Research Center
Kelly Fitzsimmons	Project Evident
Rochelle Ford	Dillard University
Marybeth Gasman	Rutgers Center for Minority Serving Institutions
David Johns	National Black Justice Coalition
Erick Jones	University of Nevada, Reno
David Kirkland	Center for Research and the Transformation of Schools at NYU
Melisa Moritz	Federation of American Scientists
Jo Ann Paanio	National Council of Asian Pacific Americans (NCAPA)
Enrique Pumar	National Science Foundation
Ed Smith	EducationCounsel
Katina Stapleton	Institute of Education Sciences
Ivory Toldson	Howard University
Dietra Trent	White House Initiative on Advancing Educational Equity, Excellence, and Economic Opportunity through Historically Black Colleges and Universities

Over the course of four meetings and ten hours of review, the Task Force explored our individual and shared **visions** for an expanded and strengthened role in education R&D for HBCUs, MSIs, and TCUs. It identified and unpacked the **gaps** in the status quo, then explored various barriers that make it hard to fill them and ultimately manifest the vision. The Task Force then focused on sharing **existing solutions** and generating **new approaches** that could make significant progress, whether in the near- or long-term. Throughout, Task Force members shared **bright spots** that are already making progress. Task Force members' participation does not necessarily constitute an endorsement of the recommendations in this brief.

The Task Force work and engagement strongly confirmed the following two hypotheses formulated during the design phase of this project:

- **We converge more than we diverge.** Across all three Task Forces—and even the focus groups and workshops we conducted to test the recommendations—we found significant levels of consensus about the vision we are all working toward, the barriers to progress in the status quo, and the most promising steps we can collectively take to overcome those barriers and advance that shared vision. Where we found divergence, we found a mutual path forward or decided to table the question; regardless, there was widespread optimism that progress and even collective action were possible.
- **We will go further, faster if we go together.** The work of the Task Forces is one (critical) part of a larger transformation that ALI and Task Force members are all pursuing in their own ways across different corners of the education sector—the shift from a compliance orientation to a learning and improvement one. To make significant progress, we must collaborate within and across the public and private sectors; the R&D, data, and continuous improvement infrastructures; and the education system's federal, state, and local levels.

ALI, InnovateEDU, and EducationCounsel are incredibly grateful to each of the Task Force members for sharing their time, experience, wisdom, and ideas to inform this brief and recommendations.

