

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

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Dr. Edith Gnanadass

Dr. Cathy D. Howell



Dr. Lisa R. Merriweather

Our Team





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



- ❖ 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

Under a microscope: STEM Education



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



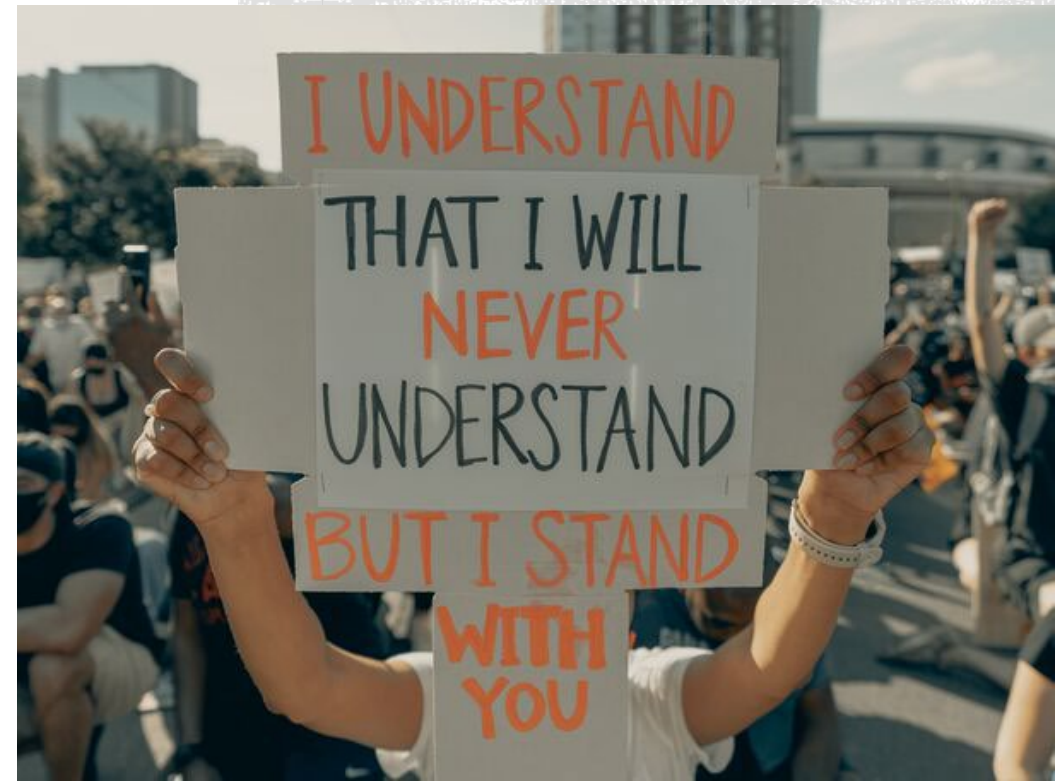
Science as the big joker – Universal science culture

- 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



- Limited opportunity to work with racially minoritized students
- Culture belonged to international students
- Black students were infantilized and deemed inferior - Deficit Framing
- Hypervigilance

**One step in,
one step out –
Mimicking
whiteness**





- ❖ 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



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.org/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. Sanczyk. 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

