



How to Reduce

Occupational Segregation in the Workplace

Through Registered Apprenticeship Programs



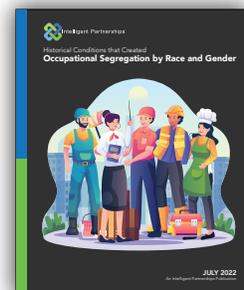
What is Occupational Segregation?

Occupational Segregation—the disproportionate representation of groups of workers into particular jobs—represents a foundational disparity within the U.S. economy that aids in the growing gender and racial wage gap and largely affects women and people of color. Research published in *Gender and Society* points to occupational segregation as the primary cause of disadvantaged groups being funneled into unstable jobs that are less prestigious and offer depressing wages. ^[1]

Though there were attempts to correct occupational segregation in the 1960s, the effects of the original historical conditions that created occupational segregation are still felt today. Over the past century, occupational segregation has primarily affected people of color and women and has robbed countless hardworking individuals of family-sustaining wages. Although the modern workplace demonstrates a more diverse labor force, minorities—especially women of color—still endure workplace segregation not often experienced by White male Americans.

Within the occupational segregation discussion, a population that is often left out of the conversation is people with disabilities. According to the Bureau of Labor Statistics, “In 2021, persons with a disability were more likely to work in service occupations than those with no disability (18.2 percent, compared with 15.9 percent). Workers with a disability were also more likely than those with no disability to work in production, transportation, and material moving occupations ... and sales and office occupations. Persons with a disability were less likely to work in management, professional, and related occupations than those without a disability.” ^[2]

For a more detailed overview of the events that cultivated occupational segregation, read: [Historical Factors that Created Occupational Segregation by Race and Gender](#)





Workplace Solutions to Minimize Occupational Segregation

1. Registered Apprenticeship Programs

A Registered Apprenticeship Program (RAP) is a government-recognized training model that is centered on occupational competency and leads to career access. It is a formal training program with a federally recognized structure and curriculum that combines traditional education with on-the-job training to help establish a highly trained workforce. Upon completion of the RAP, Apprentices receive a certificate recognized both nationally and industry-wide.

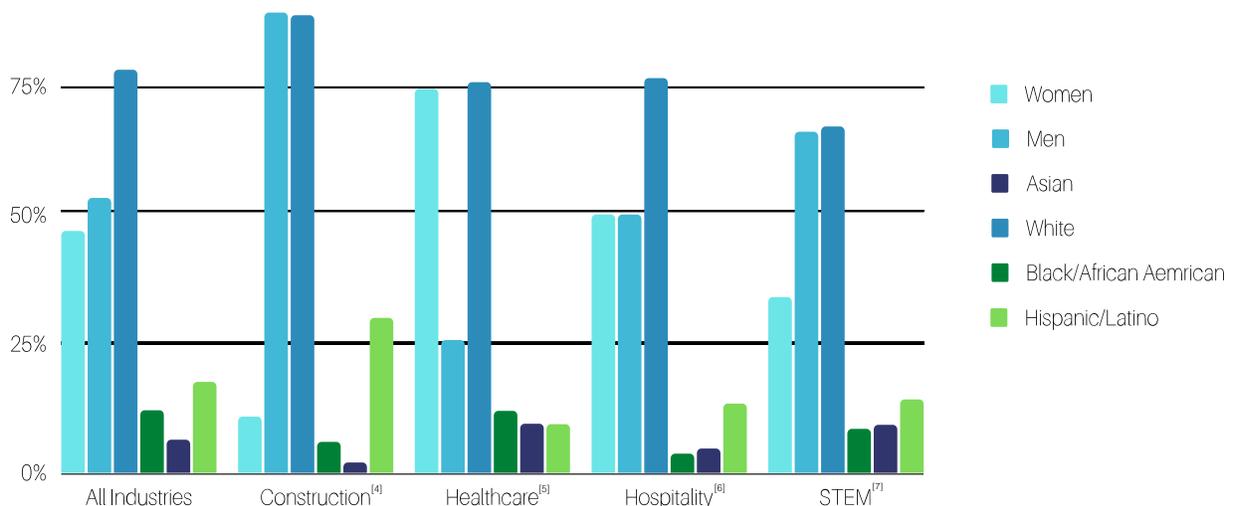
Registered Apprenticeship Programs provide a pathway to entry for disadvantaged workers. Because RAPs create equity through objective milestones and goals for recruitment, hiring, and promotion, all workers have equal access to family-sustaining careers that are offered through RAPs. The benchmarks offered through RAP programs help to eliminate the historical biases that have traditionally caused occupational segregation.

Inclusive Apprenticeships, which are apprenticeships that “support and are designed to be inclusive of apprentices with disabilities,” ^[3] are an integral tool for employers to create a well-trained and skilled workforce that is inclusive of all populations, especially people with disabilities.

Which Sectors can Benefit from Registered Apprenticeships?

Registered Apprenticeship Programs have already been implemented in many different sectors, and there has been a large push from the Department of Labor to expand RAPs in recent years.

Sectors that are deeply affected by occupational segregation include, but are not limited to, Construction, Healthcare, Hospitality, and STEM. The gender and racial/ethnic representative percentage of these workforce populations, compared against the population of all industries, can be found below:



CONSTRUCTION

The construction industry is an industry where RAPs are already widely utilized and has the greatest opportunity to expand Diversity, Equity, Inclusion, and Accessibility (DEIA) policies to mitigate occupational segregation.

Women in construction face a number of obstacles that Registered Apprenticeship Programs are readily poised to address. These issues include a lack of advancement in their careers, which is addressed through objective recruitment, hiring, and promotion practices that rely on equitable benchmarks and unbiased standards by which to evaluate workers. Additionally, embracing DEIA policies and practices in RAPs helps eliminate the discrimination 60% of women in construction face, and eliminates exclusion that 80% of women in construction report experiencing in the workplace. ^[8]



Case Study:

In order to be more inclusive, the Ironworkers introduced paid pregnancy and maternity leave policy in 2017, making the Ironworkers the first trade to introduce this benefit.^[27] When there is an absence of pregnancy and medical leave policy, women experience inordinate barriers that their male counterparts do not traditionally experience. Such practices level the playing field for all workers, as “the average length of women’s leaves is longer than men’s (34 days versus 21 days), primarily because women take longer leaves for a new child (54 days versus 18 days)”^[28]. Implementing paid pregnancy and maternity leave policies helps to address the inequities that women often face in the workplace.

The lack of gender and racial diversity in the construction industry can be addressed through the purposeful implementation of DEIA policies through Registered Apprenticeship Programs. The historical occupational segregation within the construction sector is largely due to historical bias: “People have, and still do, claim that unions guard construction-trade jobs for certain white men and, with that guarding, have kept the knowledge of their trades to themselves. While such exclusivity is often justified as a desire to keep the market from flooding, in fact, another explanation could be limited access to those perceived as different.” ^[9] In other words, established union members, who tend to be white males, may be hesitant to provide on-site training to those who don’t look like them, which inherently excludes all women and non-white men.

These possibly unconscious biases are all addressed through Registered Apprenticeship Programs, which can be time-based, competency-based, or a hybrid of both. By implementing a standardized curriculum and training process, those who enter RAPs are guaranteed to receive the proper education and training required to succeed in the construction industry.

HEALTHCARE

Women represent an overwhelming percentage of healthcare workers, and they are concentrated in low-wage health services jobs. In fact, 79% of low-wage health care workers are women, especially women of color. Registered Apprenticeship Programs like Healthcare Career Advancement Program (H-CAP) [<https://www.hcapinc.org/>] are helping remove barriers to entry for women, especially women of color, into family-sustaining healthcare careers.

“ Within H-CAP, 65% of our registered apprentices are Black or brown, primarily Black and Latina. Over 86% of our apprentices are women. ¹⁰ ”

- H-CAP's executive director
Daniel Bustillo

RAPs help underrepresented populations circumvent the traditional pathways into the healthcare career, which often include entry-level jobs with low wages and poor working conditions, empowering women and women of color to capture high-quality positions in healthcare.

However, the healthcare sector needs more purposeful interventions that transitions participants from entry-level programs into higher wage career paths. This can be done through additional certification opportunities and broader RAP adoption.



HOSPITALITY

Though the overall demographics of the hospitality sector do not seem to be as glaring as the occupational segregation in other sectors, a closer look at the specific industries within hospitality tells a different story.

The restaurant industry is 61.3% male and 28.7% female overall, ^[11] and 74.8% of chefs are men. ^[12] According to a study released by Restaurant Opportunities Center United, “workers of color are concentrated in lower-level busser and kitchen positions in fine-dining restaurants and overall segments of the industry in which earnings are lower. A canvass of 133 fine-dining establishments found that 81% of management and 78% of higher-level non-management positions such as captain, manager, and bartender are occupied by white workers, a disproportionate amount of these male.” ^[13]

Under the National Restaurant Association Educational Foundation, the Registered Apprenticeship Program partnered with community-based organizations to provide underrepresented populations, including justice-involved individuals and veterans, with an entry path to family-sustaining careers in the restaurant industry. ^[14]



Case Study:

A highly successful hospitality apprenticeship program is the Hospitality Training Academy (HTA). The HTA is a free program that teaches apprentices how to be line cooks in just 8-weeks. Many apprentices who complete the program start working in high paying jobs right after the training. In 2021, the HTA received a Federal Grant to help workers impacted by Covid-19 as well as a CAREER National Dislocated Worker Grant to provided underserved workers with apprenticeship training to enter into high-road career pathways. ^[15]

STEM

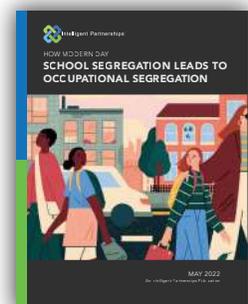
Facing a shortage of highly skilled workers who are specifically educated and trained in STEM, Lockheed Martin turned to Registered Apprenticeship to help create a sustainable pipeline of talented workers. Their technical Registered Apprenticeship programs across the nation provide an equitable entry path for people interested in STEM careers but are not seeking four-year degrees.

Additionally, Lockheed Martin has partnered with local educational institutions to support STEM education, created programs meant to garner K-12 students' interest in the aerospace industry, and partnered with organizations to increase representation of women, minorities, veterans, and people with disabilities. ^[16]

Another company to successfully utilize a Registered Apprenticeship Program in the STEM industry is IBM. In 2019, “the California Department of Industrial Relations, the California Division of Apprenticeship Standards, the Department of Technology, SEIU Local 1000, and various state agencies along with IBM announced the state’s first-ever public-private partnership focused on creating a technology apprenticeship program.” ^[17] While this apprenticeship allowed mid-career workers an opportunity to gain technology skills, it also aimed at prepping more students for professional careers without requiring a Bachelor’s degree or technology experience. This effort placed the focus on individuals with skills rather than credentials, thus allowing apprentices the chance to enter the workforce without the traditional requirements of higher education.

RAPs like the ones that Lockheed Martin and IBM have made part of their organizations removes the barrier of a four-year degree as a pathway to a career in STEM. The additional policies Lockheed Martin and IBM have embraced encourages STEM education and includes underrepresented populations in their workforce while greatly expanding DEIA policies and practices within their organizations.

For a more detailed overview of educational discrimination in the United States, read: [How Modern-Day School Segregation Leads to Occupational Segregation](#)



2. Pre-Apprenticeship Programs

Pre-Apprenticeship Programs, or Work Readiness Programs, are designed to help candidates meet the entry-level requirements of a Registered Apprenticeship Program. Pre-Apprenticeships are a useful tool in providing equitable opportunities to candidates, as they help bridge gaps the candidates may have in terms of education while providing supportive services to help candidates overcome existing obstacles to success.

Education is a large barrier to entry for disadvantaged communities. Pre-Apprenticeship Programs can create a pathway by helping Pre-Apprentices gain the skills necessary to enter into a Registered Apprenticeship Program.

How Pre-Apprenticeship Programs can help prepare a worker for a RAP

Quality Pre-Apprenticeship Programs may help candidates with the following:

- Help in obtaining a GED
The Brookings Institute ^[18] conducted a study of 37 states in 2018 and found the following graduation rates:

Females	Males	White Students	Black Students	Hispanic Students
88%	82%	89%	79%	81%

- Help in obtaining a Driver's License or State ID
 - 7% of the adult population in the United States does not have a confirmed government-recognized photo identification, with 13% of Blacks and 10% of Hispanics having no identification. ^[19]
- Instruction in academic subjects such as algebra
 - 50% of college students do not pass college algebra. ^[20]
- Basic training regarding commonly used tools
- Monetary assistance for food, transportation, or childcare
 - 19% of the U.S. population receives welfare. ^[21]
- Hands-on training or volunteering opportunities
 - 12.2% of people with disabilities report that lack of training and/or education is the largest barrier to employment that they face. ^[22]

Quality Pre-Apprenticeship Programs often partner with RAPs to provide a pathway for candidates to immediately enter a Registered Apprenticeship Program and are integral in helping present equitable opportunities to candidates in traditionally underserved communities.



Case Study:

Pre-Apprenticeship Programs have already proven successful in helping to eliminate Occupational Segregation in the Construction Sector. In Boston, the Building and Construction Council of the Metropolitan District launched a Pre-Apprenticeship Program called Building Pathways. It now operates under the nonprofit organization Building Pathways, Inc (BPI) ^[23]. The primary goal is to address the disparities in construction apprenticeships for women, people of color, and other under-served communities. As a Pre-Apprenticeship, Building Pathways works with these communities to prepare under-represented, disadvantaged, and low-skill residents of Boston to enter a Registered Apprenticeship Program with the building trades.

Since the inception of BPI in Massachusetts, the number of female apprentices has grown by 200%. ^[24]

3. Youth Apprenticeship Programs

Youth Apprenticeships are special apprenticeships for those aged 16-24. Just like Registered Apprenticeships, Youth Apprenticeships provide on-the-job training and academic instruction to apprentices. Youth apprentices typically begin the program their junior year of school and earn a paycheck from the onset of the program. The U.S. Department of Labor offers support to Youth Apprenticeships through technical support and assistance, nationally recognized credentials in certain industries, potential tax credits, access to federal resources, and high standards that align with the requirements of Registered Apprenticeship Programs.

Youth Apprenticeships can provide an earlier entryway into a family-sustaining career. As Youth Apprenticeships include people as early as 16, they are an opportunity for a young person to begin earning a wage to help contribute to the household while simultaneously gaining meaningful career training. The jumpstart not only increases their lifetime earning potential, but it also helps remove multiple barriers to entry, including lack of education and lack of training or prior experience. Positioning underrepresented populations to capture jobs in careers that they would not normally have access to helps to mitigate occupational segregation and its detrimental effects.

Case Study:

Hilton, looking to provide an onramp into the hospitality industry for unemployed youth around the world, has implemented a number of initiatives and programs aimed at training this diverse segment of the population. After the success of the Chef Apprenticeship Academy in Australia, Hilton launched the Hilton Apprenticeship Academy in Europe, which offers on-the-job training for the following positions: Front Office, Food & Beverage Service, Multi-Skilled Hospitality Service, Living Well Exercise and Fitness, and Sales. ^[25]

Impacting the Workplace through Apprenticeship

Occupational Segregation is a serious issue that afflicts a large portion of the American workforce. As occupational segregation leads to the wage gap, its impacts are felt beyond the affected workers. Check out our [Wage Gap eBook series here](#)

Because Registered Apprenticeship Programs provide equitable onramps to family-sustaining careers, they help remove traditional barriers to entry for historically underrepresented populations. The purposeful integration of these populations into the workplace, from bottom-up and top-down, will help mitigate occupational segregation. Businesses embracing policies to help expand DEIA reduce occupational segregation and gain proven benefits from welcoming the organizational changes. For more information on expanding DEIA and the benefits of DEIA in business, read [Expanding DEIA Programs Through Apprenticeship](#).

Current population models project that by 2045 non-Hispanic whites will make up less than half of all Americans, and there are currently more young people (under 18) who are minorities than young people who are white.^[26] With these shifting demographics, businesses have an opportunity to begin implementing inclusive practices and embracing DEIA policies, which will in turn help address occupational segregation.

Key Takeaways

- ✓ Occupational segregation is detrimental to workplace inequities and largely affects minority workers and women.
- ✓ Registered Apprenticeship Programs provide an active approach to minimizing workplace segregation.
- ✓ Sectors in Construction, Healthcare, Hospitality, and STEM largely benefit from using Registered Apprenticeship Programs to expand DEIA efforts.
- ✓ Pre-Apprenticeship and Youth Apprenticeship Programs provide paid entry points into RAPs and are proven methods to increase DEIA in disadvantaged youth, minority workers, and women.

ENDNOTES

1. 1 Gauchat, Gordon, et al. "Occupational Gender Segregation, Globalization, and Gender Earnings Inequality in U.S. Metropolitan Areas." *Gender and Society*, vol. 26, no. 5, Sage Publications, Inc., 2012, pp. 718–47, <http://www.jstor.org/stable/41705723>.
2. "Persons with a Disability: Labor Force Characteristics – 2021," Bureau of Labor Statistics, February, 24, 2022. <https://www.bls.gov/news.release/pdf/disabl.pdf>.
3. Kuehn, Daniel et al. "Inclusive Apprenticeship: A Summary of What We Know about Apprentices with Disabilities," Urban Institute, May 20, 2021. <https://www.urban.org/research/publication/inclusive-apprenticeship>.
4. Bousquin, Joe. "Construction's diversity numbers are awful. Here's how 3 contractors are improving theirs," *Construction Dive*, October 12, 2021. <https://www.constructiondive.com/news/constructions-diversity-numbers-are-awful-heres-how-3-contractors-are-im/607954/>.
5. "Labor Force Statistics from the Current Population Survey," Bureau of Labor Statistics, January 20, 2022. <https://www.bls.gov/cps/cpsaat11.htm>.
6. "Hospitality Representative Demographics and Statistics in the US," Zippia, April 18, 2022. <https://www.zippia.com/hospitality-representative-jobs/demographics/>.
7. Burkey, Amy and Okrent, Abigail. "The STEM Labor Force of Today: Scientists, Engineers, and Skilled Technical Workers," National Science Foundation, August 31, 2021. [https://ncses.nsf.gov/pubs/nsb20212/participation-of-demographic-groups-in-stem#:~:text=Based%20on%20the%20U.S.%20Census.\(Figure%20LBR%2D20\)](https://ncses.nsf.gov/pubs/nsb20212/participation-of-demographic-groups-in-stem#:~:text=Based%20on%20the%20U.S.%20Census.(Figure%20LBR%2D20)).
8. "Women in Construction: The State of the Industry in 2022," BigRentz, April 21, 2022. <https://www.bigrentz.com/blog/women-construction#:~:text=When%20you%20think%20of%20an,100%20employees%20in%20the%20field>.
9. Wagner, Heidi. "Hiring goals: Are they assisting more women to enter and remain in the building trades?" PhD diss. University of Minnesota, 2015. https://conservancy.umn.edu/bitstream/handle/11299/175556/Wagner_umn_0130E_16557.pdf?sequence=1&isAllowed=y.
10. Vasquez, Tina. "Q&A: The healthcare industry is segregated. Here's how one organization is trying to change that," *Prism*, February 19, 2021. <https://prismreports.org/2021/02/19/qa-the-healthcare-industry-is-segregated-heres-how-one-organization-is-trying-to-change-that/>.
11. "Restaurant Workers Demographics and Statistics in the US," Zippia, April 18, 2022. <https://www.zippia.com/restaurant-worker-jobs/demographics/>.
12. Fry, Richard, Brian Kennedy, and Cary Funk. "Stem Jobs See Uneven Progress in Increasing Gender, Racial and Ethnic Diversity." *Pew Research Center Science & Society*. Pew Research Center, April 1, 2021. <https://www.pewresearch.org/science/2021/04/01/stem-jobs-see-uneven-progress-in-increasing-gender-racial-and-ethnic-diversity/>.
13. "Restaurant Opportunities Centers United, Ending Jim Crow in America's Restaurants: Racial and Gender Occupational Segregation in the Restaurant Industry," Restaurant Opportunities Centers United, 2015. <https://laborcenter.berkeley.edu/pdf/2015/racial-gender-occupational-segregation.pdf>.
14. "About the National Restaurant Association Educational Foundation," Choose Restaurants, n.d. <https://chooseresaurants.org/About>.
15. UNITE HERE Local 11, and Rachele Smith. "Hospitality Training Academy." UNITE HERE Local 11. May 12, 2021. <https://www.unitehere11.org/community/hospitality-training-academy/>.
16. "Business Roundtable: Lockheed Martin case study," Department of Labor, n.d. <https://www.apprenticeship.gov/sites/default/files/2019-07/Lockheed%20Martin%20Case%20Study.pdf>.
17. "California State Government and IBM Launch the State's First of Its Kind Collaboration to Create Technology Apprenticeships." California State Government and IBM Launch the State's First of Its Kind Collaboration to Create Technology Apprenticeships, November 19, 2019. <https://newsroom.ibm.com/2019-11-14-California-State-Government-and-IBM-Launch-the-States-First-of-its-Kind-Collaboration-to-Crete-Technology-Apprenticeships>.
18. Reeves, Richard V. et al. "The unreported gender gap in high school graduation rates," *Brookings*, January 12, 2012. <https://www.brookings.edu/blog/up-front/2021/01/12/the-unreported-gender-gap-in-high-school-graduation-rates/>.
19. Perez, Vanessa. "Americans with Photo ID: A Breakdown of Demographic Characteristics," *Project Vote*, February 2015. <http://www.projectvote.org/wp-content/uploads/2015/06/AMERICANS-WITH-PHOTO-ID-Research-Memo-February-2015.pdf>.
20. Shakerdge, Karen. "High failure rates spur universities to overhaul math class," *The Hechinger Report*, May 6, 2016. <https://hechingerreport.org/high-failure-rates-spur-universities-overhaul-math-class/>.
21. Dautovic, G. "Straight Talk on Welfare Statistics," *Fortunly*, December 9, 2021. <https://fortunly.com/statistics/welfare-statistics/#gref>.
22. "Barriers to employment for people with a disability," US. Bureau of Labor Statistics, July 29, 2020. <https://www.bls.gov/opub/ted/2020/barriers-to-employment-for-people-with-a-disability.htm>.
23. "About Building Pathways," *Building Pathways: Building Trades Pre-Apprenticeship Program*, n.d. <https://buildingpathways-boston.org/about-us/>.
24. "Case Studies: Chicago in Women Trades," Department of Labor, n.d. <https://www.apprenticeship.gov/case-studies/chicago-women-trades>.
25. "Creating Opportunities for Youth in Hospitality," *International Youth Foundation*, January 2013. <http://news.hiltonworldwide.com/images/davos/fullReport.pdf>.
26. "3 ways that the U.S. population will change over the next decade," *PBS*, January 2, 2020. <https://www.pbs.org/newshour/nation/3-ways-that-the-u-s-population-will-change-over-the-next-decade>.
27. Chicago Women in Trades "Pregnancy and Maternity Leave in the Trades: Good Practices for Apprentices." *National Center for Women's Equity in Apprenticeship and Employment*, n.d. <https://womens-equity-center.org/wp-content/uploads/2017/10/Pregnancy-and-Maternity-in-the-Trades.pdf>.
28. Herr, Jane, et al. "Gender Differences in Needing and Taking Leave." *Abt Associates*, November 2020. https://www.dol.gov/sites/dolgov/files/OASP/evaluation/pdf/WHD_FMLAGenderShortPaper_January2021.pdf



intelligent Partnerships

Accelerate the Impact of Inclusion™

We bring decades of experience helping clients in diversity management, strategic engagement and workforce design. We encourage our partner organizations to prioritize our community's health and safety and remain an available resource. Should you have any questions or need strategic design and implementation support, please feel free to contact our team at: [\(877\) 234-9737](tel:8772349737) or iPartnerships.net

- **HELPING OUR PARTNERS** *Create Value Where Disruption Occurs.*
- **PRIORITIZING** *Innovation Through Collaboration.*
- **PROVIDING USEFUL TOOLS AND RESOURCES THAT AID IN** *Solid Decision Making And Measurable Market Impact.*
- **FACILITATING REAL WORLD APPROACHES TO THE** *Future of Work.*



Engage with us



[\(Click icons\)](#)

© 2021 Intelligent Partnerships

Errors & Omissions Liability (E&O): Intelligent Partnerships, Inc. makes no guarantee that the statements, analysis, projections, estimates, graphs, reports, numbers, and any derivatives sourced from this resource are free of errors and omissions. This information is derived from publicly available sources and is intended to provide general information. Users should seek legal expert validation independent of any resources provided here. The information is current as of the published date. Intelligent Partnerships, Inc. assumes no liability for erroneous outcomes derived from this information or its use.