Postsecondary education should expand opportunities for students to access pathways for upward economic mobility, secure a well-paying job, and achieve their full potential, especially for structurally excluded students, who face significant, structural barriers to economic security and mobility. Yet postsecondary education continues to amplify inequities through the segregation of students across fields of study by gender and race—which contributes to occupational segregation in the workforce—harming individuals, communities, and our economy.

Labor market demand for workers with at least a postsecondary credential is expected to grow faster than demand for workers with less education. It is therefore imperative that postsecondary education works to reduce—rather than reinforce—occupational segregation.

**KEY TAKEAWAYS**

- Higher education impacts occupational segregation in the labor market, particularly through racial and gender segregation across fields of study.
- Field of study segregation by gender and race is substantial. Women and students of color are particularly underrepresented in fields that lead to occupations with the greatest earning power and status.
- Policymakers and postsecondary institutional leaders should address field of study segregation to help ensure that structurally excluded students have access to all occupations.
Field of Study Segregation in Higher Education Exacerbates Labor Market Segregation

Our nation’s widespread occupational segregation harms workers and the economy. Occupational segregation deepens income, wealth, and labor market inequities; corrodes our nation’s potential for innovation and leadership; and reinforces pipeline-level barriers such as racism and sexism in postsecondary institutions.

Postsecondary institutions broadly affect occupational segregation by shaping the future demographics of the workforce. This shaping occurs when institutions decide which students to admit, influence students’ fields of study and their continuation in those fields, and support their timely degree attainment. These dynamics are all shaped by the history of exclusion of women and people of color from postsecondary education.

Field of study segregation is a key link between postsecondary education and occupational segregation. A student’s field of study correlates with their first few occupations after college, which have significant implications for their career trajectory and long-term economic well-being. Previous research shows that structurally excluded students are often underrepresented in various fields of study that lead to higher-paying occupations.

Decisions about fields of study are shaped not only by wider factors such as students’ life experiences, social networks, and K-12 education, but also by postsecondary faculty, advisors, systems, and the policies that govern higher education. For example, women and people of color are underrepresented in the most senior faculty positions, which affects the teaching, mentoring, and advising that structurally excluded students receive and can affect whether they graduate in—or even enter—particular fields of study.

Postsecondary Education Is Segregated Across Fields of Study

This project measures field of study segregation for degree-seeking undergraduate students—including students pursuing associate degrees who aspire to earn a bachelor’s degree—at various points throughout the postsecondary journey. Analysis of how students’ enrollment and graduation across ten fields of study varies by gender and race shows that:

- Students enter postsecondary institutions already segregated across fields of study by gender and race.
- Our postsecondary system does little to interrupt this initial segregation, and graduates remain segregated across fields of study by gender and race, including at public universities.
- Students leaving their first-declared field of study or exiting postsecondary education altogether exacerbates field of study and occupational segregation.
- Field of study segregation between women of color and white men has increased over the past three decades.
Key Principles for Policymakers & Institutional Leaders to Interrupt Field of Study Segregation

Four principles can guide institutions and policymakers in disrupting field of study segregation. These principles—and corresponding recommendations—cover the arc of the student’s journey through higher education, from admission through declaration of a major to persistence to graduation.

I. AFFORDABILITY FOR EVERY FIELD OF STUDY

Cost differences between fields of study and the prohibitive cost of higher education in the U.S. contribute to occupational segregation by race and gender. Significant hurdles exist for structurally excluded students completing a bachelor’s degree in their chosen field of study, including: high tuition, fees, and costs beyond tuition, exorbitant educational debt, differential tuition and course requirements in certain fields, and time and opportunity costs of work and education.

RECOMMENDATION: ADDRESS COST & TIME BARRIERS THAT SEGREGATE FIELDS OF STUDY & EXCLUDE STUDENTS BY RACE & INCOME

Postsecondary institutions should:
- Explore alternatives to differential tuition, such as charging uniform tuition and fees across all fields of study.
- Explore ways to make course load requirements more equitable across majors to mitigate barriers to access, especially for students with outside responsibilities.
- Invest in and improve the transfer process to reduce financial and time costs for structurally excluded students and better facilitate their success at four-year institutions in their chosen fields of study.

State and federal policymakers should:
- Provide adequate funding for higher education institutions, in general, to eliminate a need for charging differential tuition.
- Ensure continuity and affordability of studies—in all fields of study—for students who transfer from community colleges to four-year institutions.

II. INCLUSIVE & SUPPORTIVE ACADEMICS IN EVERY FIELD OF STUDY

Structurally excluded students often experience a “chilly climate” in some—often the most lucrative—fields of study, where curriculum and course structure, pedagogy, policies, culture, faculty, other students, and advising can all contribute to an unwelcoming, discouraging, and even hostile environment. Such chilly climates can derail success for students of color and women, too often resulting in exit from the field.
RECOMMENDATION: FOSTER INCLUSIVE, WARM, & REPRESENTATIVE ENVIRONMENTS IN ALL FIELDS OF STUDY

Postsecondary institutions should:

● Invest in holistic, culturally relevant community-building efforts to boost structurally excluded students’ sense of belonging and to facilitate the creation of vital support networks—both across campus and within fields of study.

● Implement evaluation measures for ongoing institutional efforts to improve department climates for structurally excluded students.

● Establish multiple types of mentorship programs for structurally excluded students navigating segregated fields of study.

● Invest in quality, equity-focused academic advising regarding field of study choice, coursework selection, and persistence in chosen field of study.

● Foster inclusive teaching and pedagogy in every field of study.

● Design curriculum structure, academic supports, and policies for inclusion and student success, in every field of study.

● Prioritize representative faculty and administrative staff in every field of study.

State and federal policymakers should:

● Invest more dollars in historically Black colleges and universities (HBCUs), including reparations for decades-long disparities in funding for public HBCUs.

● Use funding and accreditation processes to advance equity by requiring transparency, such as transparency of faculty diversity by department.

● Invest in racial and gender equity for faculty beyond science, technology, engineering, and math (STEM) fields of study.

III. CAREER-CONNECTED LEARNING & EXPERIENCE IN EVERY FIELD OF STUDY

Postsecondary institutions often do not provide their students with adequate information on careers, connections to the professional world, and career-connected learning opportunities. Access to internships and paid internships during postsecondary education is highly unequal. Because structurally excluded students face additional challenges in obtaining employment in their fields, postsecondary programming to connect students to their future careers can help interrupt occupational segregation.
RECOMMENDATION: ENSURE EQUITABLE & MEANINGFUL WORK-BASED OPPORTUNITIES RELEVANT TO STUDENTS' FIELD OF STUDY

Postsecondary institutions should:

- Early and often in their degree programs, provide students with information on the range of fields of study and advising on potential careers.
- Ensure career-connected learning and experiences—including field of study-relevant career awareness, exploration, preparation, and training, and access to internships.
- Offer equity-focused and robust career services and advising, including a focus on helping students obtain quality, paid career experiences before graduation.
- Encourage more employers to pay students who are completing an internship for college credit, as both can happen together.

State and federal policymakers should:

- Raise the wage floor for all government internships.
- Allow federal financial aid to fund internships to help level the playing field.
- Ensure paid internships and robust worker protections.

IV. DATA USE & IMPROVEMENTS TO BETTER UNDERSTAND & PURSUE EQUITABLE OUTCOMES FOR STUDENTS

The postsecondary education field lacks adequate data on student career outcomes over time, which undercuts efforts to address disparate outcomes for structurally excluded students, especially along the lines of race and gender.

RECOMMENDATION: STRENGTHEN DATA COLLECTION TO BETTER UNDERSTAND & IMPROVE STRUCTURALLY EXCLUDED STUDENT OUTCOMES

Postsecondary institutions should:

- Track and use data on student educational and early career outcomes by field of study, race, and gender to improve student outcomes.

State and federal policymakers should:

- Rescind the student unit records ban and create a federal student-level data system that incorporates state-level data to track student outcomes by race, gender, and socioeconomic status.

This document is a summary adaptation of “From Exclusion to Opportunity: The Role of Postsecondary Education in Labor Force Segregation & Recommendations for Action” by Vincent Palacios, Laura Tatum, Natalia Cooper, and Siddhartha Aneja. Georgetown Center on Poverty and Inequality, August 2022. Available at https://www.georgetownpoverty.org/issues/from-exclusion-to-opportunity/.
Endnotes

1. This report focuses on Black and Brown students and women as “structurally excluded students” who experience barriers to access and success, including discrimination, in education.


