

# Chapter 21

## Removing IT-Related Fields Barriers From Indigenous Recognition and Academic Positions in Developing Countries' Tertiary Institutions

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### ABSTRACT

*This book chapter addresses the challenges faced by indigenous individuals in developing countries in their pursuit of recognition and academic positions in IT-related fields within tertiary institutions. It explores the systemic barriers that hinder their advancement, and presents strategies for creating a more inclusive and supportive environment. By examining the intersection of indigenous representation and academic positions in IT, this chapter aims to contribute to the broader discourse on diversity, equity, and inclusion in higher education and the technology sector. This book chapter seeks to shed light on the complex barriers faced by indigenous individuals in academia, particularly in IT-related fields within developing countries' tertiary institutions. By offering insights and recommendations, it aims to contribute to the ongoing efforts to create more equitable and inclusive academic environments for indigenous scholars and researchers.*

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## INTRODUCTION

Indigenous individuals in developing countries often encounter multifaceted challenges when pursuing academic positions in IT-related fields within tertiary institutions. These challenges stem from historical, cultural, and systemic factors that have contributed to their underrepresentation and limited recognition within academic settings (Adams & Patel, 2020; Baker & Nguyen, 2017; Chen & Brown, 2023). The context of colonial legacies, cultural biases, and limited access to resources has created barriers that hinder the full participation and recognition of indigenous scholars and researchers in IT academia. The intersection of indigenous knowledge systems with the academic landscape presents unique complexities that require thoughtful consideration and proactive measures to address (Williams & Garcia, 2021). The experiences of indigenous individuals in IT academia are shaped by a complex interplay of historical marginalization, cultural biases, and limited access to resources. The enduring impact of colonial legacies has contributed to the underrepresentation of indigenous scholars and researchers in academic positions within IT-related fields (Chen & Brown, 2023). Moreover, cultural biases and systemic barriers have often marginalized indigenous perspectives, hindering their full recognition and participation in academic settings (Kim & Patel, 2023). The lack of access to resources, mentorship, and support networks further compounds the challenges faced by indigenous individuals pursuing academic positions in IT-related fields. The topic of removing barriers for indigenous recognition and academic positions in IT-related fields within developing countries' tertiary institutions is critical in addressing systemic inequalities that have historically marginalized indigenous populations. In many developing nations, indigenous communities face significant challenges in accessing quality education and professional opportunities, particularly in rapidly evolving fields like information technology (Yunkaporta, 2009). These barriers are often rooted in a combination of socio-economic factors, cultural biases, and institutional practices that fail to accommodate the unique needs and perspectives of indigenous students. Historically, indigenous peoples have been underrepresented in higher education, particularly in technical and scientific disciplines (Rodriguez & Smith, 2023). This underrepresentation is exacerbated by a lack of culturally relevant curricula and support systems that recognize and value indigenous knowledge and experiences. As a result, many indigenous students may feel alienated or unsupported in academic environments that do not reflect their cultural identities or address their specific challenges (Patel & Nguyen, 2022). Moreover, the digital divide remains a significant issue, with many indigenous communities lacking access to the necessary technology and resources to engage fully in IT education. This gap not only limits their participation in academic programs but also hinders their ability to contribute to and benefit from the technological advancements that shape modern society. In light of these challenges, it is essential to explore strategies that can effectively dismantle these barriers. This includes fostering inclusive educational practices, developing supportive institutional policies, and creating pathways for indigenous students to thrive in IT-related fields (McMahon, 2010; Rodriguez & Smith, 2023). By addressing these issues, tertiary institutions can play a pivotal role in promoting equity, diversity, and innovation within the academic landscape, ultimately benefiting both indigenous communities and society as a whole. Recognizing the importance of indigenous perspectives in technology is not just a matter of social justice; it is also crucial for the development of solutions that are culturally relevant and effective. As the global economy increasingly relies on technology, ensuring that indigenous voices are included in this narrative is vital for sustainable development and the creation of a more inclusive future (Vass, 2012). Addressing the barriers to indigenous recognition and academic positions in IT-related fields holds significant importance in fostering diversity, equity, and inclusion within tertiary institutions (Mollis &

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