PhD Prep Summit: A Social Design Experiment

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Abstract: Diversifying the professoriate is of great concern to the field of higher education. Yet, there is a dearth of literature studying the efficacy of programs designed to support these efforts. This project details findings from a social design experiment of the PhD Preparation Summit (PPS), a one-day pilot workshop aimed at supporting racially minoritized post-baccalaureates in Southern California. Using analyses of survey and observation data, we find that culturally affirming and asset-based frames are effective design components for programs targeted to People of Color. We conclude by sharing implications for the design of future PhD preparation programs for People of Color.

Introduction

Despite increased enrollment over time, People of Color are consistently underrepresented in doctoral education (Okahana & Zhou, 2019). Even after surpassing the initial barrier of access, research highlights sustained disparities in persistence, experiences, and degree attainment of PhD students by race and ethnicity (Griffin, Muñiz, & Espinosa, 2012). In addition to being an inaccurate and inadequate representation of the U.S. demography, the quality of scholarship suffers when the histories and epistemologies of People of Color are not represented in academe (Foxx, Barak, Lichtenberger, Richardson, Rodgers, & Williams, 2019).

In an effort to remediate a longstanding history of exclusion in postsecondary education, many colleges and universities across the United States are investing in initiatives to better support People of Color in pursuing and completing doctoral education. Examples of such initiatives include PhD preparation programs and undergraduate research programs aimed at building a 'pipeline' of racially minoritized students who would eventually enter the professoriate (e.g., Mellon Mays Undergraduate Fellowship Program and McNair Scholars Program). While these programs offer a necessary intervention to promote compositional diversity in academe, we offer two main critiques that center issues of recruitment and assimilation. First, because these programs generally recruit at particular points in students' undergraduate careers (i.e., year two or three), students who learn too late about these opportunities are excluded from taking advantage of the resources afforded to participants. Moreover, information about these programs are usually spread via word-of-mouth leaving students who are not yet involved in research activities, but wish to be, out of the pipeline. Secondly, these programs place a large focus on providing nondominant students with tools to increase their likelihood of admissions and persistence to the PhD. While this is a noble effort, it also teeters on a deficit orientation. Graduate education operates as a racialized community of practice that enculturates students into the norms, values, and practices of the academy (Liera, Posselt, Irwin, & Rodgers, 2019). Because the academy has historically centered and reproduced whiteness at the expense of Communities of Color (Wilder, 2014), preparing Students of Color to withstand the academy means enculturating them into whiteness. Advancing equity and justice in the academy requires more than increasing the number of People of Color in the ivory tower (Chang, 2000). It mandates a paradigm shift from designing to change individuals toward using educational designs to change the cultures of postsecondary institutions. However, we know very little about what design features simultaneously support People of Color's ability to navigate doctoral education as it currently exists, while also empowering them to recognize themselves as valued members and change agents in this evolving community of practice.

The project uses social design experiments (SDEs) (Gutiérrez & Vossoughi, 2010) to develop and evaluate the PhD Preparation Summit (PPS), a one-day pilot program aimed at co-constructing a support network with and for racially minoritized post-baccalaureates in Southern California seeking to pursue PhDs in education. The purpose of PPS is two-fold: 1) to assist post-baccalaureates who have graduated from their undergraduate institutions with preparing PhD applications and 2) to hold communal space for participants to leverage their full identities in academia. We sought to design a culturally affirming and intergenerational space where cultural ways of knowing and being are intentionally positioned as assets to the academic enterprise. In alignment with principles of design based research (DBR), we enact a commitment to expansive learning by empirically testing conjectures that reimagine possibilities for the design of PhD preparation programs aimed at serving People of Color, as well as enacting institutional change to promote equity. This project forwards findings from our initial stage of implementation.

Social design experiments in design based research

With roots in the learning sciences, DBR posits that researchers should seek to understand "the messiness of real world practice," rather than seeking to control extraneous variables in the study of education interventions (Barab & Squire, 2004, p. 3). In this way, DBR is praxis-oriented--seeking to actualize theory toward the development of tangible tools, artifacts, and dispositions to support learning in naturalistic contexts (Barab & Squire, 2004). Utilizing DBR as a methodology allows for a multi-layered analysis that produces locally-salient change for research participants and generative advances in theory for the academy (Brown, 1992; Collins, 1992). Within the paradigm of DBR, we adopt SDEs as a mode of inquiry. SDEs are "oriented toward transformative ends through mutual relations of exchange" (Gutiérrez & Vossoughi, 2010, p. 101). By explicitly situating learning as an activity oriented toward equity and justice for historically disenfranchised communities, SDEs re-mediate tools and artifacts toward expansive possibilities for design and iteration in education research. Central to SDEs is the need for researchers to engage in collaborative design as a mechanism of empowerment and the expansive transformation of learning. In this paradigm, researchers recognize and affirm participants as knowers and coconspirators in the justice-oriented design process.

Theoretical approach: Endarkened feminist epistemologies

We assert that our identities matter to the process of research. Our subjectivity as Black women education PhD students reminds us that the inquiry process is necessarily politicized. As such, we relied on a variety of endarkened feminist epistemologies (Bernal, 1998; Collins, 2002; Crenshaw, 1989) that honor the history of resistance and resilience that Black and Brown women and femmes exert within our social world. These expansive and culture-centered systems of knowing support our ability to engage in the practice of rigorous, responsive, and self-determined inquiry and design.

Design features and conjectures

We designed a day-long workshop that took place in Southern California in Fall 2019. After recruiting participants via social media and targeted outreach to local master's programs, we landed an inaugural cohort of 44 post-baccalaureates: Black (20%), Latinx (68%), mixed-race (4.5%) and Asian American Pacific Islander (6.8%). 70% of participants identified as women, 18% as men, 2% as nonbinary, and 9% did not disclose their gender. Given that our population of interest targeted post baccalaureates, our sample included participants who graduated from their undergraduate institutions between the years of 1998-2019. Iteration and co-construction are central components to DBR (Sandoval, 2014). We leveraged the expertise of other Scholars of Color in our network to assist with the design and implementation of PPS. Volunteers responded to a survey that gave an overview of the goals of PPS and asked how, if at all, they would like to participate or contribute to its design. Based on survey responses, we recruited three faculty members, two postdoctoral researchers, and fourteen doctoral students as volunteers who supported day-of-logistics, observation data collection, as well as designing and delivering presentations. 90% of our volunteers identify as People of Color.

The main design features included two workshops on research and the PhD application, an intergenerational fishbowl discussion featuring faculty, postdocs, and doctoral Students of Color, and a round-robin discussion on time management, work/life balance, the GRE, interview process, and funding. Grounded in critical race and endarkened feminist approaches, our design privileged the role of collective learning through dialogue and counterstorytelling (Solórzano & Yosso, 2002). By combining opportunities for individual reflection with large and small group discussions, we sought to provide a generative and affirming space for intergenerational community building where participants could connect with Scholars of Color at each developmental stage of the PhD pipeline (from pre-application to tenure-track). Sustained engagement is also crucial to our design conjecture. As such, we keep in touch with our inaugural cohort by sharing resources via social media and email. Additionally, we curated a public website that houses artifacts created for PPS.

Data collection and analysis

To evaluate the program and the efficacy of our design conjectures, we used multiple methods including pre/post surveys of participants, as well as, observations. The research team conducted thorough observations of each session at PPS--noting trends in discourse, engagement, and participation. We also noted questions that were asked during Q&A sessions of main presentations, as well as participant responses regarding the vision for the future of PPS. The pre-/post-surveys evaluated the program based on three criteria: 1) participants' knowledge of graduate school and the PhD application process before and after the workshop, 2) changes in participants' self-efficacy regarding the application process, and 3) number of attendees who submit PhD applications for the upcoming year. We used three main measures to collect quantitative data. Participants' knowledge of academia

was assessed using three items. Sample items included "I understand that a primary purpose of a PhD program in education is to produce education researchers." Participant responses were based on a 5-point Likert scale ranging from "strongly agree" to "strongly disagree." Participants' self-efficacy was assessed using three items developed for this study. Sample items included "I am confident in my ability to write a research statement." Participants were asked to indicate on a 3-point scale ranging from "not at all confident" to "very confident." Lastly, we provided two open-ended items specifically asking which features of PPS attendees found most useful and where improvements to future iterations could be made.

Findings

Navigating the hidden curriculum

Results from pre-/post-surveys indicated improvements around knowledge of the hidden curriculum of doctoral education and the application process. For example, results from the post-surveys indicated that 73% of participants post-PPS agreed that they were aware of the various ways to fund a PhD compared to 18% of participants pre-PPS. Similarly, findings also suggest improvements around self-efficacy in the application process. Post-surveys indicated that only 5% of participants reported that they were not at all confident in their ability to write a compelling research statement, compared to 40% of respondents in the pre-survey. Participants also highlighted value in the *Research 101* and *Slaying the PhD Application* sessions. One participant shared, "I especially enjoyed the Research 101 session because it allowed me to start thinking about my research interests and potential research questions that I may want to discuss in my application. Prior to this event, I did not think about my research interest extensively. Although I was aware about topics that interested me, developing a research question was extremely helpful." In these sessions, participants engaged with both presenters and peers in discussions that demystified what it means to conduct education research. They also practiced communicating their research interests to an academic audience and received feedback prior to completing and submitting their applications. Many participants appreciated the practical utility of these sessions.

Intergenerational community building

When asked about the most valuable aspect of the program, participants highlighted the importance of community building, centering racially minoritized identities, and "humanizing" graduate education. One participant wrote, "seeing and interacting with folks who look like me helped me to know [graduate education] is possible." Other participants wrote about the ways that the fishbowl discussion revealed a shared dialectical experience of marginalization and perseverance in the academy. One participant shared, "the discussion was extremely helpful and affirming. I appreciated hearing stories of professors, postdocs, and current students." Reflecting on experiences of imposter syndrome, another participant shared that PPS was the first time that she allowed herself to just "breath and let it out..." knowing that "someone else understands and empathizes." Having an opportunity to deeply connect with Scholars of Color who shared similar lived experiences and tensions navigating the academy had a great impact on our participants' ability to see themselves as part of our growing community of practice.

Future improvements

In response to questions around areas of improvement for PPS, participants mentioned the limited time and amount of space for the workshop. Specifically, participants wanted more time for the Grad Chat Hot Topics Roundtables session. One participant shared, "I really would have liked to visit all the fishbowl sessions, I had to choose and it was difficult." Another participant wrote that while they considered it a privilege to attend PPS, "In the future, maybe larger space would make transitions between activities less time consuming." Ultimately, participants gained valuable information and constructed an open and honest space that centered the lived experiences of both participants and volunteers. Future considerations around the space and one-day model will be important for future iterations of the program.

Implications and future directions

While diversity is a popularly espoused value in the field of higher education, extant PhD preparation programs rarely leverage the inherent value in Communities of Color in the design of learning environments. More frequently, these programs employ approaches that seek to *fix* People of Color who are positioned as underresourced and disadvantaged. We unequivocally reject this narrative. Supported by our findings from the first iteration of PPS, we argue that taking up the work of culturally affirming and asset-based approaches are necessary

design features for programs seeking to simultaneously support diversity and equity in academe. We plan to integrate our findings into the next iteration of PPS, which will take place in Fall of 2020.

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