# Reimagining Multi-institutional Outreach Program Evaluation through the Cultural Wealth of Students of Color

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# Reimagining Multi-institutional Outreach Program Evaluation through the Cultural Wealth of Students of Color

#### **Abstract**

This paper introduces the case of transformative program evaluation that capitalized on the cultural assets of MSI (Minority-serving Institution) students of color in a multi-institutional collaboration grant. The evaluation team intentionally included several HBCU (Historically Black Colleges and Universities) undergraduate students over the two years of its summer camp program implementation and facilitated their critical reflections and professional development as emerging black professionals in engineering and education. As a result, HBCU undergraduate students played a pivotal role in leading the enrichment program and identifying and filling in the critical void unnoticed—and hard to address--by PWI (Predominantly White Institution) members. Faculty and other stakeholders of color also played a pivotal role in advocating and supporting the HBCU students and the voices of the rural and urban communities served by the enrichment program. This "inclusive and transformative program evaluation" research offers important insights into PWI-HBCU's institutional collaboration model that helps recognize and amplify the cultural assets of HBCU/MSI students in the dynamic workspace.

#### Introduction

Diversity is widely recognized as a pivotal factor for innovation and ground-breaking transformation in scientific research [1]. As a result, the National Science Foundation (NSF) and other federal funding agencies have long supported the creation of diverse research project teams to enact a significant change in scientific knowledge and positively impact society. Beyond the rhetoric of research productivity, facilitating diversity in engineering programs and professions would help raise individuals' ethical awareness and commitment to engineering ethics. Previous studies confirm that individuals from diverse life experiences and cultural backgrounds offer varied perspectives and help create a fertile ground for deeper reflections and perspective changes [2]. Students of color tend to be more aware of ethics and moral principles based on their lived experiences with social prejudices and inequity [3]. Therefore, they will likely develop a strong ethical stance that challenges the observed social injustice [4].

Despite the large number of federal grant programs that require the inclusion of a minority-serving institution (MSI) as one of the key collaborators in large, multi-institutional grant proposals, very few studies have examined the complex relationships between Predominantly White institutions (PWIs) and Minority Serving Institutions (MSIs) working for their shared goals of scientific research and other programmatic implementation. Furthermore, it is unknown how their collaboration space and related activities function as an affirming, supportive, and even transformative space for historically marginalized students of partnering MSIs, including Historically Black Colleges and Universities (HBCUs).

This paper illustrates a case of transformative program evaluation that capitalized on the cultural assets of MSI students of color in a multi-institutional collaboration grant. The team of PWI and HBCU faculty and staff members collaborated on a STEM outreach program to make

the two universities' STEM resources accessible to middle and high school students in traditionally excluded rural and urban communities.

#### **Theoretical Frameworks**

The STEM enrichment program evaluation was guided by *Inclusive and transformative* evaluation principles [5], which highlight "diversity, the inclusion of diverse groups, and the promotion of equity through intentional work against oppressive systems (p.34)" [6]. This evaluation model is grounded in theories highlighting cultural relevance as a pivotal element of evaluation. In this model, an evaluation must include marginalized groups, pay intentional and special attention to power differences, and collaborate in the key decision-making process. By doing so, transformative and inclusive evaluation can avoid biases, challenge the status quo, and help promote equality.

The evaluation team intentionally included several HBCU undergraduate students over the two years of its program implementation and facilitated their critical reflections and professional development as emerging black professionals in engineering and education. As a result, these HBCU students played a pivotal role in leading the enrichment program and identifying and filling in the critical void unnoticed—and hard to address--by PWI members. Faculty and other stakeholders of color also played a pivotal role as advocates of the HBCU students and the voices of the rural and urban communities served by the enrichment program.

Yosso's theory of community cultural wealth (CCW) served as the theoretical framework logically aligned with the social justice-oriented tenets of inclusive and transformative evaluation [7]. (See Figure 1) Challenging the traditional social and cultural capital theory that weighed one's financial wealth or income as the only source of cultural capital, Yosso contested that historically marginalized communities also possess a significant amount of personal or community-embedded resources that their members can tap into.



Figure 1: Yosso's Community Cultural Wealth Model

Yosso's model presents six types of capital: aspirational, linguistic, familial, social, navigational, and resistance capital. Aspirational capital is the ability to maintain hope and dreams for the future despite barriers. Linguistic capital represents individuals' communication skills developed and refined through diverse experiences, including storytelling. Familial capital refers to various social and personal resources available through extended family and community networks. Social capital is a wide range of human connections through which individuals gain information and opportunities. Navigational capital refers to one's skillsets in navigating various social and institutional contexts, including educational programs and workspace. Through their lived experiences, the members of historically marginalized communities naturally develop resistance capital, a disposition to pursue social justice and advocacy.

#### **Research Methods**

#### Study Contexts

The program evaluation was a mixed methods study that included multiple surveys, interviews, and document data. The primary purpose of the program evaluation was to assess the overall impact of STEM enrichment summer camps on participating middle and high school students and collaborating schoolteachers, all recruited from rural areas in two southern states. Three summer camps were implemented during the first year (2023), and four were offered during the second year (2024). Two camps lasted for four days due to a federal holiday, and the remaining five lasted for five days. Since the program's primary goal was to provide a highquality STEM enrichment opportunity for students living in under-resourced rural areas of the two states, all seven camps were held at local school sites. The camp curriculum was developed and implemented by a joint team of six faculty members from two institutions, one PWI and one HBCU (2 PWI and 4 HBCU faculty members). During the first year, five graduate and three undergraduate students were hired as teaching assistants (TA) and led sessions on their assigned topics with some hands-on activities. The three HBCU undergraduate engineering students worked most closely with campers as they covered more than 70% of the summer camp topics and activities. During the second year, four PWI graduate students and three HBCU undergraduate students were hired to lead the revised curriculum. One HBCU undergraduate student participated in both years' programs. All summer camps included at least two field trips, such as visiting the PWI and HBCU campuses and other industry facilities. These field trips were led by various project team members, yet HBCU undergraduate students played the most significant role in leading the camp program and field trips.

The summer camp evaluation included multiple data sources systemically collected throughout the summer camp period and subsequent months. (See Table 1: Program Evaluation Data Sources & Samples) The key measures were pre- and post-camp student surveys covering learning outcomes and psychological and affective domains. The campers also participated in focus group interviews at the end of their camp program. Collaborating school teachers were also invited to participate in individual, paired, or focus group interviews scheduled on the last day of camp in person or the following week via Zoom. The school teachers were also encouraged to share their feedback through an anonymous online survey link sent to their email addresses later in the summer.

Table 1: Program Evaluation Data Sources & Samples

Data Sources (sub-domains)	Samples (n)
Student Pre and Post-Surveys	2023: 65 students
<ul> <li>Learning outcomes in 7 topics</li> </ul>	(44 cases for analysis)
<ul> <li>STEM career interest &amp; commitment</li> </ul>	
Learning experience	2024: 122 students
<ul> <li>Demographics</li> </ul>	(109 for analysis)
Teacher Survey	2023: 5 teachers
Camp Program Quality	2024: 4 teachers
<ul> <li>Program Impact on Teachers' Professional</li> </ul>	
Development	
• 3 open-ended questions for recommendations	
Demographic information	
Student Focus Group Interviews	2023: 53 campers
• 6 focus groups (2023)	2024: 93 campers
• 23 focus groups (2024)	
School Teacher Interviews	2023: 4 teachers
• 1 pair & 3 individual interviews (2023)	2024: 11 teachers
• 4 focus groups (2024)	
Project Team Member Interviews	2023: 15 team members
<ul> <li>PI, co-PIs, staff members,</li> </ul>	2024: 9 team members
PWI & HBCU grad and undergrad students	

In 2023 and 2024, all project team members were invited to share their input right after the summer camps. The PI, co-PIs, staff members, and PWI and HBCU students were invited to participate in individual interviews later in the summer when all summer camps were completed. All four groups were asked to identify the summer camp program's strengths and weaknesses and further recommendations. The external evaluator completed all faculty and staff interviews, while the HBCU student serving as an assessment RA conducted some interviews with other TAs/RAs. The external evaluator, assisted by her HBCU assessment RA, analyzed all qualitative data using NVivo software. Interview summaries and NVivo's code matrix were used to check key codes' stability and consistency in four domains, such as major strengths and weaknesses of the summer camp program, its impact, and success based on their observations during the summer camp, and some areas for further improvement. We completed two IRB reviews at two institutions, one at the PI's institution and the other at the external evaluator's university. The PI institution's IRB reviewed this program evaluation work, and an exemption letter was obtained. The second IRB approval from the external evaluator's university allowed the team to use the de-identified data for research purposes.

The two-year program evaluation outcomes indicated the summer camps were a great success, as evidenced by many statistically significant differences in high and middle school campers' pre- and post-camp learning outcomes. Multiple qualitative data that were collected and triangulated across high/middle school students, collaborating teachers, faculty/staff members (Pi and co-PIs), and involved university students (e.g., TAs/RAs) confirmed a similar pattern

pointing to the synergetic collaboration and significant contributions to the professional development of key stakeholders, especially the five HBCU students reported in this paper.

# Intentional Inclusion of HBCU Students in Program Evaluation

The PI, co-PIs, and external evaluator leading the summer camp program evaluation included three key components to materialize a truly inclusive and transformative evaluation. Firstly, the evaluation plan was grounded in a critical, transformative, and justice-oriented theory, Community Cultural Wealth [7], to avoid a deficit perspective about the communities being served through the program. The project team itself was racially and culturally diverse and included those who knew the local communities the program intended to serve. Secondly, the external evaluator developed a 360-degree data collection plan that includes extensive data collection from all key stakeholders, such as high/middle school campers, collaborating teachers, and project team members, especially the graduate and undergraduate students who have the most direct contact with campers throughout the summer. Most importantly, HBCU undergraduate students covering a large proportion of the summer camp instruction were invited to be part of the program evaluation. Based on the proximity of their social identities (e.g., age, college student status), these HBCU students played the role of boundary spanners between the leadership team members and high/middle school campers. These students' critical perspectives and constructive recommendations were encouraged and welcomed by the project team and consciously incorporated into the subsequent year's curriculum and instruction revisions.

# **Findings**

In this section, we will report both quantitative and qualitative findings derived from the 2023 and 2024 summer camp evaluation data. While the two-year program evaluation included multiple sets of data, this paper will report the findings that directly testify to the overall success of the summer camp program in terms of camp participants' learning outcomes, collaboration with local school teachers and communities, and involved HBCU students' advocacy role and holistic professional development. In this section, the first author has replaced all identifiable information (e.g., institutions, schools, and interviewees) with pseudonyms to ensure the participants' privacy and confidentiality.

# Quantitative Survey Results

In the 2023 post-camp survey, students reported overwhelmingly positive camp experiences and strong satisfaction. All seven individual items and two composite constructs (camp experiences and satisfaction) had means ranging from 4.47 to 4.74 on a scale of five as the maximum. Both medians and modes are 5 for all six individual question items. The first paired samples statistics results confirmed statistically significant differences for seven out of eight learning outcome domains. It affirms that participating high school students gained a significant knowledge base on the seven topics covered during the camp. The only topic that did not reach a statistically significant difference was Cyber/MITRE.

The second year's data showed a similar pattern. In the post-camp survey, students reported largely positive experiences and high satisfaction levels. All seven individual survey items, as

well as the two composite constructs (camp learning experiences and overall satisfaction), received mean scores ranging from 3.92 to 4.42 on a five-point scale. The paired samples statistics revealed statistically significant differences across eight learning outcome domains. This indicates that students gained substantial knowledge in these eight topics during the camp. Comparisons between pre-camp and post-camp survey responses showed significant increases in the mean scores for all eight topics, demonstrating that participants successfully enhanced their understanding through the camp's programs and activities.

Collaborating school teachers in 2023 summer camps rated the quality of the summer program as superior. The mean scores in all five ranged from 4.4 to 4.8 on the five Likert-scaled measures. Teachers also evaluated that the summer camp program positively impacted students' interests in STEM and related careers. The teachers evaluated the quality of collaboration they had with the summer camp project team as exceptional. The mean scores ranged from 4.8 to 5.0. They confirmed the positive impact of the summer camp and associated collaboration on their professional development. The mean scores ranged from 4.6 to 4.8. In their written responses, teachers made many positive comments about the quality of the summer camp program and the professionalism of the PWI/HBCU project team. Key recommendations included possible incentives to encourage students to join the program, more days for field trips, and professor's involvement during the campus visits. All expressed their desire to continue the summer camp program at their schools.

#### Qualitative Findings 1: Students and Teachers' Testimonies

During the focus interviews, many students discussed the positive impact they had from the summer camp. They said their summer camp experiences were "amazing" and "phenomenal." They highlighted the value of the summer camp experiences for those 'interested in STEM or thinking about learning about STEM."

After experiencing the whole camp, I still don't have any disagreements with the way the teachers and other educators ran the event, and I believe they ran the whole camp with almost no flaws. Wonderful camp! I would recommend this camp to anyone interested in STEM or thinking about learning about STEM.

I have absolutely no critique that could better the program. The people in charge were amazing and kind, yet talked to us about their jobs, lives, and interests at our age. The projects were phenomenal and helped to understand things they had taught more while still being fun. I loved this camp!

The students also confirmed that they gained meaningful knowledge and became more appreciative of the value of engineering knowledge through the camp experience. Some explained that the camp program helped them understand the broad scope of STEM and engineering fields and many professional career paths available to them.

I think it will help academics. I think it will help because I've learned that engineering is just more than building or machines. I think it'll have a positive impact on my education since, well, I've done a lot of unique things.

I think it would help with different career paths that you would take that include STEM. Maybe, [it] show[ed] that there are more paths out. First, it helped me realize what other careers I could take.

Major findings from teacher interview data were consistent with the teacher survey results explained above. Teachers rated the program very successful regarding student engagement, learning outcomes, and student motivation. All teachers interviewed strongly believed that the camp made a significant impact on their students' STEM interests and career aspirations. They shared the stories of students with whom they found a tangible impact of the summer camp. Teachers overheard students discussing scientific concepts like gravity and propulsion on their own, indicating genuine interest and engagement at the end of the summer camp. Another teacher shared two students' cases: one male student who was previously uninterested in STEM topics but changed significantly during the camp, and another racial minority and immigrant female student who needed an opportunity to gain quality exposure to STEM topics and confidence to pursue a professional career.

His name was Garry. He is an interesting character. You know, at the beginning of the week he was very disconnected. In school, he is very disconnected. He is not part of any type of club. He's not part of any camps. He doesn't take any advanced courses. He's capable of it, but he doesn't. But on the last day, when we were at the University of XXX, he was asking questions that I had not even thought of. You know, He asked [the TA], he was asking about the aerodynamics of planes and as if we had looked into like biology and compared it. And I was like, "Well, look at you Garry!" and that's just one example.

There's another student, Yuri, she is just so smart. Both of her parents work in chicken plants, and neither, you know. She, I know that I think that she has a part-time job after school. And so she was able to see things. I knew that she had wanted to be an engineer, but I think that this maybe opened up an opportunity of like her to think that she could actually do it. She could get out of what generational, the first newcomers' lives are. And she could go to college, and she could be an engineer. She could study some of these things that she's learning about.

All teachers interviewed clearly expressed their passion and commitment to the goal of this summer program—providing STEM enrichment opportunities to disadvantaged students. One teacher commented that this summer program, based on its voluntary nature, attracted students genuinely looking forward to a STEM learning opportunity and enjoying high-quality, authentic STEM topic exploration without being interrupted by other non-committed students' behavioral issues. All teachers' interviews testified to extraordinary enthusiasm, commitment, and desire for genuine collaboration based on student advocacy and appreciation of and pursuit of the exemplary university and school collaboration. Responding to the interviewer's question about his interest in continuing interest in this summer camp collaboration for the next year, one teacher said:

100%. I already talked to our career tech coordinator. I said next year, your, for this [camp] hopefully to do that. I mean, it'd be great if other teachers could get this opportunity. But then also my thing is with [XX: a collaborating teacher], I, like, we

both love our jobs. We both are passionate about education. I would not wanna put somebody in this STEM camp where you would just kind of waste it on where they would just show up just to manage kids. Like that's, we, uh, y'all are working hard to give this information and present it. But then they need someone from our school system that's gonna encourage them and play along with them and, and help out. Not, like I said, not someone that's just gonna show up and then, and then just kind of not take anything away from it and just keep teaching the same way they do.

### Qualitative Findings 2: HBCU Students' Role as Critical Advocates

Consistent with student and teacher survey data, the project team members agreed that most summer camp programs were successful. Still, these stakeholders offered much more in-depth and critical feedback about the camp curriculum and overall logistics. These recommendations were presented—without any identifiable information—during the leadership team's subsequent meetings, where the PI and co-PIs discussed the strategies to address each recommendation.

It is important to highlight that the summer camp's benefits were not limited to the STEM enrichment experiences the participating high school students enjoyed. It also facilitated significant professional growth among the participating undergraduate and graduate students. They mentioned various benefits from their summer camp involvement. In particular, the five HBCU undergraduate students who led most camp program activities throughout the seven camps showed significant professional growth, which their advisors, other faculty and staff members, and the students themselves equivocally acknowledged.

In particular, the five HBCU undergraduate students' engagement throughout the summer camp period was profound. Reflecting the tenets of inclusive and transformative evaluation, these undergraduate students were encouraged to evaluate the relevance of the summer camp program, various aspects of the program's logistics, and other individuals (camp students, collaborating teachers, and leadership team members) working with them. They were clearly aware of the purpose of the summer enrichment program—offering STEM enrichment opportunities to disadvantaged rural school students who, otherwise, would not have adequate exposure to STEM topics and career-related information. The HBCU students deeply valued the program's goals and wanted it to become even better next year in fulfilling the goals.

One clear example of the HBCU students' critical advocacy is their input about the lack of racial diversity in the first years' camp. All three HBCU students pointed out the lack of diversity in school settings, especially African American students. Leo expressed his disappointment, noticing, "The ratio of African Americans wasn't what I thought it was." Calvin also raised the same issue and explicitly added his recommendation that the summer program should reach out to more diverse and economically disadvantaged students to strengthen its original goals of diversifying the STEM workforce and social justice. He said:

In the future, I would like to see more diversity in visiting these schools because, yeah, it's, it's, I would like, to me personally, if I were to do it again, I would like to visit other ethnic groups and teach them. Cause a lot of other ethnic groups that aren't white, don't know about engineering, they've probably never even heard about it.

While the lack of racial diversity identified by the three participants seems to be highly adequate and natural, this problem was ironically invisible from other team members' perspectives. The program's heavy focus on economically disadvantaged students in rural areas and a large proportion of Hispanic and female students in the campers' pool obscured this clear void and made it difficult for others, especially those leading the program, to discover it. The three participants' critical and advocacy stances brought this point to the surface and helped the program intentionally seek schools serving Black students.

The five HBCU students consistently advocated age-appropriate curriculum and activities. For them, an inadequate curriculum was more than a technical mistake. It was a lack of respect and compassion for learners. As a result, they criticized other TAs who showed little attention and adaptability to the needs of high school campers. Based on their social-justice mindset and strong empathy for others, one HBCU student sharply criticized another TA's lack of adaptability, calling it "an insult."

We're teaching kids the basics of how rockets work and how they're made and what they do, and what their purpose is. In this day and age, a lot of kids, they don't study like how past students would do because of technology. Technology is taking over. So, you have to keep that in your mind. Well, I count this as an insult to intelligence. When you talk about material to kids who don't know what you're talking about, and then try to make yourself look smart off of that, I think that's very insulting to one's intelligence and especially kids. Because it could go over their head anytime. Somebody like me can see what you're doing. But I wasn't like that at all when I was a kid. We all were kids. We all used to be kids. I wouldn't want somebody treating... If I had a son or a daughter. I wouldn't want anybody treating my child that way because they, everybody has the opportunity to learn.

It is important to note that the five HBCU students who actively participated in the summer camp implementation and program evaluation exhibited a set of professional dispositions (e.g., relationship-building and communication skills, critical macro ethics) that are known to be lacking and hard to foster among typical engineering students. Previous studies indicated that engineering students gradually lose their interest in and commitment to broader societal issues and the critical role of the engineering profession. In contrast, women and students of color are more likely to respond to calls for diversity, equity, and justice as their life experiences have been complicated by social stereotypes, prejudices, and inequity to varied degrees [3]. Therefore, it is not surprising that the five HBCU students understood their summer camp employment as an opportunity for social justice engagement and expressed their critical voice to ensure the diversity goal of the program and the transformative nature of evaluation.

# Qualitative Findings 3: Limitations and Recommendations

Despite the overall success of the summer camp program and all RAs/TAs' favorable view of their involvement, some areas for further exploration and improvement also emerged. One of the most noteworthy phenomena was the uneven impact of the summer camp experiences on the HBCU and PWI RAs/TAs. The five HBCU students' significant professional growth was clearly substantiated by all team members' retrospective accounts, including the leadership team members' interviews and observations. However, the professional growth of the PWI

graduate and undergraduate students who also served as summer camp TAs was not as profound or extensive as that of HBCU students. Overall, the PWI students expressed that they also had a positive experience and benefited from the summer camp involvement, which helped improve their communication and teaching skills. They also found the goal of the summer camp meaningful and felt rewarded for being part of the team serving the needs of under-resourced rural communities. Still, the PWI students' involvement was characterized as an individual endeavor rather than a collective, reciprocal, and community-inspired commitment, as observed among HBCU students. Heather, an HBCU undergraduate student who worked as a TA and assessment RA, explained what caused such a significant difference between the two groups of RAs/TAs throughout the summer camp. Heather recollected when two newly assigned PWI TAs struggled to decipher their roles and could not organically be integrated into the entire summer camp TA team.

I love collaboration. However, I do think that the [RAs/TAs] training needs to be taken more seriously, meaning it needs to be mandatory for all RAs who will be participating in—all the teaching assistants. Because that means during the training, all the RAs and TAs need to be bonding at the point in order to make sure that they are executing the camp for the students. Of course, Leon Ulyssa and I were able to work more together because we were traveling together. We were together [from] early morning, at five o'clock in the morning, traveling. Just overall, talking and having that open communication about the whole camp helped a lot. And just like, 'Look what comes up/" in the car like, "Heather, how did I do today? Or what do you think I need to do tomorrow?" So, just having that open communication. I think that we weren't able to have that communication with the [PWI] students. So, I think just from the beginning, if everyone starts together, you can end together.

When the other two were added, Steve and Chuck from [PWI], it was hard. They were kind of shy [and] didn't know much about the program. [They] didn't know much about their responsibilities just because they were thrown out there. They were Dr. XX's? They were her students. So they basically just were thrown in there. They kind of just... They helped a lot. They did what they were supposed to do, and that was it. But when it came to that collaboration or that help, or that bonding with others, the other TAs, it was not there. So, I think it could be better by doing some pre-bonding or team building before beginning the camp at the schools.

It was evident that HBCU undergraduate students considered their summer camp employment and involvement more than a summer job but a way to create a meaningful collaboration among themselves, which ultimately serves the community's needs.

#### **Discussions**

The outcomes from our transformative program evaluation offer important insights into recognizing and amplifying the cultural assets of HBCU/MSI students in the unique spatial context of PWI-HBCU's institutional collaboration. The major findings of this evaluation study resonate with some core constructs of Yosso's Community Cultural Wealth model [7] and existing literature on Black engineering students [8]. For example, the HBCU undergraduate TAs exhibited great adaptability, flexibility, and resourcefulness in the constantly changing

environment of each summer camp. Their attentiveness to subtle environmental cues and proactive handling of unexpected and challenging incidents reflect a strong *navigational capital*, which stemmed from their prior experiences of overcoming many obstacles in their family lives and career pathways. For example, when working in a rural school environment where the student demographic was predominantly white, the HBCU TAs still enacted a point of connection by paying attention to the school's under-resourced learning environment and affirming the value of the summer camp program for the rural students. The HBCU TAs also formed an extremely strong bond among themselves, tapping into the benefits of the familial capital shared, enriched, and constantly amplified among themselves.

Still, the most significant contribution made by the HBCU undergraduate students was based on their resistance capital. They were keenly aware of the persistent economic disparity plaguing their racial and cultural community in the South. Their engineering career pathway was possible through their unwavering resilience and persistence backed by the multiple layers of family and community support. Based on their life experiences and a sense of purpose and moral obligations, these students embodied the unique capacity to critically observe and evaluate various aspects of the program's logistics and other individuals working with them. As much as they valued and committed to the goal of the summer program—offering STEM enrichment opportunities to disadvantaged rural school students who, otherwise, would not have adequate exposure to STEM topics and career-related information, they were eager to share their authentic and honest feedback and recommendations for the program's further improvement. The HBCU students' recommendations were extensive, reflective, and remarkably insightful, as shown in Heather's comment about the need for "pre-bonding or team building." They intuitively knew that multi-institutional collaboration should create a generative space to facilitate mutual understanding, appreciation, respect, and authentic alliance, which supports everybody's holistic growth and accomplishing the shared project goal endorsed by all team members.

While we are pleased to find the relevance and benefits of using a transformative and inclusive evaluation model for our multi-institutional outreach program evaluation, we also recognize several limitations. The observed disparity between HBCU and PWI students' professional growth requires further investigation and intervention strategies. Our team's relative success can also be explained by several contextual factors beyond the evaluation model itself. One notable factor can be the diverse team composition. The faculty and staff members from diverse personal, cultural, and professional backgrounds affirmed the principles of openness and mutual respect, as witnessed by all student participants, including the HBCU undergraduate students. The project team also included a Black woman faculty member who traveled, worked closely with the HBCU students, and served as their advocate and mentor. Her critical role as a conduit of social capital [1] was evident in the HBCU students' accounts. As a result, it seems reasonable to conclude that the HBCU undergraduate students' positive experiences during the camp and their eager sharing of critical and authentic feedback—pivotal to transformative and inclusive evaluation—were possible as they considered the team environment safe and supportive.

We believe that multi-institutional collaborations and their evaluation models should acknowledge the unique cultural assets possessed by the students of MSIs and HBCUs and strive to build a safe and, more importantly, generative space where those students can take on

a proactive role in raising the overall quality of the inter-institutional collaboration to the next level. This types of institutional collaboration and evaluation strategies will fill the critical void that most PWIs cannot accomplish alone, ultimately leading to greater creativity and innovation [1].

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