Chapter 4
Navigating Cultural Diversity With EDI Skills

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ABSTRACT

In our increasingly interconnected world, recognizing and valuing cultural diversity is crucial for creating inclusive and equitable environments. This chapter seeks to delve into the principles of equity, diversity, and inclusion (EDI) and their significance in preparing students for diverse, multicultural settings. It will also emphasize the importance of professional development for staff, particularly those with multicultural backgrounds, to enhance their ability to succeed in transnational higher education contexts. This chapter will serve as a comprehensive guide for educational professionals, policymakers, and institutions aiming to improve staff competencies in a transnational environment. It will present a multi-faceted approach to staff development, encompassing theoretical frameworks, practical strategies, and real-world applications.

1. INTRODUCTION

In our increasingly interconnected world, recognizing and valuing cultural diversity is crucial for creating inclusive and equitable environments. This chapter seeks to delve into the principles of Equity, Diversity, and Inclusion (EDI) and their significance in preparing students for diverse, multicultural settings. It will also emphasize the importance of professional development for staff, particularly those with multicultural backgrounds, to enhance their ability to succeed in transnational higher education contexts. This chapter will serve as a comprehensive guide for

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educational professionals, policymakers, and institutions aiming to improve their staff's competencies in a transnational environment. It will present a multi-faceted approach to staff development, encompassing theoretical frameworks, practical strategies, and real-world applications.

In this work, we will use the Foundation Chemistry module (FC101) as an illustrative example of redesigned curriculum that include EDI elements. The FC101 curriculum is designed for preliminary students enrolled in nine out of the fifteen undergraduate programs within the Faculty of Engineering at a Sino-Foreign university, "university" in further text. This module provides students with essential chemistry knowledge and skills, which are crucial for enhancing their studies and professional skills in Science, Technology, Engineering, and Mathematics (STEM) fields (Whitcomb, Kalender, Nokes-Malach, Schunn, & Singh, 2020). Reflective reviews of teaching practices and curricula benefit both educators and students by supporting quality assurance (QA) and curriculum improvements (Ashwin et al., 2020). The Quality Assurance Agency for Higher Education (QAA) issues Subject Benchmark Statements outlining expected graduate standards. The 2022 revision for chemistry mandates equity, diversity, and inclusivity (EDI) as essential skills across 28 disciplines (Ostler et al., 2022). The Royal Society of Chemistry sets professional and ethical standards, emphasizing inclusivity, integrity, respect, and responsibility for chemistry practitioners, including teachers, educators, and students (Royal Society of Chemistry, 2024).

Integrating EDI into STEM curriculum design and assessment enhances student engagement, communication skills, employability, and academic success (Khan et al., 2023). This reflective review outlines efforts to improve the FC101 curriculum by incorporating EDI principles. Revisions include updating teaching materials, adjusting teaching methods, and embedding EDI elements, guided by the visible learning model (Hattie, 2015), the DIIE (Diagnosis-Intervention-Implementation-Evaluation) model of curriculum planning (Blackmore & Kandiko, 2012; Ashwin et al., 2020). Enhancements adhere to QA standards at university, with evidence-based diagnosis, teacher training, student engagement, and feedback-driven implementation (Ellis & Hogard, 2019).

2. UNDERSTANDING CULTURAL DIVERSITY THROUGH EDI INTEGRATION

Integrating EDI into STEM curriculum design and assessment enhances student engagement, communication skills, employability, and academic success (Khan et al., 2023). This chapter outlines efforts to improve the FC101 curriculum by incorporating EDI principles. Revisions include updating teaching materials, adjusting