Discovering our "We": Marginalization as Connection between International STEM Faculty and their Black and Brown Doctoral Mentees

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Lisa R. Merriweather is a professor at the University of North Carolina at Charlotte. She received her PhD in Adult Education with a graduate certificate in Qualitative Inquiry from the University of Georgia in 2004. Her research focuses on issues of equity and social justice within adult education, informal education, and doctoral education. She explores the critical philosophy and sociology of race and anti-Black racism and employs Africana Philosophy, Critical Race Theory, and qualitative and historical methodology to investigate topics found at the nexus of race and adult education.

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Dr. Cathy D. Howell is a Clinical Assistant Professor and Graduate Program Director at the University of North Carolina at Charlotte. She received a Bachelor of Science degree in Community Health and Master's degree in Health Education at East Carolina University. Dr. Howell completed her doctoral degree in Educational Leadership at the University of North Carolina at Charlotte. Dr. Howell is a qualitative researcher with a multidisciplinary perspective focused on doctoral degree completion and persistence. She addresses issues of inequity, substantive mentorship, barriers and facilitators related to access in educational opportunities for Black women. Her work seeks to critically examine issues of diversity and inclusion as well as the structural inequities that impede access. She also explores research on health disparities related to mental health and chronic illness as linked to higher education obtainment for migrant and marginalized communities of color.

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Edith Gnanadass has a Ph.D. in Lifelong Learning and Adult Education with a minor in Women's, Gender, and Sexuality Studies from The Pennsylvania State University. Her research interests are at the intersection of race and learning in adult education, DesiCrit (theorizing the racialized experiences of South Asian Americans using Critical Race Theory), Cultural-Historical Activity Theory (CHAT) as a framework to analyze learning, and qualitative research. She is currently working on the following research projects: Environmental racism, Racialized experience of South Asian Americans, and Mothering during the pandemic. Her selected publications include "Learning to teach about race: The racialized experience of a South Asian American feminist educator" in Adult Learning, "New Directions for Adult and Continuing Education" in New Directions for Adult and Continuing Education, and a chapter entitled "Gender still matters in distance education" in the Handbook of Distance of Education. She is the co-editor of Adult Education Quarterly and guest editor of the upcoming Being Black in the U.S. themed issue of Dialogues in Social Justice: An Adult Education Journal.

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Our Team

AGEP
NC Alliance

Institutional Change Model
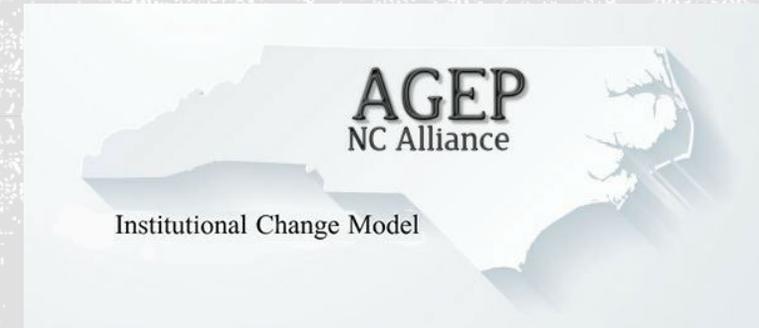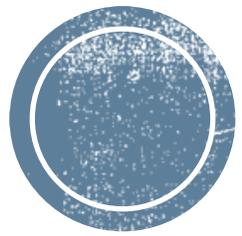
An individual has not started living until he can rise above the narrow confines of his individualistic concerns to the broader concerns of all humanity.

Rev. Dr. Martin Luther King

Birth of a New Age, 1956

Under a microscope: STEM Education

- ❖ 80% of all STEM faculty are white or Asian
- ❖ 25% of all STEM full professors are women
- ❖ Less than 10% are from racially minoritized groups
  - ❖ 2.5% are Black
  - ❖ 4.6% Latine
  - ❖ 37% of American colleges and universities have no Black STEM faculty
  - ❖ 28% have only 1 Black STEM faculty
- ❖ 53% STEM professors at HBCUs are White men.
- ❖ 22% of STEM faculty are foreign-born/international
- ❖ 75% of foreign-born/international faculty are in STEM

International/ Foreign-born faculty: Benefits

University

- Cultural exchange

- Globalization

- Work force Diversification

- Add new perspectives

- Productive

Personally

- Welcomed in departments

- People who look like me

- Benefit of the doubt

- Honorary/ideological whiteness

Challenges

- ❖ Understanding context/lack of cultural awareness
- ❖ Linguistic barriers including accents
- ❖ Lack of support, community, networking opportunities
- ❖ Isolation
- ❖ Knowledge and skills questions
- ❖ Cultural insensitivity not afforded ie students complaining about accent
- ❖ Cultural background in conflict with US norms, values, and practices
- ❖ Myth of model minority
- ❖ Disrespected
- ❖ Marginalized for being different

Conundrum
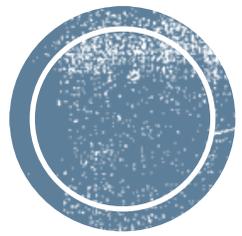
Cross- cultural mentoring

Mentoring

- Mentors have more experience
- Serve in multiple capacities including advising
- Involves bi directional interpersonal interaction
- Influenced by micro, meso, and macro cultures
- Pivotal to success of doctoral students
- Not equitable experienced
- Limited STEM doctoral mentors who are racially minoritized

Cross Cultural Mentoring

- Require increased awareness of micro, meso, and macro cultures
- Required universal particularism
- Requires acknowledgement and mitigation (dismantling) of privilege
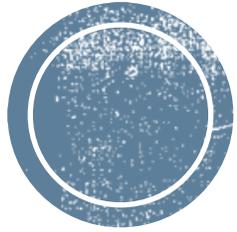
❖ Qualitative Case Study
❖ 2 Historically White Institutions (HWI) & 1 Historical Black College and University (HBCU)
❖ Cross case analysis
❖ 18 semi-structured interviews with international faculty
  ❖ Predominately men
  ❖ Predominately from Asia
  ❖ Represented a range of Science discipline
❖ Constant comparison data analysis
❖ Limitations
  ❖ Sample not representative of STEM Faculty

Methodology
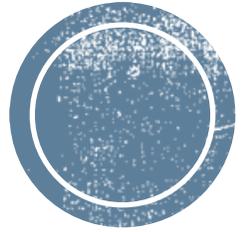
What are the perceptions of STEM doctoral mentoring of international STEM doctoral faculty based in US institutions?

1. When in Rome – Pragmatic Mentoring
2. Science as the Big Joker – Science Culture as Universal;
3. One Step in, One Step Out – Mimicking Whiteness.

Findings

When in Rome – Pragmatic Mentoring

1. More akin to advising
2. Prioritized disciplinary knowledge and career development
3. Expectations of how students should show up
4. Few were holistic in approach
5. Few had training in how to mentor
6. Lack of support for mentoring

Science as the big joker – Universal science culture

- Belief in universality of science culture
  - Both race and gender neutral
- Requires teaching the fundamentals without questioning assumptions undergirding them.
- Lack of critical interrogations of science
- Limits practice of culturally liberative mentoring

One step in, one step out – Mimicking whiteness

- Limited opportunity to work with racially minoritized students

- Culture belonged to international students

- Black students were infantilized and deemed inferior – Deficit Framing

- Hypervigilance
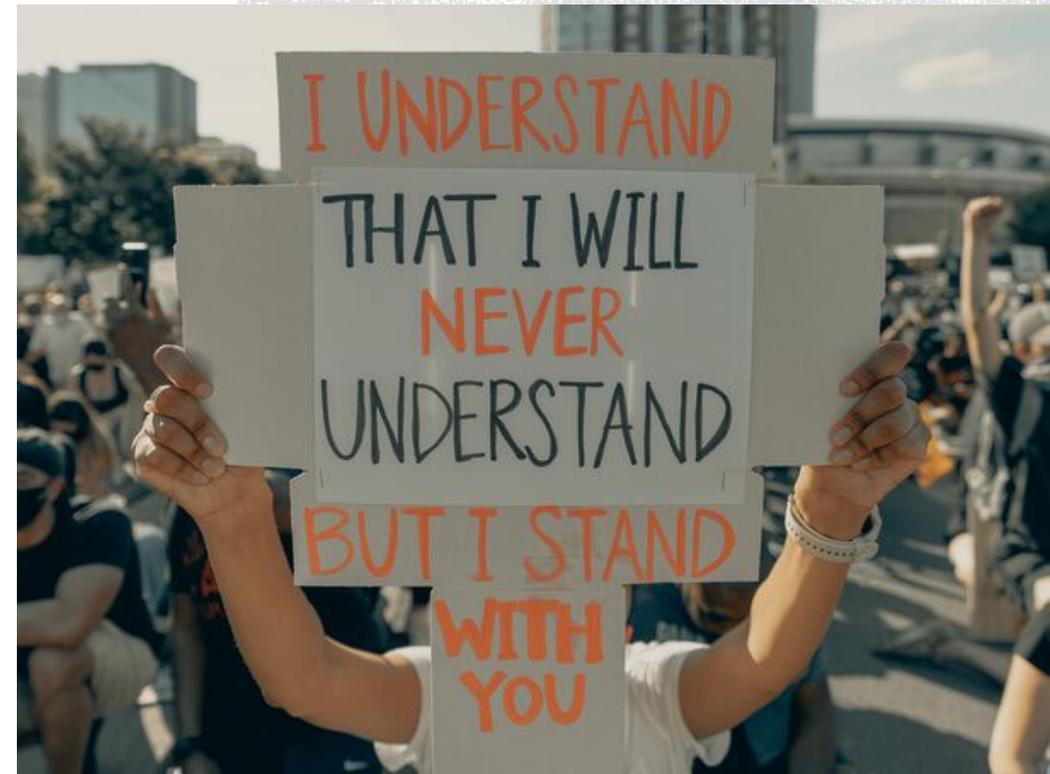
❖ Hegemonic Normativity
  ❖ Lack criticality
❖ Narrow conceptions of science adversely impact cross-cultural mentoring
❖ Expansion of social and epistemological positions needed to liberate international faculty and recognize shared experiences of marginalization

Discussion

❖ Intentionality

❖ Brave spaces of mentor development training

❖ Recognition of humanity - Our We

Conclusion

Human flourishing
must remain the core objective
of all technological progress
(Humanistic Futurism)

References

[1] P. Altbach, and M. Yudkevich, "Twenty-first century mobility: The role of international faculty," *International Higher Education*, vol. 90, no. Summer, pp. 8-10, 2017. [Online]. Available: http://dx.doi/orMg/10.6017/ihe.2017.90.9760

[2] A. Gahungu, A., "Integration of foreign-born faculty in academia: Foreignness as an asset," *The International Journal of Educational Leadership Preparation*, vol. 6, no. 1, pp. 1-22, Jan-Mar, 2011.[Online]. Available: http://cnx.org/content/m36649/1.2/

[3] D. S. Kim, S. Twombly, and L. Wolf-Wendel, "International faculty in American universities: Experiences of academic life, productivity, and career mobility," *New Directions for Institutional Research,* vol. 155, pp. 27–46, 2012. [Online]. Available: http://doi.org/10.1002/ir

[4] E. Omiteru, J. Martinez, R. Tsemunhu, and E.F. Asola, "Higher education experiences of international faculty in the U.S. Deep South," *Journal of Multicultural Affairs,* vol. 3, no. 2, Article 3, 2018. [Online]. Available: https://scholarworks.sfasu.edu/jma/vol3/iss2/3

[5] Y. Furuya, M. I. Nooraddini, W. Wang, and M. Waslin, "A portrait of foreign-born teachers in the United States Institute for Immigration Research, George Mason University. 2016. [Online]. Available: https://www.immigrationresearch.org/system/files/Teacher_Paper.pdf

[6] A. Herget, "Foreign-born faculty face challenges," Higher Ed Jobs, August 18, 2016. [Online]. Available: https://www.higheredjobs.com/Articles/articleDisplay.cfm?ID=1012

[7] O. Majesky-Pullmann, "Just the stats: a closer look at STEM majors," *Diverse Issues in Higher Education*, Dec 14, 2006. [Online]. Available: https://www.diverseeducation.com/faculty-staff/article/15082918/just-the-stats-a-closer-look-at-stem-majors

[8] J. Lawrence, S. Celis, H. S. Kim, S. Lipson, and X. Tong, "To stay or not to stay: retention of Asian international faculty in STEM fields," *Higher Education*, vol. 67, pp. 511–531, 2014. DOI 10.1007/s10734-013-9658-0

[9] Author, 2021, NYU Press

[10] J. Shiao, "The meaning of honorary whiteness for Asian Americans: boundary expansion or something else?," *Comparative Sociology*, vol. 16, iss. 6, pp. 788-813, 2017. [Online]. Available: https://doi.org/10.1163/15691330-12341445

[11] L. Merriweather. Ontological Blackness in adult and higher education. In Occasional Papers. SUNY Empire State University. 2022.

References

[23] D. Merolla and R. Serpe, "STEM enrichment programs and graduate school matriculation: the role of science identity salience," *Social Psychology Education*, vol. 16, no. 4, pp. 575–597, 2013.

[24] M. N. Davidson and L. Foster-Johnson, "Mentoring in the preparation of graduate researchers of color," *Review of Educational Research*, vol. 71, no. 4, pp. 549-574, 2001. [Online]. Available: https://www.jstor.org/stable/3516098.

[25] M. Gasman, A. Hirschfeld, and J. Vultaggio, J., "Difficult yet rewarding": the experiences of African American graduate students in education at an ivy league institution," *Journal of Diversity in Higher Education*, vol. 1, no. 2, pp.126-138, 2008. doi: 10.1037/1938-8926.1.2.126

[26] R. Yin, *Case study research: design and methods*, 5th ed., Thousand Oaks, CA: Sage Publishing, 2018.

[27] L. Merriweather, C. Howell, A. Sanczyk, N. Douglas, K. Villanueva, K., S. Casey, Lifting the veil: Toward the development of culturally liberating STEM faculty doctoral mentors. In S. Linder, C. Lee, K. High (Eds.), *Handbook of STEM faculty Development.* Information Age Publishing, 2022.

[28] R. Scholz and O. Tietje, Eds., *Embedded Case Study Methods*, Thousand Oaks, CA: SAGE Publications, 2013

[29] A. Strauss, and J. Corbin, *Basics of qualitative research: techniques and procedures for developing grounded theory*, 2nd ed., Thousand Oaks, CA: Sage Publications, 1998.

[30] L. Merriweather, N. Douglass, C. Howell, & A. Sancyzk. Out with the old, in with the new: What the National Academies of Science, Engineering, and Medicine got right about STEM doctoral mentoring. Infonomic Society, In press

[31] L. Gordon, *Bad faith and antiblack racism*, New York: Humanity Books, 1995.

[32] M. Dumas and k. ross, "Be real black for me" imagining BlackCrit in education," *Urban Education,* vol. 51, no. 4, pp. 415-442, 2016.

[33] S. Vakil and R. Ayers, "The racial politics of STEM education in the USA: Interrogations and explorations," *Race, Ethnicity and Education*, vol. 22, no. 4, pp. 449-458, 2019. DOI: 10.1080/13613324.2019.1592831