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## **Participatory Theatre and the Retention of Underrepresented Women in STEM**

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### **ABSTRACT**

*This paper introduces participatory theatre as a transformative intervention designed to address these barriers by centering the lived experiences of underrepresented women leading NSF-funded STEM broadening participation (BP) programs. Grounded in Freirean critical pedagogy, Boal's Theatre of the Oppressed, and Yosso's Community Cultural Wealth framework, the study uses creative nonfiction counterstories derived from qualitative interviews as the basis for interactive theatre performances. Participants engage in Forum and Image Theatre techniques to identify, embody, and critically examine institutional challenges, fostering collective reflection and the development of strategic approaches. This participatory approach enables spect-actors to collaboratively explore themes such as representation, resource inequity, cultural capital, and policy advocacy. The findings underscore the potential of arts-based methodologies to catalyze institutional change and support the inclusion and retention of URM women in STEM.*

**Keywords:** Arts-Based Intervention; Broadening Participation; Community Cultural Wealth; Institutional Climate; Participatory Theatre; STEM Education; Theatre of the Oppressed; URM Women Faculty

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## INTRODUCTION

STEM academic fields have long been marked by gendered and racialized exclusionary practices that hinder the participation and retention of underrepresented minoritized (URM) women. Although significant efforts have been made through STEM broadening participation (BP) programs to increase inclusion and retention, systemic barriers persist, making it imperative to explore innovative interventions that address the nuanced challenges URM women face. These challenges are deeply rooted in institutional climates that perpetuate exclusionary behaviors and microaggressions, all of which contribute to a cycle of attrition in STEM disciplines and the workforce (Acker & Wagner, 2019; Burt et al., 2023; Sue et al., 2007; Zambrana et al., 2017).

This study introduces participatory theatre as an intervention that engages URM women in a transformative and dialogical process to critically explore their lived experiences and co-develop strategies for inclusion and retention. Grounded in Freirean critical pedagogy (Vittoria, 2019) and Boal's (2002) Theatre of the Oppressed, participatory theatre provides a performative and visual methodology that enables participants to deconstruct dominant narratives, challenge systemic exclusions, and reimagine equitable futures within STEM (Synder-Young, 2013). Centering the voices of URM women leading NSF-funded STEM BP programs, this study demonstrates how theatre-based methods foster collective reflection and structural change.

Drawing from findings that underscore the persistent microaggressions (Sue et al., 2007; Zambrana et al., 2017), racial/ethnic taxation (Thompson & Sekaquaptewa, 2002; Zambrana et al., 2015), and exclusionary institutional climates within STEM academic disciplines and workforce (Anicha et al., 2017; Mendoza, 2022; Mendoza & Dorner, 2020), this study demonstrates how participatory theatre serves as an embodied, action-oriented intervention that translates these insights into meaningful structural change (Howe et al., 2019; Snyder-Young, 2013). By amplifying the cultural capitals of URM women— aspirational, navigational, social, familial, linguistic, and resistance capital—this intervention creates space for co-constructed creative nonfiction counterstories that contest dominant frameworks and affirm the agency of URM women in STEM (Yosso, 2005; Yosso & García, 2007). Ultimately, this study aims to explore how participatory theatre can support the inclusion and retention of URM women in STEM by transforming institutional climates and fostering collaborative problem-solving.

### **Challenges and Opportunities**

The intersectional challenges experienced by URM women in STEM have resulted in disproportionate representations and consistent gaps between URM and White-perceived men and women as faculty in STEM fields (Armstrong & Jovanovic, 2017; Domingo et al. 2022; Ghazzawi et al., 2021; Matchett, 2013),

and disproportionate representations between women and men of color in career paths (Maltese et al., 2014; Matchett, 2013). The intersection of gender and non-majority status creates multilayered hurdles—overt and covert socio-cultural and political barriers hindering URM women’s success and retention (Anicha et al., 2017; Armstrong & Jovanovic, 2017; Cardoso et al., 2013; Freeman et al., 2014; Morton & Parsons, 2018). Equally significant is the growing literature examining (lack of) representation of URM women faculty in STEM fields due to their intersecting identities (Armstrong & Jovanovic, 2017; Flores & O’Brien, 2002; Lent & Brown, 2017; Metcalf et al., 2018; Morton & Parsons, 2018; Ong et al., 2018). Intersectionality “conceptualizes the social experience of individual identity as dynamically produced from mutually constitutive elements” (Armstrong & Jovanovic, 2017, p. 218). It maps the interlocking patterns of racism and patriarchy, and other oppressive patterns such as classism that have historically marginalized URM persons (Annamma, 2018; Crenshaw, 1991; Zambrana, 1995, 2011; Zambrana et al., 2017). In this study, race, gender, and other intersecting identities are considered socially constructed (Annamma et al., 2013; Crenshaw, 1991; Rothenberg, 2004), inseparable as they provide the full understanding of the experiences of URM women in STEM (Crenshaw, 1991), and treated as assets to enhance the inclusion and retention of URM faculty (Crenshaw, 1991; Yosso, 2005).

Despite challenges to their identities, URM women skillfully navigate gendered and racist academic spaces by drawing from their cultural capitals (Armstrong & Jovanovic, 2017; Cross et al., 2021). They navigate against the patriarchal, White-oriented STEM fields even though their cultural capital is positioned as a deficit (Morton & Parsons, 2018; Yosso & García, 2007). The academic spaces they navigate are hostile due to the microaggressions they encounter (Zambrana et al., 2017). Microaggressions, whether intentional or unintentional, manifest as brief, commonplace daily verbal, behavioral, and environmental gestures that convey hostile, derogatory, or harmful racial slights and insults to the target person or group (Sue et al., 2007). Microaggressions faced by URM women in academia encompass various forms, including blatant, outright, subtle, and insidious racism, the devaluation of scholarly contributions, merit, and skillset by colleagues and administrators; and the burden of representing minorities—a form of racial/ethnic tax (Zambrana et al., 2017). These microaggressions, leading to stressors, ultimately impact the persistence or attrition of URM persons.

Furthermore, the unique burden of being in a solo status as an underrepresented minorities in STEM academic units adds another layer of challenge (as highlighted by Armstrong & Jovanovic, 2017; O’Connor, 2002; Thompson & Sekaquaptewa, 2002). For instance, URM women, often in solo status, find themselves disproportionately engaged in service, committee work, and mentoring institutionally excluded students. These activities demand significant sacrifices of their time, yet their contributions in these areas do not

significantly contribute to promotion and tenure. This racial/ethnic tax not only places an additional burden on URM women but also frees up time for their White-perceived colleagues to focus on activities that hold greater weight in the promotion processes (Pittman, 2010; Zambrana et al., 2015, 2017).

### **Institutional Barriers Facing URM Women in STEM**

The experiences of URM women in STEM within higher education institutions (HEIs) are significantly influenced by the institutional climate, defined as the prevailing environment and culture within these institutions (Espinosa, 2011; Hurtado et al., 1998). This climate encompasses shared values, norms, attitudes, and practices that shape the interactions and experiences of individuals within the institution. Unspoken values and beliefs create inhospitable environments, fostering microaggressions, particularly in research-extensive universities (Zambrana et al., 2017). Specific climate factors that disproportionately impact URM women's experiences include exclusionary behaviors (Patridge et al., 2014), social constraints on their identities (Morton & Parsons, 2018), and stressors related to daily microaggressions (Sue et al., 2007).

Moreover, institutional climate is intertwined with systemic racism, a complex array of practices perpetuating racial inequity across society (Castro et al., 2021; Feagin, 2013; Watson & Collins, 2023). Structural and institutional racism, an unequivocal reality rooted in centuries of systemic oppression, manifests in laws, policies, institutional practices, and social norms that uphold and perpetuate systemic racism (Banaji et al., 2021; Bonilla-Silva, 2014; Harper, 2012). Examples of institutional racism within the day-to-day operations of STEM departments include the promotion of meritocracy, emphasis on individualism, reinforcement of masculinity, and the prevalence of narratives promoting unrelenting competition and compromising well-being in the pursuit of career achievements. These elements contribute to a climate that disproportionately affects URM women in STEM, influencing their experiences and opportunities within HEIs. Exclusionary behaviors can be traced back to a post-racial era of the late Twentieth Century where color-blindness became a dominant discourse (Bonilla-Silva, 2014). The idea of color blindness is deeply entrenched in organizational practices that deny equal access and opportunities (Zambrana et al., 2017).

URM women often contend with being unjustly labeled as “presumed incompetent” in their roles as scholars, teachers, and participants in academic governance (Gonzalez & Harris, 2012). Moreover, within STEM departments, there exist discernible social classes, mirroring broader societal stratification and imposing norms and expectations on their members. URM women describe facing disproportionately severe repercussions for minor or perceived infractions compared to their non-URM colleagues (Annamma, 2018). Such constant scrutiny undermines their ability to thrive professionally, as it fosters an environment of mistrust and limits access to opportunities for growth and development.

Continuous surveillance and labeling act as significant impediments to professional development by fostering an environment of constant scrutiny and mistrust. This process reinforces negative stereotypes about URM persons' capabilities and efficiency.

### **STEM Broadening Participation Programs**

STEM broadening participation programs employ a range of strategies to increase the inclusion and retention of underrepresented persons in STEM disciplines. These initiatives often incorporate mentorship programs, research opportunities, and financial support to mitigate barriers that disproportionately impact students from marginalized backgrounds (Estrada et al., 2018; McGee, 2016). Key interventions for the student population include structured summer bridge programs designed to provide academic preparation and social integration before students enter college, as well as cohort-based learning models that foster community and belonging (Palmer et al., 2010). Additionally, many BP programs emphasize culturally responsive pedagogy, recognizing the importance of integrating diverse perspectives into STEM education to enhance engagement and persistence. Faculty development initiatives, including those funded by the National Science Foundation (NSF), further aim to improve mentoring and inclusive teaching practices and ensure that STEM educators are equipped to support diverse learners. NSF-funded STEM BP programs include ADVANCE, Alliances for Graduate Education and the Professoriate (AGEP), NSF INCLUDES (Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science), and the like. Institutional transformation efforts, such as revising curricula to incorporate interdisciplinary and problem-based learning, also contribute to creating STEM environments that are more inclusive and reflective of diverse epistemologies.

Traditional interventions utilized by STEM broadening participation programs have fallen short in retaining URM women faculty in STEM due to their emphasis on individual professional development rather than systemic institutional change. Many programs focus on mentorship, grant-writing workshops, and leadership training, yet they fail to address exclusionary academic cultures, implicit biases, and inequitable tenure and promotion processes, placing the burden of adaptation on URM women rather than transforming the structures that marginalize them. Institutional climates remain unwelcoming, with persistent experiences of isolation, microaggressions, and racial/ethnic taxation, which BP programs rarely challenge directly. Additionally, many interventions lack sustainability, as their initiatives often lose momentum once external funding ends, and they frequently overlook the intersectional challenges that uniquely impact URM women. Participatory theatre presents an alternative intervention by centering dialogue, collective agency, and structural transformation, offering a space for URM women to co-develop solutions that foster lasting retention and inclusion in STEM academia.

## Participatory Theatre as an Intervention

The proposed participatory theatre practice as an intervention is grounded in different theoretical perspectives—Freirean critical pedagogy, Boal's Theatre of the Oppressed, and Community Cultural Wealth (Yosso, 2005). Freire (Vittoria, 2019) emphasizes dialogical learning and critical consciousness, advocating for education as a practice of freedom. Boal extends these principles through Theatre of the Oppressed, which uses performance as a means of social critique and collective problem-solving (Campbell, 2019; Howe et al., 2019; Vittoria, 2019). Yosso's (2005) Community Cultural Wealth framework complements these approaches by centering the strengths URM women bring to STEM, particularly their aspirational, navigational, and resistance capital. Yosso identifies six distinct forms of capital:

- **Aspirational Capital** refers to the ability to maintain hope and envision future possibilities despite structural challenges.
- **Navigational Capital** denotes the skills needed to effectively maneuver through institutional structures that were not designed with marginalized groups in mind.
- **Resistance Capital** encompasses the knowledge and abilities derived from resisting oppression and advocating for change.
- **Familial Capital** includes cultural knowledges and strengths nurtured through kinship and community histories.
- **Social Capital** involves networks of relationships providing community support and shared resources.
- **Linguistic Capital** refers to communication skills and language practices unique to one's cultural identity that enhance community cohesion and advocacy.

Together, these frameworks inform the participatory theatre model, positioning it as a transformative intervention that fosters critical reflection, agency, and structural change.

In this study, the participatory theatre model is developed through a series of research-informed creative processes. The foundation for the model lies in interviews conducted with four URM women who lead NSF-funded STEM BP programs. These women are tenured faculties at different research-intensive higher education institutions in the U.S. They have grants aimed at broadening the participation of URM persons in STEM fields, albeit at the time of publication, some of those grants have been paused. Two of them identify as Black/African American, one Hispanic foreign-born, and one is non-Hispanic Black, foreign born. All participants provided informed consent, and the study received IRB approval from the researcher's home institution, ensuring compliance with international research ethics protocols for studies involving human subjects and arts-based dissemination (Leavy, 2020). Data were analyzed using thematic coding and narrative reconstruction, following the principles of Critical Narrative Inquiry (Clandinin, 2022; Saldaña, 2013). Validation involved member-checking through

emails and researcher reflexivity to ensure alignment with participants lived realities.

Drawing on their narratives and informed by the analysis of existing literature on the experiences of female URM faculties, the researcher crafted the creative nonfiction counterstory that encapsulates the lived experiences, challenges, and strengths of URM women in STEM. The counterstory serves as the "model" in Boal's (2002) terms—a script or performance piece that is presented during participatory theatre sessions to provoke reflection, dialogue, and intervention. Through a combination of Image Theatre, Forum Theatre, and metaphorical style, participants—many with minimal theatrical background—are invited to step into the scenes, becoming spect-actors who explore and rehearse potential strategies for transformation. As Boal (2002) emphasized, the goal of Forum Theatre is not merely to present problems, but to open up "paths of liberation" and foster a rich debate through collective engagement rather than predetermined solutions. It is noteworthy that by grounding the model in an empirically derived counterstory, the intervention remains firmly anchored in the realities of URM women in STEM fields.

### **Introducing the Creative Nonfiction Counterstory**

The following excerpt, titled 'Forging New Modes of Communities,' is the opening scene of one of the creative nonfiction counterstories crafted from the interviews. It highlights a seemingly mundane yet symbolically rich interaction at a fictional professional development conference that becomes a moment of connection, resistance, and critical reflection between two URM women leading STEM BP programs. The dialogues are inspired by research participants' responses in actual interviews that are creatively implemented in the counterstory. The fictional scene that unfolds sets the tone for how participatory theatre enables spect-actors to recognize, enter into, and transform these narratives in real time, imagining possibilities for collective empowerment and structural change.

#### ***Forging New Modes of Communities***

The professional development event hosted by an NSF grant was scheduled to be on a campus of a city in the broader Gulf Coast region of the United States. Attendees, recipients of any National Science Foundation, broadening participation in STEM grants, and their students were excited to be finally recognized for their hard work during the summer. Albeit the never-ending struggles of getting travel funds and the institutions' archaic funding models posed serious hinderances to students' attendance. Angela had to pay out of pocket for students' tickets and wait to be reimbursed. Angela, a primary investigator of an NSF-funded STEM BP program for many years had to constantly make mental notes of student success stories to share with her department, justifying her focus on that certain student population. As for Tigueraje, a Hispanic woman PI of a grant, she was basking in the opportunity to spend time with her students, who

never even knew such opportunities existed. From her extensive experience in the industry and her unique positionality as a foreign-born, only female in her field, she was the champion of her all-female mentees who accompanied her to the convening.

Each decided to get a cup of coffee from the cafeteria on the mezzanine level. They were standing in line close to each other and were looking at the menus on the wall. Angela decided to go with a cold mocha latte with double espresso shots. Tigueraje overheard Angela's order, liked it, and ordered the same thing. When the barista prepared the first drink and shouted, Angela Davis, A white mocha, double shot, Angela went to the counter and told the barista, in a very understanding tone, that she did not like white chocolate syrup and this was wrong order. Tigueraje who was also waiting for her order smiled and jokingly said: "I am no longer accepting the things I cannot change; I'm changing the things I cannot accept." Angela returned to her and said:

Angela- Excuse me!

Tigueraje- Your order was not a white mocha...

A- Oh, that is right, hence Angela Davis's quote. Touché! (both laughed)

T- I love Angela Davis.

A- Me too! My sister-in-law says I look like her.

T- Yes, I can see that, and they tell me I look like Anzaldua.

A- Wait a second, you do!

T- I wonder what kind of conversation the two of them would have had if they met at a convening like this.

A- It should go along these lines (with a Shakespearean voice)

"and when we speak we are afraid/

our words will not be heard/

nor welcomed/

but when we are silent/

we are still afraid/

So it is better to speak/

remembering/

we were never meant to survive." (pp. 31-32)

T- Wow! That was refreshing! (*About this time both orders are ready.*)

A- Want to go somewhere and talk?

T- Sure; I am here for a conference. What brought you here?

A- The conference on STEM broadening participation programs.

T- NO WAY! I am here with my students for the same conference. Do you have a grant?

A- Yes! I am here with my students. They spent the whole summer working on research and now presenting them. How about you?

T- Same. I bring my students to these professional development events regularly. Almost all of them are first-generation (URM) underrepresented and minoritized students. How about you?

A- Yeah. Let me ask you this: How do you get travel funding?

T- Pfff, hustling! (*Both laugh*) I worked in the industry for many years before joining the academia. I find money elsewhere. I know university-industry linkage always yields great development opportunities, and believe me or not, the environment is less racist. On the other hand, my experience from the time that I was a PhD student in my old country was very male-dominated, and they had their own club. While they never mistreated me or discriminated in a very blatant way, I always felt like I had to prove myself. In my cohort, I was in engineering, and top of my cohort; but if you asked any of my colleagues, they would not have pointed at me. The prototype of an engineer was not me.

## **Forum and Image Theatre**

Soon after the creative nonfiction counterstory is introduced, participants engage in dialogue around familiar themes they recognize in the performance. The facilitator deepens the discussion by inviting participants—many of whom are also research collaborators—to identify additional themes they believe should be incorporated into the evolving performance. To move beyond verbal dialogue and activate embodied reflection, the workshop transitions into a series of participatory Image Theatre exercises. Boal (2002) developed Image Theatre as a response to the limitations of spoken language, particularly the hesitations and constraints individuals face when confronting systems of oppression. In this method, participants use their bodies to create images that express emotions, experiences, and relationships related to the themes discussed.

As the group progresses through the Image Theatre process, new themes emerge organically—often revealing subtleties or tensions not previously articulated. The facilitator documents these emerging insights and collaborates with the group to explore them further through a series of sculpted images that include representations of protagonists, antagonists, and bystanders. These embodied explorations allow participants to rehearse multiple perspectives and potential responses to real-world scenarios. Together, participants select one resonant theme to develop into a full performance piece for the Forum section of the workshop. Drawing from the counterstory and supported by research findings, they collaboratively shape an authentic scene that encapsulates the challenges and possibilities within STEM environments. This co-created performance becomes the basis for interactive engagement in the Forum Theatre session that follows.

## **Transition to Post-Performance Facilitation**

At the Association for the Study of Higher Education (ASHE) Annual Conference in Las Vegas, Nevada, November 2022, I facilitated a segment of the

counterstory performance. The session was titled Humanizing STEM Broadening Participation through Participatory Theatre. It included a participatory theatre session designed to engage the audience—now spect-actors—in critical reflection and collective meaning-making. Guided by applied theatre principles, the facilitation process centered on emergent themes from the performance and invited participants to engage deeply with structural and affective dimensions of institutional life in STEM. Key facilitation themes included:

- **Navigating Institutional Climate:** Spect-actors examined institutional conditions that perpetuate isolation, funding inequities, and racial/ethnic taxation, while identifying strategies to challenge and transform these norms.
- **Representation and Belonging:** Dialogues focused on the power of visibility and informal interactions as spaces of affirmation and solidarity for URM women in STEM.
- **Cultural Capital as Resistance:** Participants reflected on the roles of aspirational, navigational, and resistance capital (Yosso, 2005) as represented in the characters' narratives and discussed how these forms of capital can serve as mechanisms for institutional transformation.
- **Mentorship and Resource Redistribution:** Discussions interrogated equity in mentoring and resource allocation, highlighting how access to travel funding and leadership development often reflect broader structural disparities.
- **Collective Voice and Policy Change:** The session concluded by exploring how everyday acts of resistance and collaboration could inform institutional policy shifts and reimagine the structures of STEM Broadening Participation programs.

In the session, participatory theatre was facilitated with groups of actors who had minimal theatrical backgrounds. To accommodate them, I used Image Theatre extensively, incorporating other elements of Forum Theatre in a metaphorical and ritualistic style. This approach allowed participants to engage with the material intuitively, embodying their experiences while collectively exploring possible interventions. By centering dialogue and critical engagement over predetermined resolutions, the participatory theatre model aligned with Boal's vision of theatre as a catalyst for social transformation. Furthermore, this arts-based intervention created a space where embodied storytelling and institutional critique intersected, facilitating a praxis of transformation grounded in the lived experiences of URM women in STEM.

### **Boal's Concepts of Show and Model in Forum Theatre**

Augusto Boal introduced the concepts of "show" and "model" within the framework of Forum Theatre, emphasizing its purpose as a transformative and participatory practice. He asserted that the defining principle of Theatre of the Oppressed is its capacity to turn spectators into protagonists of the theatrical action, shifting them from passive observers to active agents of change. Boal stated:

Only the fundamental principles of Theatre of the Oppressed are excluded from this re-evaluation, because they are what defines Forum Theatre as Theatre of the Oppressed – its intention to transform the spectator into the protagonist of the theatrical action and, by this transformation, to try to change society rather than contenting ourselves with merely interpreting it. (2002, p. 253)

Boal distinguished between oppression and aggression, emphasizing that Forum Theatre should focus on struggles where participants have the agency to resist and transform their circumstances. He noted that “cases with solutions that exist only in the realm of the physical are of no use for Forum Theatre shows because they do not present oppression against which one can struggle but aggression which one cannot evade” (Boal, 2002, p. 254). In this way, oppression is understood not only as external and physical but also as internalized, requiring collective reflection and action for liberation.

Central to Boal’s methodology is the idea that the model—the scripted performance presented before audience intervention—must be engaging, aesthetically compelling, and structurally sound. He insisted that “the most important thing, over and above anything else, is that Forum Theatre should be good theatre; that the model in itself offers a source of aesthetic pleasure” (Boal, 2002, p. 256). The effectiveness of the forum, he argued, depends not on offering a singular solution but on fostering critical debate. He maintained that “it is more important to achieve a good debate than a good solution because, in my view, the thing which incites the spect-actors into entering into the game is the discussion and not the solution which may or may not be found” (Boal, 2002, p. 259).

While Boal’s Theatre of the Oppressed offers valuable strategies for dialogic engagement and reflection, implementing these interventions within academic STEM settings is not without challenges. Institutional resistance to arts-based methods, concerns over legitimacy, and logistical constraints may limit the scalability of such practices (Bell, 2016). Acknowledging these limitations provides a more pragmatic understanding of the intervention’s applicability. It is important to consider participatory theatre’s adaptability and scalability through faculty development workshops, departmental retreats, or grant-funded initiatives that prioritize equity and inclusion. However, institutional actors may face limitations related to resource availability, competing priorities, or discomfort with nontraditional pedagogies. These contextual realities must be considered when designing sustainable, arts-based interventions in STEM.

URM women in STEM often experience isolation and microaggressions that undermine their sense of belonging. Participatory Theatre provides a structured yet flexible space where they can externalize these challenges and engage in collective problem-solving. Through Forum Theatre techniques, participants critically reflect on real-life scenarios and rehearse interventions in a safe and supportive setting. The enactment of these scenarios allows URM women to visualize and analyze oppressive structures while developing strategies to navigate and disrupt them.

## Discussion of Findings and Conclusion

Participatory Theatre fosters a sense of community, allowing URM women to share strategies for resilience, advocate for institutional change, and develop sustainable support networks. The interactive nature of the intervention enables participants to practice advocacy, leadership, and strategic negotiation, enhancing their agency within STEM fields. By creating a shared space for storytelling and collective action, participatory theatre cultivates a sense of solidarity that challenges institutional barriers and promotes long-term retention and success in STEM. Furthermore, this approach underscores the necessity of integrating arts-based methodologies into STEM BP programs to foster an inclusive and supportive academic environment.

The participatory theatre model described in this study has the potential to significantly enhance STEM BP programs by fostering inclusive institutional climates and addressing deeply embedded structural inequities. For educators and faculty developers, this approach offers a scalable, reflective, and engaging method to raise awareness about the lived experiences of URM women and generate institution-specific action steps. For administrators and policymakers, incorporating participatory theatre into faculty development or diversity training initiatives may cultivate a more equitable culture by centering experiential learning, empathy-building, and collaborative problem-solving. Integrating arts-based interventions like participatory theatre into the fabric of STEM initiatives not only affirms the cultural assets of URM women but also builds collective capacity to transform exclusionary practices into opportunities for meaningful change.

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