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Proposal of Teacher Training in DEI + STEM: A Collaborative Work in Latin America and the Caribbean

[ASEE Annual Conference and Exposition, Conference Proceedings](#) • [Conference Paper](#) • 2024

[Sánchez-Gómez, Juan Sebastián](#)^{a,*} [✉](#); [Robles, Laura Eugenia Romero](#)^{b,*} [✉](#); [Cajiao, María Catalina Ramirez](#)^a [✉](#); [Cervantes, Libis Valdez](#)^{c,*} [✉](#); [Salazar, Luis Alberto Cruz](#)^d

^aUniversidad de los Andes, Engineering School, Colombia

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Abstract

As a result of growing student mobility and globalization, higher education institutions now host a more diversified student body comprising individuals of varying ages, races, ethnicities, nationalities, linguistic/cultural backgrounds, and sexual orientations. An inclusive, diverse environment promotes social progress and justice in higher education. It empowers students and staff, encouraging the generation of novel ideas and fostering higher levels of achievement and a better sense of belonging among students. Recently, one of the key premises in higher education has been the importance of educators being proactive rather than reactive in addressing cultural issues. It is a reality that the professional development and training of teachers that train them authentically and effectively on issues of diversity, equity, and inclusion, effectively and respectfully with all vulnerable groups, is still incipient despite being the key to creating a climate in which all students truly feel part of the learning community. Integrating Diversity, Equity, and Inclusion (DEI) into the curriculum is complex and may not be seen as essential in teacher education, especially in contexts with low or no diversity. However, one of the educators' responsibilities historically is to provide students with the basic skills to become successful members of our society. To be successful in any social or professional group, it is necessary to be tolerant of differences, to be accepted, and to accept others. By providing professional development and formal training in DEI, teachers could have the tools to teach students to truly understand the characteristics of others and create an inclusive environment. This study proposes to define a research methodology whose data collection and analysis tools will allow us to answer our research question on how to train teachers in Latin America and the Caribbean in DEI from the educational approach in Science, Technology, Engineering, and Mathematics (STEM). Following a multiple case study methodology, this paper presents the results of teacher training in DEI+STEM in the context of higher education institutions in Latin America and the Caribbean, which are directly related to some advances in compliance with Sustainable Development Goals (SDG) number 4 on quality education of the countries of this region in the SDG Index. The obtained data allow us to understand the existence of educational needs of university professors from Latin America and the Caribbean, who wanted to learn not only about STEM and migration but also about the intersectionality of DEI with other minorities, such as black communities, natives, Hispanics in the United States, and LGBTQI+. © American Society for Engineering Education, 2024.

Indexed keywords

Engineering controlled terms

Curricula; Economic and social effects; Educational technology; Energy security; Engineering education; Engineering research; Personnel training; Professional aspects; Regulatory compliance; STEM (science, technology, engineering and mathematics); Teaching

Engineering uncontrolled terms

Collaborative Work; Engineering and mathematics; Globalisation; High educations; Higher education institutions; Latin America and the Caribbean; Science technologies; Student mobilities; Teacher training; Teachers'

Engineering main heading

Students

Funding details

Details about financial support for research, including funding sources and grant numbers as provided in academic publications.

Funding sponsor	Funding number	Acronym
Latin American and Caribbean Consortium of Engineering Institutions		
Institute for the Future of Education at Tecnológico de Monterrey		
Universidad de los Andes		Unianedes
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Funding text

The authors received financial support from the Latin American and Caribbean Consortium of Engineering Institutions (LACCEI) for the research, authorship, and/or publication of this article. The authors would like to acknowledge the financial support of the Writing Lab of the Institute for the Future of Education at Tecnológico de Monterrey (Mexico), and the Engineering School at Universidad de los Andes (Colombia) in the production of this work.

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