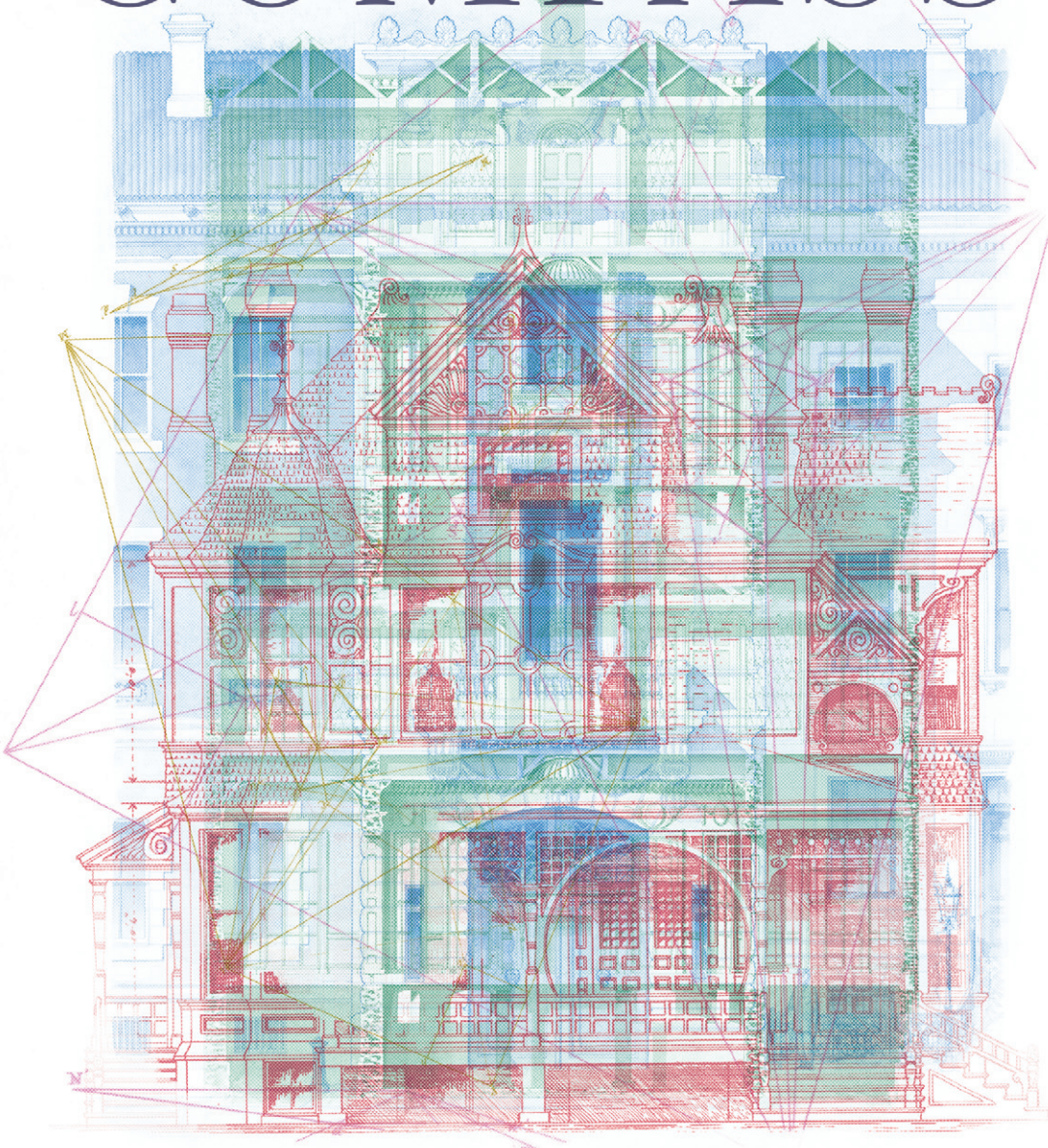
# CULTURAL COMPASS



Navigating Curriculum Design in Higher Education

GLORIA D. CAMPBELL-WHATLEY
KIMBERLY BUNCH-CRUMP
KEONYA C. BOOKER

# Cultural Compass

This page intentionally left blank

# Cultural Compass: Navigating Curriculum Design in Higher Education

BY

**GLORIA D. CAMPBELL-WHATLEY**
*The University of North Carolina at Charlotte, USA*

**KIMBERLY BUNCH-CRUMP**
*The University of North Carolina at Charlotte, USA*

AND

**KEONYA C. BOOKER**
*Charleston College Teacher Education, USA*




United Kingdom – North America – Japan – India – Malaysia – China

Emerald Publishing Limited
Emerald Publishing Limited, New Era House, 8 Oldlands Way, Bognor Regis, West Sussex, England PO22 9NQ

First edition 2027

© 2027 Gloria D. Campbell-Whatley, Kimberly Bunch-Crump, and Keonya C. Booker.
Chapters 1, 4, 7, 8, 11, and 12 © 2027 The Authors.
Published under exclusive licence by Emerald Publishing Limited.

**Reprints and permissions service**
Contact: www.copyright.com

No part of this book may be reproduced, stored in a retrieval system, transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without either the prior written permission of the publisher or a licence permitting restricted copying issued in the UK by The Copyright Licensing Agency and in the USA by The Copyright Clearance Center. Any opinions expressed in the chapters are those of the authors. Whilst Emerald makes every effort to ensure the quality and accuracy of its content, Emerald makes no representation implied or otherwise, as to the chapters' suitability and application and disclaims any warranties, express or implied, to their use.

**British Library Cataloguing in Publication Data**
A catalogue record for this book is available from the British Library

ISBN: 978-1-80791-801-9 (Hardback)
ISBN: 978-1-80791-803-3 (Paperback)
ISBN: 978-1-80791-800-2 (Online)
ISBN: 978-1-80791-802-6 (Epub)



INVESTOR IN PEOPLE

# Contents

About the Authors *vii*

Preface *ix*

**Part I: Establishing the Framework for Cultural Infusion in Education**

**Chapter 1 The Art of Cultural Adaptation in Academia** *3*
*Gloria D. Campbell-Whatley, Jugnu Swarup Agrawal, Keonya C. Booker and Diane Rodriguez*

**Chapter 2 The Building Blocks for Inclusion Infusion: Constructing Bridges, Not Barriers** *17*
*Gloria D. Campbell-Whatley*

**Chapter 3 Organizational Development: Reinventing Education, One Course at a Time** *49*
*Kimberly Bunch-Crump and Gloria D. Campbell-Whatley*

**Chapter 4 Sense of Belonging: Cultivating Community and Connection on Campus** *63*
*Keonya C. Booker and Kim M. Reddig*

**Chapter 5 Micro to Macro: Tackling Aggressions, Building Solutions** *83*
*Keonya C. Booker*

**Chapter 6 Integrating Online Learning, Artificial Intelligence, and Culture in Higher Education** *95*
*Gloria D. Campbell-Whatley and Kimberly Bunch-Crump*

**Part II: Infusing Culture: Strategies and Resources for Discipline-Specific Integration**

**Chapter 7 Bridging Worlds: Integrating Cultural Perspectives Into Science Education** *115*
*Gloria D. Campbell-Whatley and DeSilver Cohen*

**Chapter 8 Mathematics Across Cultures: Unlocking Global Insights in Numbers** *133*
*Jugnu Swarup Agrawal and Gloria D. Campbell-Whatley*

**Chapter 9 Blueprints for Inquiry: Building Learning Pathways in Liberal Arts** *145*
*Kimberly Bunch-Crump and Gloria D. Campbell-Whatley*

**Chapter 10 Brushstrokes and Blueprints: The Cultural Pulse of Art and Architecture** *153*
*Gloria D. Campbell-Whatley and Kimberly Bunch-Crump*

**Chapter 11 Embedding Culture in Teacher Preparation** *165*
*Deondra Gladney Campbell and Gloria D. Campbell-Whatley*

**Chapter 12 Beyond the Binary: Infusing Culture Into Computing Education** *181*
*Deondra Gladney Campbell and Gloria D. Campbell-Whatley*

**Chapter 13 The Cultural Prescription: Designing Health Science Course Activities** *195*
*Gloria D. Campbell-Whatley and Keonya C. Booker*

**Chapter 14 Cultural Constructs: Shaping Engineering Education for a Global Society** *217*
*Gloria D. Campbell-Whatley and Keonya C. Booker*

**Epilogue: Culture, Innovation, and the Future of Education, Technology, and Society** *233*
*Gloria D. Campbell-Whatley*

Index *239*

# About the Authors

Our contributors enriched this book by writing chapters and assisting with editorial review and revisions.

**Dr. Gloria D. Campbell-Whatley** is a Full Professor in the Department of Special Education and Child Development at the University of North Carolina at Charlotte. Her specialty is infusing culture into higher education and K–12 curriculum, and she also offers solutions for behavior problems. She is a Multi-Tiered System of Supports (MTSS) interventionist, and offers solutions for social skills training in public schools. Dr. Campbell-Whatley has written numerous articles related to cultures and has cumulatively written five academic related books.

**Dr. Kimberly Bunch-Crump**, is an Assistant Professor of Special Education at the University of North Carolina at Charlotte, North Carolina, and has over a decade of experience teaching in K-12 special education and preparing educators and behavioral health professionals at university level. She has promoted access for nonmajority male students and led a community-based mental health agency. Her research focuses on personnel preparation, culturally responsive practices, behavior interventions, applied behavior analysis, and student transitions.

**Dr. Keonya C. Booker** is a Professor of Educational Psychology and Interim Dean of the Graduate School at the College of Charleston. Dr. Booker teaches courses in Human Growth and Development and Creating Effective Learning Communities. Dr. Booker conducts research on school belongingness, inclusivity, and classroom community for nonmajority populations.

**Dr. Deondra Gladney Campbell** is an Assistant Professor in the College of Education and Integrative Studies at California Polytechnic State University. Her areas of expertise are in culturally and linguistically sustaining practices and universally designed instruction and behavior management. To date, she has published several works on culturally sustaining practices and social skills, as well as practical guides to infusing components of culturally sustaining practices into university-level coursework.

**Dr. Jugnu Swarup** Agrawal is the Senior Manager of Special Education Curriculum at Fairfax County Public Schools in Fairfax, VA. Dr. Agrawal is dedicated to bridging the gap between research and practice by empowering teachers to implement evidence-based interventions in K-12 settings. Her mission

is to promote inclusive education and support educators and parents worldwide in fostering asset-based learning environments where all students can thrive.

**Dr. Kim M. Reddig** is a Black Talent Pipeline (BTP) Program Coordinator for Young Black Leadership Alliance Nonprofit Organization (YBLA) at the University of North Carolina at Charlotte, North Carolina. Her research interest includes: (a) diversity, (b) culturally responsive teaching, and (c) inclusive practices for nonmajority students with disabilities.

**Dr. Diane Rodriguez** is the Associate Dean and a Professor at Fordham University in the Graduate School of Education in New York City. Dr. Rodriguez's primary research interest lies at the intersection of special education, bilingual and multicultural education, and teacher preparation. With a deep commitment to improving educational outcomes for nonmajority learners, she explores how bilingualism and multicultural perspectives can enhance teaching strategies, especially for students with disabilities. Her work seeks to bridge the gap between these two fields, advocating for more inclusive and equitable educational practices that support both linguistic diversity and special needs.

**Dr. DeSilver Cohen** is a tenured Associate Professor of English in the Department of English and Modern Languages at Florida A&M University. She teaches undergraduate English courses, including freshman composition and communicative skills and has contributed to the university's academic community through her long-standing service and instruction. Dr. Cohen earned her doctorate in English from Carnegie Mellon University, where she completed advanced scholarly training in literary and language studies. Her academic background and teaching experience reflect a strong commitment to higher education, student development, and excellence in English instruction.

**The Diversity Committee in the Department of Special Education and Child Development,** refined and modified the *Building Blocks of Inclusion Infusion* and the *Level of Culturally Responsive Instruction Infusion* presented in Chapter 2.

# Preface

Everyone has a culture! This book is a comprehensive guide for faculty, instructors, and professors in higher education, providing a practical framework for infusing culture into academic courses. The framework is not intended to increase faculty workload. Instead, it is designed to enhance the ability to incorporate cultural perspectives into the activities and assignments already present in the syllabus. It serves as both a resource, equipping educators with strategies to integrate cultural understandings into curricula across disciplines, realizing that all people have a culture! The text also includes tools to assess the impact of these changes, such as pre- and postmeasurements and an observation scale, allowing educators to gauge progress and identify areas for growth. By incorporating cultural perspectives, educators can create learning environments that prepare students with a broad, inclusive, and nuanced worldview.

At its core, the book introduces a multi-level model for cultural integration that offers flexible approaches applicable to various subjects and disciplines. Educators can use this framework to transform their syllabi course activities, classroom interactions, and assessment methods. Supplementary materials, including downloading Artificial Intelligence (AI) web-based training modules and an electronic booklet from Canvas, provide additional resources for those seeking a more interactive engagement with the topics presented in the book.

The book is organized into 2 parts consisting of 14 chapters and an Epilogue, each contributing to a holistic understanding of cultural integration in higher education. Part 1 of the book established the outline and logistics for overall culture infusion in the first 6 chapters. Chapter 1 establishes the framework for culture infusion and belonging, exploring how shifting student and faculty demographics shape the need for curriculum transformation. It emphasizes the role of cultural understanding in fostering a sense of belonging and highlights the benefits of expanded curricula for both students and educators. Chapter 2 introduces the "Building Blocks for Inclusion Infusion," outlining four levels of cultural integration: the Auxiliary Level for minimal infusion, the Comprehensive Level for expanded content, the Community and Societal Influence Level for deeper exploration of cultural differences, and the Conversion Level for real-world problem-solving and self-reflection. This chapter also discusses the key elements of infusion, including content, instruction, assessment, and technology. Chapter 3 shifts focus to organizational development, offering strategies for adapting institutional policies, infrastructure, and syllabi course activities to support cultural infusion. It includes practical guidance for aligning course

objectives, resources, and policies to foster an inclusive academic environment. Chapters 4 and 5 delve into the dynamics of belonging and the challenges posed by cultural interactions in the classroom. Chapter 4 explores the concept of belonging and its critical role in creating supportive learning environments, while Chapter 5 addresses microaggressions, macroaggressions, and unconscious inclinations, offering strategies to mitigate their impact and promote positive classroom interactions. Chapter 6 discusses the ramifications of online asynchronous and synchronous classes in regard to various cultures. The implications of AI, online learning, and culture considerations end the last chapter of Part I.

Part II presents the 9 remaining chapters that shift from theory to practice, offering concrete examples of culturally infused syllabi activities across a variety of academic disciplines. Portions of infused syllabi activities are presented including: (a) Learning Outcomes and Objectives, (b) Infused Assignment Example(s), and (c) Cultural Related Reading(s). These chapters provide discipline-specific guidance for integrating cultural elements into course design. Chapter 7 focuses on the sciences, including biology, chemistry, and physics, offering examples of infused syllabi activities. Chapter 8 addresses mathematics, providing strategies to incorporate cultural perspectives into mathematical instruction. Chapter 9 explores liberal arts disciplines, while Chapter 10 focuses on arts and architecture, including music, and visual arts.

Chapter 11 examines education, with a focus on special education and elementary and secondary teaching. Chapter 12 addresses computing and informatics, offering insights into integrating cultural understanding in fields such as computer science and bioinformatics.

Chapter 13 highlights health-related disciplines, including nursing, kinesiology, and social work, and Chapter 14 discusses engineering, providing examples from electrical, mechanical, and environmental engineering. The Epilogue is the last chapter that brings closure to the book and reiterates the goal and future hopeful reactions.

Part I provides the conceptual foundation for cultural infusion in higher education, introducing the frameworks, levels, and organizational strategies needed to understand why integration matters and how institutions can prepare to implement it. It defines the key principles (framework of belonging, levels of infusion, policy alignment, and addressing barriers such as microaggressions) that form the "why" and "how" at the theoretical level.

Part II builds directly on this foundation by demonstrating the application of these principles in practice. While Part I outlines the philosophy, logistics, and institutional strategies for fostering infusion, Part II translates those ideas into discipline-specific implementation. Each chapter shows how the frameworks and strategies introduced can be adapted to different fields: sciences, mathematics, liberal arts, arts and architecture, education, computing, health, and engineering, through sample learning outcomes, infused assignments, and curated readings.

Together, the two parts create a theory-to-practice continuum:

- Part I = Framework and readiness (why cultural infusion is necessary and what it requires).

- Part II = Implementation and examples (how to bring the framework to life in concrete classroom settings across disciplines).

This relationship ensures that readers not only understand the principles behind cultural integration but also gain the tools and examples needed to enact those principles in their own teaching contexts. Together, these chapters offer a roadmap for educators seeking to transform their curricula, incorporating cultural understanding into every aspect of their teaching. Whether used as a standalone resource or in conjunction with supplementary materials, this book empowers educators to create learning environments that reflect the richness of varied cultures, preparing students for a complex and interconnected world.

This page intentionally left blank

Part I

# Establishing the Framework for Cultural Infusion in Education

This page intentionally left blank

Chapter 1

# The Art of Cultural Adaptation in Academia

*Gloria D. Campbell-Whatley*[a], *Jugnu Swarup Agrawal*[b], *Keonya C. Booker*[c] *and Diane Rodriguez*[d]

[a]The University of North Carolina at Charlotte, USA
[b]Fairfax County Public Schools, USA
[c]Charleston College Teacher Education, USA
[d]Fordham University, USA

> Not everything that is faced can be changed but nothing can be changed until it is faced. – James Baldwin

## Culture and Belonging in Higher Education Institutions (HEIs)

In higher education institutions, the relationship between culture and student access is essential but often misunderstood. While the two terms are distinct, they are deeply interconnected. *Culture* encompasses the multifaceted ways individuals differ across cultures, gender, age, disability, socioeconomic status, and religion. Thereby shaping identities and worldviews, on the other hand, refers to how meaningfully those varied identities are recognized, valued, and integrated into institutional environments. In practice, access involves actively supporting, welcoming, and affirming individuals and groups across differences. *Reception* expands this by focusing on equal opportunity regardless of circumstance and intentionally correcting systemic imbalances to create access for those historically excluded (Roland et al., 2021). *Belonging* further deepens this work, describing the emotional and psychological connection individuals feel within shared spaces and communities. Belonging is linked to a wide range of positive social, emotional, and behavioral outcomes. This book asks: How can these concepts of culture, access, reception, and belonging be meaningfully realized in HEIs? In the United States, students from varied cultures and backgrounds and historical nonmajority groups (i.e., cultures, identity groups, ancestries, lineages)

**Cultural Compass, 3–16**
**© 2027 Gloria D. Campbell-Whatley, Jugnu Swarup Agrawal, Keonya C. Booker and Diane Rodriguez**
**Published under exclusive licence by Emerald Publishing Limited**
**doi:10.1108/978-1-80791-800-220261001**

have increased in number in HEIs (Higher Education Today, 2018; Mercer-Mapstone & Bovill, 2020). It is anticipated that within the next decade, these students may attain majority status, as their enrollment at HEIs is increasing significantly.

Although nonmajority groups are getting larger, they continue to face more challenges than majority groups, who achieve higher success rates in higher education settings. For example, systemic imbalances in HEI significantly impact nonmajority students, as reflected in a two-to-one disparity in completion rates and degree attainment favoring majority students (Acai et al., 2022; Advance, 2018).

## Sense of Belonging

Increasing culturally related efforts oftentimes emphasize the importance of students, faculty, and staff feeling a strong sense of belonging to the campus community. Belonging is a fundamental human need (Osterman, 2000). In learning and working environments, we are motivated to achieve when we can connect with others in affirmative and meaningful ways (Ryan & Deci, 2020). The research on the importance of belonging and community in postsecondary education is compelling. Students report higher levels of competence, persistence, and self-efficacy when they experience a sense of psychological belonging within their institution (Hussain & Jones, 2021). The interactions students have with faculty and their peers are oftentimes a predictor of belongingness. When faculty utilizes classroom practices that communicate to students that they are welcomed and a connected member of the group, students feel that they belong.

Faculty are not immune from feeling the effects of disengagement and disconnection related to a lack of belonging; this is especially true for female faculty and members of nonmajority groups (Endo, 2020). Recruiting nonmajority populations of academicians does not matter if retention is not a priority. Many times, women and nonmajority scholars are not aware of the "hidden curriculum" at some institutions. For example, while excellence in teaching, research, and service are the professional expectations of new faculty, the road to tenure can be difficult to navigate without dedicated mentors and allies. These supporters play a crucial role in guiding novice faculty as they transition from graduate student to academic professional and provide support to understand social constructs. The ever-evolving question of "fit" for nonmajority faculty may amount to simply how well that person manages interpersonal relationships with colleagues and students.

## Changes in Populations in the United States in Higher Education

Now is the time for HEIs to reconceptualize the implementation of culturally related efforts. Relative conversations regarding a better understanding of the concepts' surrounding culture are a good start but are sorely lacking for the task ahead. Language, socioeconomic status, and religion are all concepts that

include some dimensions of culture that HEIs will need to work on and develop: (a) an understanding for the unique and essential aspects of each category, (b) a sense of belonging for these populations, and (c) experiences to educate faculty, administrators, staff, and students alike concerning respect and consideration in a time of a growing and changing population.

## Changing Populations of Students and Faculty in Higher Education

Expanding the experiences of the students and faculty through increased exposure to culture is beneficial, as global demands require the ability to successfully navigate and negotiate across cultures. According to the University and College Designers Association (UCDA) (n.d.), statistics show some progress toward increasing nonmajority groups and educational opportunities for them. However, UCDA (n.d.) also explains that data demonstrate gaps in enrollment of nonmajority students and majority students, with gaps being higher for nonmajority students. According to the U.S. Bureau of Labor Statistics (2023), 61.4% of high school graduates were enrolled in college in October 2023. This is similar to the rate of 62% in October 2022, but lower than the 66.2% rate in October 2019 before the COVID-19 pandemic. The data show that college enrollment was highest among Asian and White students and lower among African American and Latin students. A breakdown of the 2023 enrollment by race/ethnicity based on BLS data is as follows in Fig. 1.1.

In the last two decades, nonmajority faculty has increased but not significantly higher than the student body at institutions of higher education. According to the National Center for Education Statistics (2023), full-time faculty in degree-granting postsecondary institutions were 40% White males, 35% White females, 7% Asian/Pacific Islander males, 5% Asian/Pacific Islander females, and 3% each African American males, African American females, Latin males, and

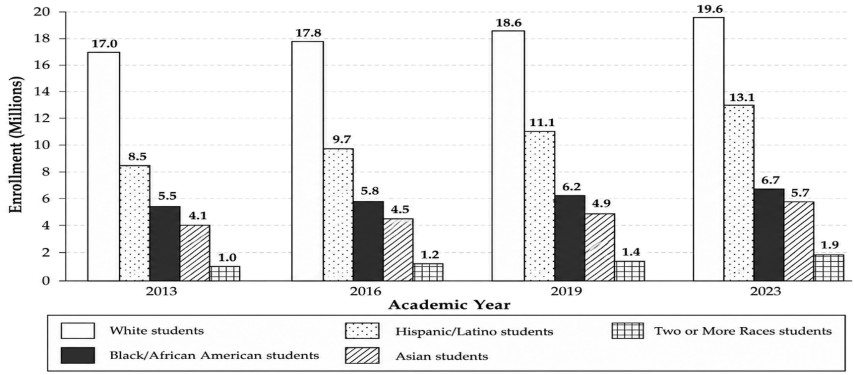



Fig. 1.1. Increase in Enrollment of Students by Race/Ethnicity.

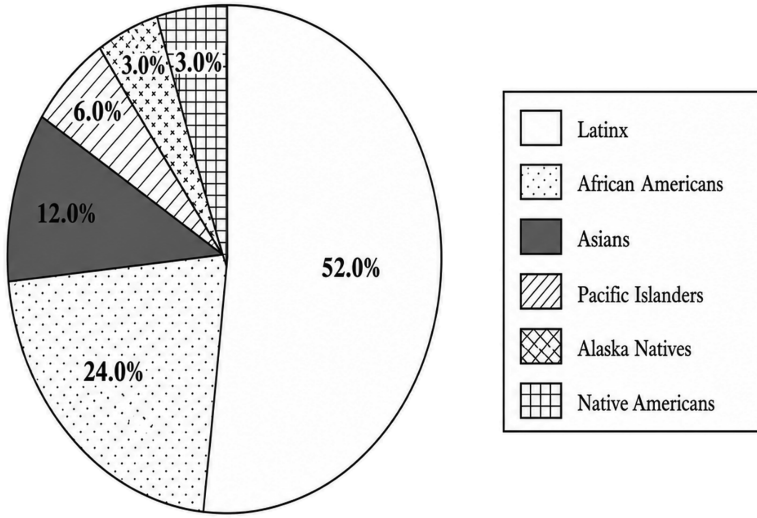



Fig. 1.2. Nonmajority Including Latinx, African Americans, Asians, Pacific Islanders, Alaska Natives, Native Americans.

Latin females. American Indians/Alaska Natives and individuals of two or more cultures represented 1% or less. Fig. 1.2 shows a comparison of majority and nonmajority faculty (US Department of Education, National Center for Education Statistics – The Condition of Education 2024, Characteristics of Postsecondary Faculty 2022–2024).

## International Students and Faculty

There are several issues that are specific to international students and faculty.

Population changes, language concerns, classroom subtleties, and differences in social settings that vary from their native countries are some factors HEIs might need to address.

### *Students*

International student enrollment in the United States has increased from approximately 4.6% (about 1 million students) in 2019–2020 to roughly 6% (about 1.2 million students) in 2024–2025, reflecting a continued global demand for US higher education despite recent fluctuations in new student enrollment (Institute of International Education, 2025).

In the 2024–2025 academic year, approximately 1.18 million international students were enrolled in US colleges and universities, representing about 6% of

total enrollment (Institute of International Education, 2025). More recent snapshot data suggest a slight decline in overall enrollment and a notable decrease in new international student enrollments in 2025–2026, indicating emerging shifts in global student mobility patterns (Institute of International Education, 2025).

Recent scholarship continues to highlight the limited institutional responsiveness to linguistic differences in US higher education, contributing to the relegation of international students. Language variation, defined as the use of multiple linguistic systems or patterns, remains central to global mobility and student participation in higher education. As multilingualism increases worldwide, particularly in Europe and other global regions, linguistic variations have become critical to economic development, international trade, and cross-cultural engagement. However, US institutions often lag in adequately addressing language differences, which can hinder access and academic success for international students (Institute of International Education, 2025; Organisation for Economic Co-operation and Development, 2023; UNESCO, 2022). As Banks (2019) stated, "one of the challenges in a democratic nation is to provide opportunities for different groups to maintain aspects of their community culture while building a nation in which these groups are structurally included and with which they feel allegiance" (p. 23). However, enrollment rates are decreasing as other countries increase and make better recruiting efforts, yet there are enough students in our colleges and universities to warrant attention to language and linguistic variations. Facilitating these efforts may include the reconstruction of some admissions standards that are relevant to their educational school experiences for students, affecting imbalances for nonmajority populations. In addition, providing opportunities for mentoring, financial support, community building, and engagement in meaningful and relevant experiences is needed.

To support international students, it is suggested that HEIs retain and recruit international students by using various enrollment strategies. Prioritizing integration will help international students develop a stronger sense of belonging. Cocurricular and social opportunities are emphasized, while mentoring academic skills as well as social-emotional health and identity development. Sumonte-Rojas et al. (2026) described several measures that would assist international students in the classroom. These measures can be performed by faculty as they infuse their curriculum and syllabi activities with culturally related materials and resources. Providing (a) colloquial free language, (b) discussion questions in advance, (c) advance readings, and (d) small group work before a topical discussion is helpful. The American Council on Education (2020) encourages HEIs to adopt a strategic approach by developing student goals and curriculum goals simultaneously through international partnerships and faculty innovation.

### *Faculty*

According to national statistics, the number of full-time international faculty at four-year universities alone increased from 940 (0.9% of all faculty) in 5 years to

9,187, nearly 5%, in 2020 (Huang, 2021; Organisation for Economic Co-operation and Development, 2023). Most international faculty are foreign-born and therefore may have a different set of values and classroom expectations than American students, which may cause conflict (Jawaharial, 2022). Wang (2021) and the American Council on Education (2024) report that many internationally born faculty do not understand the history, culturally related tension, and preconceptions that are now present in their new social environments in the United States. Traditionally, international faculty have difficulty integrating into teaching. They have the limited social and cultural capital needed to progress forward in the university setting. There may also be a lack of social support from faculty, and some might have difficulty cultivating relationships with students. Challenges with parity may arise, potentially causing discomfort in classroom situations. HEIs can initiate effective strategies and take measures to help faculty find solutions for the problems they encounter in their academic work. Initiating cultural instruction at HEIs is important for all faculty and will be helpful for the classroom. Hiring practices can be modified for various populations. Cultural infusion in the curriculum is also needed to assist faculty in providing a more global view and providing students with a stronger comprehensive setting.

## Female Students and Faculty

There has been a number of changes in male and female faculty and students at HEIs.

Particularly, female students and faculty have increased in number and have different experiences than males.

### *Students*

Recent data indicate that females now earn approximately 58–60% of baccalaureate degrees in the United States, reflecting a continued and widening gender gap in degree attainment (National Center for Education Statistics, 2023; U.S. Department of Education, National Center for Education Statistics, 2024). Female students now represent the majority of the student population at colleges and universities in the United States. Fifty-nine percent of college and university students were women (National Center for Educational Statistics; NCES 2023), while men held the second position of 40.5%. Student enrollment in the United States has dropped. Overall, US universities and colleges saw 1.5 million fewer students compared to five years ago, with men decreasing by 71%.

The Center for Disease Control and Prevention (CDC, 2024), US Department of Education Office for Civil Rights (2024), and Association of American Universities (2023) list a number of challenges that females face in HEIs, such as gender imbalance and sexual harassment. Female students may also leave school because of sexual harassment and the refusal of administrators to correct it. The National Sexual Violence Resource Center (NSVRC) (n.d.) and the CDC (2024) highlight that sexual assault is a serious and prevalent issue on US college