Going beyond #RetireELL: A call for anti-colonial approaches to languages in STEM education

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Projects aimed at retiring deficit-oriented naming imposed upon racially and linguistically minoritized students (see García & Leiva, 2014 and a recent commentary by González-Howard & Suárez, 2021) are critical moves in countering deficit views perpetuated through policy documents and research publications. However, merely changing labels from "English language learner" to "emergent bilingual" or "multilingual" (which are often actualized as a replacement of an acronym, ELL to another, ML) is insufficient to desettle the colonial matrix of power continued within and through STEM disciplinary domains (Bang & Marin, 2015; Mignolo, 2009). We argue that a retirement of the term "English language learner" (#RetireELL) can still fail to improve the structures that have created the conditions of marginalization for these students in the first place, unless we challenge underlying white normativity, Eurocentrism, and intersectional oppressions.

To be clear, we are not arguing that naming is not important or worthy of discussion. We recognize that naming practices are entangled with the ongoing white settler-colonial project and we should continuously reflect on and dismantle the power of naming (Paris, 2019; Rivera Maulucci & Mensah, 2015). Defining and using asset-based terms that can communicate political and pedagogical agenda accurately, as called for in the prior commentaries, is an important step toward the redistribution of resources for improving formal education opportunities for those who are disadvantaged systematically (González-Howard & Suárez, 2021; Grapin, 2021). However, we argue that depoliticized asset-based narratives that do not explicitly attend to issues of power, domination, linguistic racialization, and associated unequal resource (re) distribution and unjust representations can risk masking and perpetuating inequity. Language and race are intensely entangled. The label of "ELLs" is a racial marker functioning in "stigmatizing ways by positioning racialized speaking subjects as deviant and inferior from the perspective of white listening subjects" (Rosa & Flores, 2017, p. 628). What we are calling for in the #RetireELL movement is our commitment to continuously interrogate underlying coloniality and racism, actualized in the form of naming.

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Such a stance implies that oppressive racialized and colonial projects at the institutional and interpersonal spaces should be named, interrogated, and challenged. For example, in the United States, the expansion of dual immersion and other bilingual programs—primarily Spanish-English programs that claim to offer Latin* students educational equity—has been driven by parents of white, middle-class English-dominant children (Chávez-Moreno, 2021). The benefits of multilingualism are afforded to white children while historically marginalized and racialized communities' languages are viewed largely as problems that need to be solved in schooling contexts (Kayumova & Tippins, 2021). Globally, Indigenous languages have been systematically erased by the institutional practices enforced by settler-colonial, nation-state projects, which have also erased epistemology and ontology rooted in Indigenous communities (Bang & Marin, 2015). Multilingual Black youth have largely been invisible and overlooked within the line of research on language in STEM education due to anti-Black racism and racialized stigmas attached to languages (Ortiz, in press). By naming and challenging anti-Black racism and colonialism, we could instead make visible Black children's linguistic brilliance and also address how anti-Black racism continues to persist and shape youth's racialized experiences in STEM classrooms (Baker-Bell, 2020; Irizarry et al., 2021; see #CenteringBlackStudents). Anti-colonial approaches to languages in STEM education bring forth the complex coupling of racialization and linguistic practices shaped through colonization *and* allow us to imagine and enact pedagogies that challenge the erasures, oppression, and subjugation of historically marginalized and racialized languages and communities.

We cannot detach the coupling of language and race from other interlocking systems of oppression of class, gender, and sexuality that shape young people's marginalization and resistance. We should not single out the category associated with language as an identity marker without considering other intersectional histories of oppression (Crenshaw, 1990). If we do not challenge hegemonic and settled expectations (Bang & Marin, 2015) in white, elitist, patriarchal, and heteronormative spaces of STEM education (e.g., Leyva, 2021; Mensah, 2019), racialized people with minoritized language markers will continue to be measured and deviated against mainstream norms—even when they are called "multilinguals" by their teachers and researchers. Unless the underlying systems of oppression are dismantled, articulations of "emergent" in "emergent bilingual" could be reappropriated to mean "not enough."

Given the primacy (our history) of labeling students comparatively to the dominant groups (white listening subject), the specifics of a new approach to discussing students' language practices in an anti-colonial manner will take unlearning and learning anew; the final outcome is yet unknown. Anti-colonial approaches to #RetireELL are incomplete without learning from the acts of resistance, reclaiming, and reimagining by those who fought against coloniality and domination (Paris, 2019). Going beyond the replacement of terms, though that is certainly part of the process, we can reimagine praxis toward centering the voices of people who live across multiple linguistic and national borders. Such anti-colonial perspectives urge the science and mathematics education community to take a global perspective on issues of languages beyond the Global North.

Anti-colonial approaches to languages in STEM education require researchers to see, name, and acknowledge the pain, struggle, and desire imposed by English language hegemony and the colonial world order. At the same time, these approaches demand that we make visible the resistance, agency, and capabilities of racially and linguistically minoritized people who are struggling or refusing to make English "their own." Doing so would mean continuously interrogating the white settler colonial gaze (Paris, 2019) and assumptions embedded in our research and pedagogy while centering multilingual young people's full humanities and voices, which have been largely silenced historically.

Language is not apolitical. Language racializes us, language colonizes in visceral ways, and language marks our marginalities. Yet, language can heal us, language can connect us, and with the power of language, we can imagine history anew.

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REFERENCES

Baker-Bell A (2020). Linguistic justice: Black language, literacy, identity, and pedagogy. Routledge. https://www.routledge.com/Linguistic-Justice-Black-Language-Literacy-Identity-and-Pedagogy/Baker-Bell/p/book/9781138551022

Bang M, & Marin A (2015). Nature–culture constructs in science learning: Human/non-human agency and intentionality. Journal of Research in Science Teaching, 52(4), 530–544. 10.1002/tea.21204

Chávez-Moreno LC (2021). Dual language as white property: Examining a secondary bilingual-education program and Latinx equity. American Educational Research Journal, 58(6), 1107–1141.

Crenshaw K (1990). Mapping the margins: Intersectionality, identity politics, and violence against women of color. Stanford Law Review, 43(6), 1241–1299. https://heinonline.org/HOL/P?h=hein.journals/stflr43&i=1257

García O, & Leiva C (2014). Theorizing and enacting translanguaging for social justice. In Blackledeg A & Creese A (Eds.), Heteroglossia as practice and pedagogy (pp. 119–216). Springer. https://link.springer.com/chapter/10.1007/978-94-007-7856-6_11

González-Howard M, & Suárez E (2021). Retiring the term English language learners: Moving toward linguistic justice through asset-oriented framing. Journal of Research in Science Teaching, 58(5), 749–752. 10.1002/tea.21684

Grapin S (2021). Toward asset-oriented and definitionally clear terminology: A comment on González-Howard and Suárez (2021). Journal of Research in Science Teaching, 58(5), 753–755. 10.1002/tea.21686

Irizarry Y, Madkins TC, Miller B & Montejos Edwards K (2021). Racialized mathematics learning environments: Understanding and working toward inclusive secondary mathematics classrooms. Working Paper #1 for Student Experience Research Network. OSF preprint. https://osf.io/9jpf6

Kayumova S, & Tippins DJ (2021). The quest for sustainable futures: designing transformative learning spaces with multilingual Black, Brown, and Latinx young people through critical response-ability. Cultural Studies of Science Education, 16(3), 821–839. 10.1007/s11422-021-10030-2 [PubMed: 34484464]

Leyva LA (2021). Black women's counter-stories of resilience and within-group tensions in the white, patriarchal space of mathematics education. Journal for Research in Mathematics Education, 52(2), 117–151. 10.5951/jresematheduc-2020-0027

Mensah FM (2019). Finding voice and passion: Critical race theory methodology in science teacher education. American Educational Research Journal, 56(4), 1412–1456. 10.3102/0002831218818093

Mignolo WD (2009). Epistemic disobedience, independent thought and decolonial freedom. Theory, Culture & Society, 26(8), 159–181. 10.1177/0263276409349275

Ortiz N (in press). Let our rejoicing rise without bound: A focus on Black language and matheamtics learning. International Journal of Qualitative Studies in Education.

Paris D (2019). Naming beyond the white settler colonial gaze in educational research. International Journal of Qualitative Studies in Education, 32(3), 217–224. 10.1080/09518398.2019.1576943

Rivera Maulucci M, & Mensah FM (2015). Naming ourselves and others. Journal of Research in Science Teaching, 52(1), 1–5. 10.1002/tea.21196

Rosa J, & Flores N (2017). Unsettling race and language: Toward a raciolinguistic perspective. Language in Society, 46(5), 621–647. 10.1017/S0047404517000562