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Advancing Inclusion: A Professional Development Series for Faculty at a Hispanic Serving Institution

Dr. Dianne Delima, University of California, Irvine

Dr. Dianne G. Delima is the Project Policy Analyst for The Institute for Meaningful Engagement (TIME). Dr. Delima received her doctorate in Higher and Postsecondary Education at Teachers College, Columbia University, where she focused on the learning experiences of first-generation college-going students of color and faculty members' use of a funds of knowledge approach for teaching in college classrooms. Her research has been published in College Teaching and in two edited volumes. Dr. Delima's work and research interests are informed by her prior roles in elementary schools in Southern California, as a Research Assistant for the Department of Mexican American Studies at the University of Arizona, and her involvement with Professor Anna Neumann on Metropolitan Colleges Institute for Teaching Improvement at Columbia University. Her research interests in higher education are supplemented by her prior work as a student affairs administrator at Barnard College and as a Researcher and Administrative Coordinator for the Center for Understanding Race Education, under the direction of Professor Amy Stuart Wells.

Dr. Pheather R Harris, University of California, Irvine

Dr. Harris has worked in postsecondary education for over two decades in various capacities. She began her career at Santa Monica College as a counseling aid at the Extended Opportunities Programs and Services office prior to her role as an Assistant Director of Admissions at the University of Southern California. She then moved to Cambridge, MA to pursue her Master's Degree in Higher Education, with a focus on Risk and Prevention, and began working at Tenacity, a non-profit organization focused on social-emotional learning and literacy development for middle school youth, as a Prevention Specialist. Dr. Harris formally moved to the east coast when she began her work at the Gates Millennium Scholars Program as a Senior Program Manager – managing the Academic Empowerment Program across partner organizations: the United Negro College Fund, The Asian Pacific Islander American Scholarship Fund, The Hispanic Scholarship Fund, and the American Indian Graduate Center Scholars. Dr. Harris received her Bachelor of Arts degree in Communication from the University of Southern California, a Master of Arts degree in Education from Harvard University, and a Doctorate in Higher Education Administration from The George Washington University. She is also an NSF IASPIRE Fellow and the Principal Investigator on a nearly $3-million dollar grant aimed at advancing access, diversity, equity, and inclusion in STEM . Her research interest includes exploring the relationship between faculty mentor engagement and minoritized student STEM persistence. She is a critical methodologist who uses both post positivism and postmodernism to guide her inquiries.

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Presenter:
Dr. Pheather R. Harris

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Agenda

1. Context
2. Overarching Goals
3. Professional Development Experience
4. Research Findings
5. Conclusion

Context

STEM Degree Completion Disparity Between Minoritized and Non-Minoritized Students:

There are two distinct examples of how the environment influences the academic experience of minoritized students.

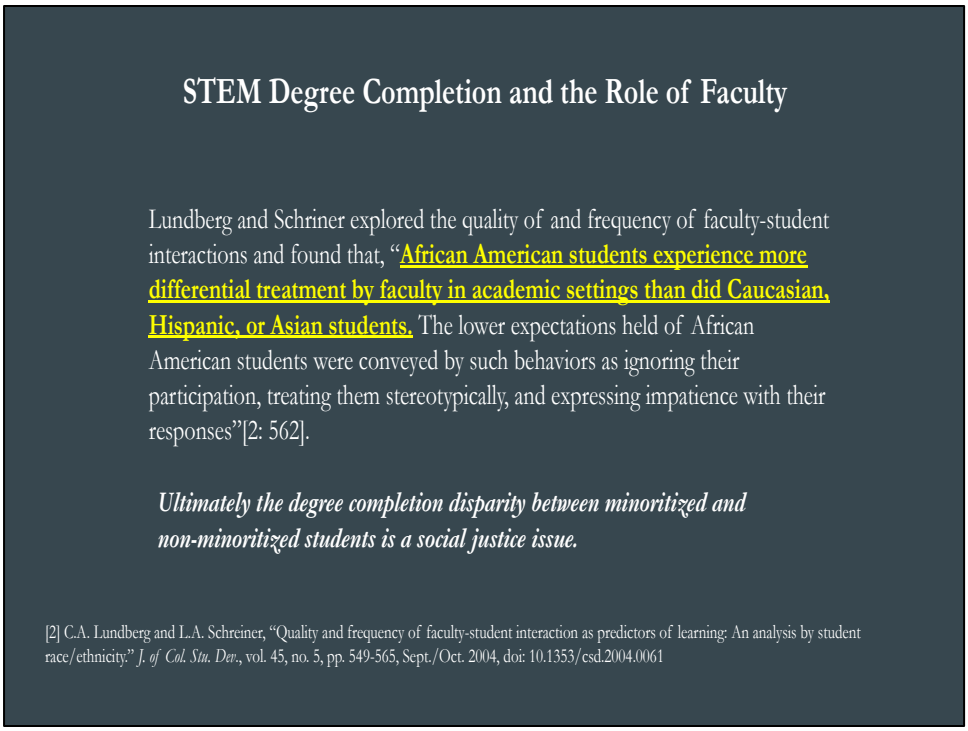
1. Systemic Inequity: minoritized students arrive to their STEM classrooms embedded in social (economic, political, judicial, educational, healthcare, and geographical) systems that are inequitable - which influences the way that STEM curriculum is experienced. Not addressing the systems students are in when designing curriculum, or exploring our social and cultural locations, can create exclusionary academic spaces.

Scholars have discussed the role of mentoring but not the nuisance of mentoring as specifically defined for minoritized students, LatinX and Black students in STEM. This proposal was written after the murder of George which influenced the definition of minoritized to address racism in post-secondary ed.

STEM Degree Completion Disparity Between Minoritized and Non-Minoritized Students

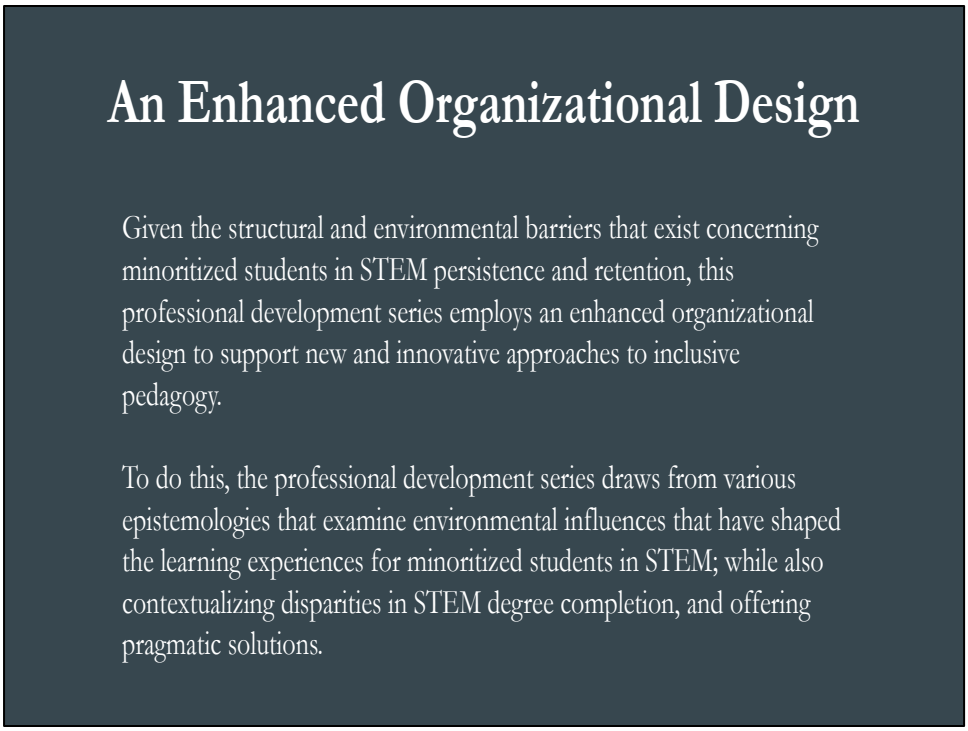
2. STEM Culture: "STEM educational environments often privilege White men and marginalize women and people of color" [1: 336]. **This distinctly White and hetero-masculine culture, creates challenges for those who deviate from that description.** This reality gives way to microaggressions and stereotype threat. Faculty play a significant role in the development of positive (or negative) classroom cultures.

[1] D. Johnson, "Campus racial climate perceptions and overall sense of belonging among racially diverse women in STEM majors." *J. of Col. Stu. Dev.* vol. 53, no. 2, pp. 336-346., March/April 2012, doi: 10.1353/csd.2012.0028



The interactions between faculty and minoritized is an important in STEM classrooms and research labs (the amount of interactions versus impact and how it problematic)

Organizational Change and Conceptual Framework



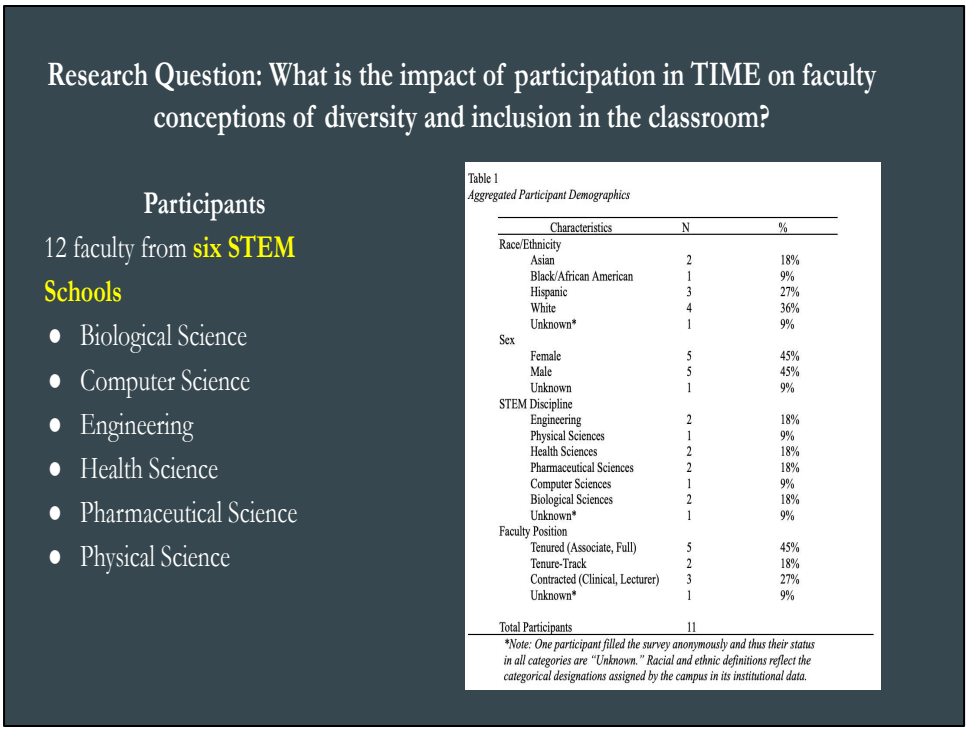
This PDE experience is shaped by amplifying systemic inequities, exposing participants to epistemological frameworks, and pragmatic solutions that shape the learning experiences of minoritized students.

Overarching goals of the PDE and its implications for research and practice.

Professional Development Experience

The PDE design and faculty involvement.

The Research



Participant overview.

Data Collection and Methodology

Surveys

- **Purpose** of surveys were to **understand** faculty experiences during the professional development series and **gauge** their plans to continue the work beyond the professional development series.
- Surveys were **deployed** a week before the first PDE session, and participants were given two-weeks to complete it.
  - Surveys were collected using Qualtrics five-point **Likert-scale**.
- Out of the 12 faculty, 11 responded to the survey (**92 percent response rate**).
  - Data was analyzed by looking at the **trends**, in proportion to the sample size, and **drawing conclusions**.
  - **Minor variations** were found in the survey responses [3].

Finding #1

When asked about their motivations for participating in a year-long professional development experience focused on access, equity, diversity, and inclusion, we found that most faculty were willing and eager to participate.

The survey finds that STEM faculty are motivated to learn more about access, diversity, equity, and inclusion. Almost all the faculty respondents (10/11) reported that they are **intrinsically motivated** to learn about the lived experiences of minoritized students in STEM.

- Almost all the faculty respondents (10/11) wanted to **learn about the teaching practices and theories that can support minoritized students in STEM**.
- All the faculty respondents wanted to **change their own pedagogy and curriculum to be inclusive and equitable** to the experiences of minoritized students in STEM.
- Most of the respondents (8/11) reported having **experiences outside of academics** that shaped their desire to learn about and understand further how they can better support minoritized STEM students.

Finding #2

The current political and social contexts and their working context also contributed to participants' motivation to become involved in the professional development series.

The survey finds that faculty are aware about the current contexts in which they teach and how that may impact their students.

- Almost all the respondents (10/11) were **influenced by current events concerning people of color** (e.g., Black Lives Matter) to learn more about the experiences of minoritzed students in STEM on campus.
- Almost all the respondents (10/11) were **aware of the significant impact of the COVID-19 pandemic** on the lives of minoritized students and these students' communities.
- Most of the respondents (8/11) reported **currently working with minoritized students in STEM** and wanting to learn how to better support them.
- Most of the respondents (9/11) reported **feeling comfortable having conversations with peers and colleagues about systemic inequity and its impact on minoritized students in STEM.**

Finding #3

The faculty respondents still have much to learn about ways to navigate issues related to access, equity, diversity, and inclusion.

The survey finds that, even though faculty want to do this work, they still have much to learn about how to incorporate access, diversity, equity, and inclusion topics and themes into their teaching.

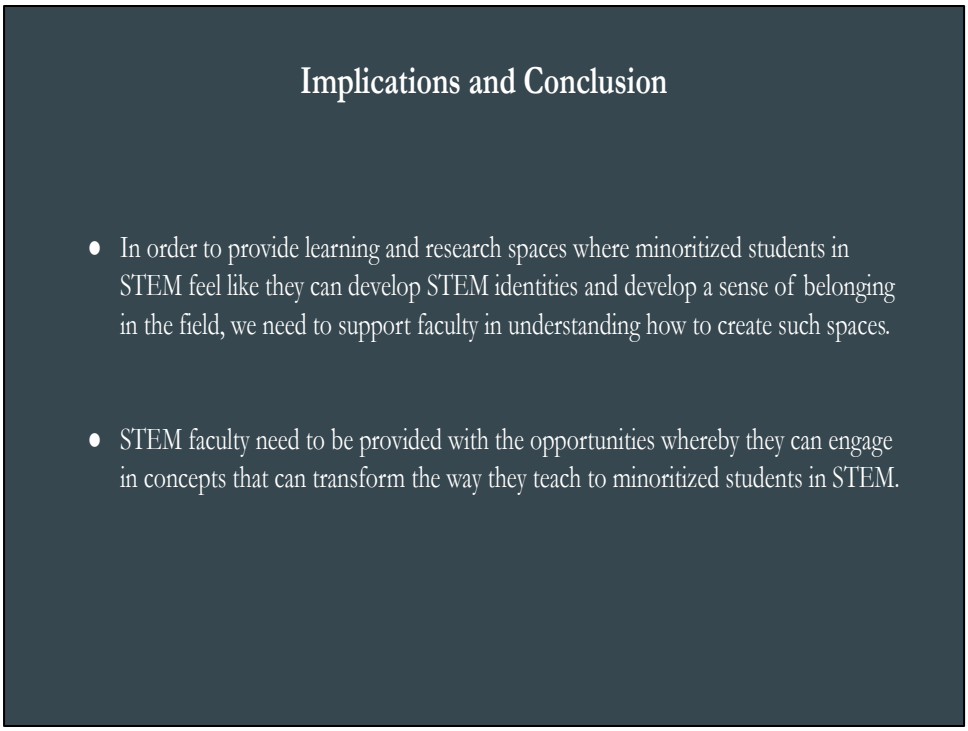
- Nearly two-thirds of the faculty respondents (7/11) reported ***not*** **having any prior exposure or training** in the theories and data that can help them create an inclusive and equitable classroom environment and curriculum.
- Less than half of the respondents (5/11) reported **feeling comfortable about having conversations with students about systemic inequity** and its impact on minoritized students.
- Less than a third of respondents (3/11) reported **being apprehensive about creating an inclusive and equitable curriculum and teaching practice in their own classrooms**.

Finding #4

The lack of exposure and comfort in doing purposeful access, diversity, equity, and inclusive work also shows up in the faculty respondents' prior and current work with students, particularly when incorporating inclusive pedagogical practices with which MS in STEM could relate.

The survey finds that the current faculty do not do enough to incorporate access, diversity, equity, and inclusion into their current teaching practices.

- Less than a third of respondents (3/11) reported **purposely incorporating the work of minoritized scholars** into their curriculum.
- A little more than half of the respondents (6/11) **acknowledged their awareness of the social systems** that impact minoritized students' academic experiences.
- Less than a fourth of respondents (2/11) **created opportunities for minoritized students in STEM to incorporate their personal experiences** into the learning of subject matter.



Implications for institutional practice and culture: a change in how STEM faculty have opportunities to learn more about access, diversity, equity, and inclusion topics and themes.

- Higher education institutions that serve minoritized students in STEM need to provide opportunities for STEM faculty to deeply interrogate their biases and their epistemological frameworks and to understand how they can be the gatekeepers to advancing minoritized students in their development of STEM identities and in progressing in their STEM careers.

References

[1] D. Johnson, "Campus racial climate perceptions and overall sense of belonging among racially diverse women in STEM majors." *J. of Col. Stu. Dev.* vol. 53, no. 2, pp. 336-346., March/April 2012, doi: 10.1353/csd.2012.0028

[2] C.A. Lundberg and L.A. Schreiner, "Quality and frequency of faculty-student interaction as predictors of learning: An analysis by student race/ethnicity." *J. of Col. Stu. Dev.*, vol. 45, no. 5, pp. 549-565, Sept./Oct. 2004, doi: 10.1353/csd.2004.0061

[3] A. Mercer, A. Lau, and C. Kennedy, "For Weighting Online Opt-In Samples, What Matters Most?" Pew Research Center, https://www.pewresearch.org/methods/2018/01/26/for-weighting-online-opt-in-samples-what-matters-most/ (accessed October 23, 2023).

Thank You