CRITICAL MATHEMATICS EDUCATION FOR SUB-SAHARAN AFRICAN YOUTH:
TOWARDS EPISTEMIC FREEDOM

Oyemolade Osibodu
York University
mosibodu@yorku.ca

Keywords: Ethnomathematics, equity and diversity, first nations and indigenous cultures, informal education

I draw on the findings from one study to show how Njo (pseudonym), a Gambian youth in the study shifted towards Epistemic Freedom during the course of our semester long co-exploration. I argue that when multiple knowledges are valued in mathematics spaces, students are able to see themselves as capable mathematics learners. Ndlovu-Gatsheni (2018) speaks about epistemicide as the killing of indigenous peoples' knowledges, that occurred during colonialism and is still in place now. Thus, he introduced Epistemic Freedom as “democratizing ‘knowledge’ from its current rendition in the singular into its plural known as ‘knowledges’.” In mathematics education, epistemic freedom pushes us to make room for multiple knowledges as this shifts towards what Ndlovu-Gatsheni termed “cognitive justice.”

Using African epistemologies – Sankofa, Ubuntu, and the Fela Anikulapo-Kuti Music (FAM) – I sought to co-explore with five Sub-Saharan African youth, if and how they use mathematics in understanding, challenging, and disrupting social issues related to the African context. Ubuntu (Tutu, 1999) is a Southern African philosophy emphasizing that I am because we are. Sankofa (Dei, 2012) is from the Twi people in Ghana that asserts that we must look into our past before reflecting on the future. Lastly, I coined the FAM methodology from Fela’s song Teacher Don’t Teach Me Nonsense (Anikulapo-Kuti, 1986) which has three main facets including co-learning, disruption, and joy.

The research question guiding this inquiry is “what knowledges do African youth draw upon in their investigation of social issues and how might these knowledges advance our understanding of critical mathematics education?” In the spring of 2019, I partnered with five sub-Saharan African youth in an out-of-school context. Together, we met for approximately two hours once a week using a storytelling approach. I collected audio and video data from all sessions along with WhatsApp group messages. I ensured that we collectively designed the space with the overarching goal of making sense of social issues on the African continent. I was intentional in not centering mathematics but instead was interested in seeing if mathematical ideas emerged in thinking through social issues. I analyzed the data thematically while ensuring that I was guided by the stories told (Wilson, 2008).

In the poster, I will use seven narratives that reveal Njo’s journey towards epistemic freedom as she began to claim authority in her mathematics education. These narratives reveal her identity formation, disruption of colonial discourses, awareness and valuing of multiple ways of knowing, and lastly, multiple ways of knowing in mathematics. Njo’s journey showed how through looking at cultural artifacts and reflecting on her own experiences, she was able to value indigenous [mathematics] knowledge. Moreover, she asserted that if young children are given the opportunity to see the multiplicity of knowledges within their communities, perhaps they will enter formal mathematics spaces with more confidence and belief in their abilities.

References
