

Equity-Focused Career Counseling

Communities thrive when individuals are able to pursue jobs and careers that are a good match for their talents and interests. For many decades, employers and institutions explicitly barred women and people of color from certain occupations and leadership roles.ⁱ Today, though many of the more obvious barriers have been dismantled and some firms even actively recruit with an eye toward increasing representation from historically marginalized groups, occupational segregation persists. In a society that values freedom and equality of opportunity, this is a fundamental problem that must be addressed.

Occupational segregation, when based on biases and barriers, also hampers economic growth. When workers disregard or feel shut out of particular occupations, they miss opportunities and options that may be the best fit for their skills and motivations or that provide better wages and benefits. This reduces productivity as the pipeline of talent becomes unnecessarily narrow. At a time when projections regarding the future of work suggest that many occupations or even entire industries will see dramatic shifts over time,ⁱⁱ workers may also foreclose options in in-demand fields based on perceptions about the accessibility of particular occupations to a person of their race, gender, or other social identity.ⁱⁱⁱ Addressing occupational segregation would reduce gender and racial wage gaps, thereby increasing the economic security of women and people of color.

While there are many strategies and improvements that could reduce occupational segregation, this brief focuses on the potential of career counseling – in schools, in job centers, and through technology – to promote progress toward this goal, as well as the policy changes that would be needed to better serve the goal of integrating occupations in Indiana.

Occupational Segregation in Indiana

An occupation is a set of roles and/or tasks, usually grouped together under a label like attorney, carpenter, cashier, or teacher. If there were no occupational segregation, social groups would take on these roles in percentages proportionate to their representation in society as a whole; in other words, if men made up 52% of the workforce, 52% of the attorneys, carpenters, cashiers, and teachers would be men. In Indiana and elsewhere, this is far from the reality.

Women make up 48% of Indiana's workforce, and people of color^{iv} make up 18%. There is considerable variation, however, in their representation within certain occupational categories. The Census Bureau's American Community Survey breaks occupations into 25 broad categories (see Table 1). Of the 25

categories, 12 are so segregated by gender in Indiana to be considered non-traditional occupations for either men or women, meaning that one gender accounts for fewer than 25% of the workers in that occupation.^v As Table 1 shows, there tend to be greater proportions of women and workers of color in lower-paying occupations.

TABLE 1. Indiana Occupational Groups by Median Earnings, Percent Female, & Percent Workers of Color

	Median Earnings	Percent Female	Percent Workers of Color
TOTAL WORKFORCE	\$32,069	48%	18%
<i>Architecture and engineering occupations</i>	\$70,014	14%	15%
<i>Computer and mathematical occupations</i>	\$68,185	24%	20%
<i>Legal occupations</i>	\$66,878	50%	11%
<i>Management occupations</i>	\$62,588	39%	12%
<i>Health diagnosing and treating practitioners and other technical occupations</i>	\$59,277	79%	14%
<i>Business and financial operations occupations</i>	\$52,247	56%	15%
<i>Life, physical, and social science occupations</i>	\$50,906	47%	22%
<i>Law enforcement workers including supervisors</i>	\$50,396	19%	11%
<i>Installation, maintenance, and repair occupations</i>	\$42,460	4%	11%
<i>Transportation occupations</i>	\$40,423	16%	18%
<i>Construction and extraction occupations</i>	\$40,311	4%	19%
<i>Production occupations</i>	\$36,904	28%	22%
<i>Education, training, and library occupations</i>	\$36,738	72%	16%
<i>Health technologists and technicians</i>	\$36,634	81%	16%
<i>Community and social services occupations</i>	\$36,259	63%	21%
<i>Firefighting and prevention, and other protective service workers including supervisors</i>	\$32,752	23%	18%
<i>Arts, design, entertainment, sports, and media occupations</i>	\$31,889	51%	15%
<i>Office and administrative support occupations</i>	\$30,267	74%	18%
<i>Sales and related occupations</i>	\$29,376	51%	15%
<i>Farming, fishing, and forestry occupations</i>	\$28,616	20%	13%
<i>Material moving occupations</i>	\$26,757	25%	29%
<i>Healthcare support occupations</i>	\$22,239	90%	29%
<i>Building and grounds cleaning and maintenance occupations</i>	\$20,844	38%	23%
<i>Personal care and service occupations</i>	\$14,362	79%	20%
<i>Food preparation and serving related occupations</i>	\$11,422	62%	26%

Source: American Community Survey, 2017

Looking in more detail at gender segregation, neighboring states also have segregated occupational groups, although Illinois, Michigan, and Ohio have fewer occupational groups that meet the benchmark for “nontraditional,” or where one gender make up less than 25% of the workers in an occupational group.^{vi} Table 2 shows the percentage of women in each occupation group by state.

TABLE 2. Occupational Segregation by Gender in Indiana vs. Neighbor States (Percent Female)

	Indiana	Illinois	Kentucky	Michigan	Ohio
Architecture and engineering occupations	14%	17%	11%	15%	13%
Arts, design, entertainment, sports, and media occupations	51%	47%	47%	45%	52%
Business and financial operations occupations	56%	53%	57%	56%	56%
Community and social services occupations	63%	65%	66%	69%	66%
Computer and mathematical occupations	24%	23%	24%	27%	24%
Education, training, and library occupations	72%	72%	76%	71%	73%
Firefighting and prevention, and other protective service workers including supervisors	23%	28%	27%	24%	25%
Health diagnosing and treating practitioners and other technical occupations	79%	77%	78%	74%	76%
Health technologists and technicians	81%	80%	78%	80%	82%
Law enforcement workers including supervisors	19%	18%	19%	16%	13%
Legal occupations	50%	51%	56%	46%	49%
Life, physical, and social science occupations	47%	49%	49%	50%	44%
Management occupations	39%	41%	41%	41%	39%
Building and grounds cleaning and maintenance occupations	38%	38%	37%	37%	38%
Construction and extraction occupations	4%	4%	3%	3%	4%
Farming, fishing, and forestry occupations	20%	19%	14%	29%	27%
Food preparation and serving related occupations	62%	53%	59%	58%	60%
Healthcare support occupations	90%	88%	90%	90%	89%
Material moving occupations	25%	24%	24%	20%	24%
Office and administrative support occupations	74%	70%	70%	74%	72%
Personal care and service occupations	79%	80%	79%	81%	79%
Production occupations	28%	29%	30%	28%	28%
Sales and related occupations	51%	49%	52%	51%	50%
Transportation occupations	16%	15%	13%	15%	14%
TOTAL OCCUPATIONAL GROUPS WHERE % FEMALE IS <25 or >75	12	11	12	9	11

Because the categories offered by the American Community Survey are broad, this data likely does not tell the whole story. For example, as Table 3 shows, when Equal Employment Opportunity data from 2006-2010 is used to further break down the “legal occupations” category into four distinct groups, segregation is revealed in three of the four. Unfortunately, more current data this precise is not available at the state level, making it difficult to get a comprehensive understanding of the extent to which occupations are segregated by gender, race, or other factors.

TABLE 3. Legal Occupations by Percent Female and Percent Workers of Color

	Percent Female Workers	Percent Workers of Color
Lawyers, and judges, magistrates, and other judicial workers	29%	6%
Judicial law clerks	50%	13%
Paralegals and legal assistants	89%	12%
Miscellaneous legal support workers	80%	10%

Source: EEO Tabulation Data 2006-2010 (5-year ACS data), U.S. Census Bureau

Occupational segregation matters in part because the occupations traditionally held by women and people of color tend to pay less. In Table 3 above, white workers and men occupy a greater proportion of the more lucrative fields, like lawyers and judges, while women and people of color hold a greater share of positions like paralegals and legal support workers. Similarly, looking across the major occupational groups, occupations that have a higher proportion of men tend to be higher paying than those with a higher proportion of women even when the credential requirements may be similar. As Hegewisch and O’Farrell note,

The median hourly earnings for an electrician were \$23.96 and of a sheet metal worker \$20.81; by comparison, the median hourly earnings of a social worker were \$21.25 and of a rehabilitation counselor \$16.29 (U.S. Bureau of Labor Statistics 2014a). All of these are highly skilled jobs, yet while social work or counselling requires a four-year university degree, the route to becoming a skilled electrician or sheet metal worker (or a skilled tradesperson in other construction trades) is an earn-while-you learn apprenticeship. Similarly, several of the occupational groups with the lowest median earnings also have the highest proportion of non-white and/or Hispanic or Latino workers.^{vii}

Lower pay and poorer job quality ultimately mean that women and people of color continue to see significant wage and wealth gaps, have less saved for retirement, struggle to pay debts, and are more likely to experience poverty.^{viii}

Leveraging Career Counseling to Decrease Occupational Segregation

Changing the status quo requires intervention, and, given that children’s occupational choices begin to be shaped in their youngest years, early intervention will be necessary to decrease occupational segregation. A variety of factors, including school curriculum, exposure to media, and availability of role models, influence individuals’ early occupational aspirations and choices. For example, to the extent media exposes individuals to stereotypical gender roles or peers reinforce societal gender norms, these may pose barriers to non-traditional career selection. At the same time, parents, employers, or role models who challenge or reduce these barriers can ensure that students feel equipped to select from the full range of options available to them, and that the pipeline of talent does not suffer solely due to bias that has little to do with aptitude.

This brief focuses on specific strategies, tools, and supports those in career counseling or guidance roles can use to ensure that individuals consider and feel equipped to choose from the full set of occupational choices available. Attention to this area is critical for three key reasons:

- 1) Early intervention to counteract stereotypes and biases is necessary so that young people do not lose access to available options because they did not pursue the requisite coursework or skill development;
- 2) Younger generations are more likely than those in generations past to not only change jobs, but even to change occupations multiple times in their working lives, creating multiple opportunities to push the boundaries of what they may consider and pursue; and
- 3) There is clearly room for improvement in the provision of career counseling guidance as adults support youth in countering stereotypes and pursuing non-traditional opportunities. A recent study of women working in construction trades found that of over 200 respondents, just one learned about the trades from her high school career counselor and only two through a counselor at a job center.^{ix}

Many of the commonly employed, one-off tactics to encourage non-traditional career selection, such as brochures, field trips, or talks, are insufficient to prompt individuals to consider these to be viable options.^x Rather, effective strategies for career counselors include:

- Intervening early, before individuals make key decisions about qualifications they may need to pursue certain options;
- Explicitly acknowledging how socialization based on gender, race, ethnicity, or other factors can create biases that shape and restrict career choices;
- Providing clear, detailed information about both the benefits (pay, benefits, security, and social good) and stresses of many types of jobs, as well as the typical on-the-job tasks;
- Linking individuals with mentors and other interventions like camps and programs that encourage exploration of non-traditional options;

- Selecting and using career assessments carefully, with recognition that these can lead to biased results; and,
- facilitating equity-oriented school environments through analyses of culture and climate, curricular materials, and reflection on outcomes data.^{xi}

However, research suggests that the extent to which counselors and counseling tools can and do incorporate these strategies is mixed at best.^{xii} Accordingly, counselors may need further training and support to effectively provide equity-focused career counseling.

Policy Recommendations

To provide the greatest likelihood that the individuals in our workforce find the best match for their talents and interests:

Reduce caseloads to retain a focus on career counseling. Career counselors can play a critical role in introducing students to potential career paths and connecting them with the resources to get there. However, in K-12 settings, these counselors are often expected to provide support in other areas, including achievement testing and study skills, all while handling very large caseloads. Research suggests that this is especially acute in rural areas, where 14% of schools do not have counselors and others share counselors across multiple sites. Meanwhile, adult career counselors must spend a significant amount of time on eligibility determinations and data entry.

The American School Counselor Association recommends a ratio of 1 counselor to 250 students and that counselors undertake regular professional development, while Indiana law recommends that elementary educational and career services counselors maintain a 1-to-600 ratio in grades 1-6 and 1-to-300 ratio in grades 7-12. However, Indiana's counselor-to-student ratio averaged 1-to-543 between 2004-05 and 2014-15.^{xiii} Surveyed counselors in Indiana suggest that too much time is spent on activities other than advising students.^{xiv} This may undergird the fact that many Hoosier students appear to be uncertain as to whether they created a graduation plan.^{xv} Addressing the sheer time challenge counselors currently face in meeting the needs of students (e.g. hiring more counselors, reducing other workloads) is a critical first step to intervening early in the career decision-making process.

Offer anti-bias training and support to K-12 and adult career counselors. As part of their ongoing training, career counselors should be equipped with supports to examine their own biases and systemic factors that affect occupational segregation; they should also be equipped to facilitate nontraditional career exploration and preparation. Counselors can then support teachers or employers in developing the pipeline to non-traditional careers, especially for historically marginalized groups. However, only about 37 percent of high schools report that their counselors participate in *any* related professional development.^{xvi} The State of Indiana or Indiana Department of Education might consider a pilot program

to offer such training and assess its impact on nontraditional career path selection, and might consider adding tools and information specifically focused on equity and non-traditional career paths to the Indiana Career Ready website.

Conduct an equity-focused evaluation of Indiana career connect tools and interest inventories. As more individuals turn to digital sources for career guidance and advice, these tools will also need to be carefully assessed for their impact on occupational segregation. Small changes in format can lead to substantial differences in the career options presented to users. For example, research suggests that activity-based rather than occupation-based assessments, particularly those that use Likert scoring rather than ranking or sorting, may be less likely to trigger gender stereotypes that result in more segregated selections.^{xvii} While more research is needed to determine what tools might best facilitate consideration of non-traditional occupations, user evaluations and outcome data may provide key insights into the value of existing tools for promoting consideration of nontraditional career options.^{xviii}

Create dedicated funding streams and evaluation measures to encourage entrance into non-traditional career paths. Even well-equipped career guidance professionals cannot overcome barriers like discrimination or harassment, or limitations in skills or sense of personal efficacy. Supporting evidence-based programming that encourages consideration of and facilitates entry into nontraditional occupations will provide an important vehicle for newly trained counselors to steer individuals toward non-traditional careers. When the Carl D. Perkins Act mandated funding for promotion of equity in career and technical education and dedicated equity coordinators in the 1980s and 1990s, the country saw progress toward occupational desegregation. Some organizations have picked up where the federal government left off. For example, in Chicago, New York City, and Oregon, where strong women-only trade apprenticeship programs exist for non-traditional, high-wage fields, women's participation in apprenticeships is double the national average.^{xix} Policymakers should consider setting aside funding for non-traditional career entry, improving measures to facilitate better state-level tracking of occupational segregation, and providing more robust evaluation of initiatives and tools with an eye toward diversifying occupations.

Occupational segregation, when based on bias or discrimination, harms Hoosier families, businesses, and our economy. Conversely, when individuals feel free to go where their talents and motivation will be best employed, we all benefit. And, while not a cure-all, addressing occupational segregation would do much to mitigate the gender wage gap and increase the economic security of women and people of color. Taking steps to better use career counseling opportunities as moments to interrupt bias and introduce non-traditional occupations for consideration could yield important benefits for families, communities, and our economy.

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ⁱ See, for example, C. Goldin, *Understanding the Gender Gap: An Economic History of American Women* (1990), New York: Oxford University Press.

ⁱⁱ See, for example, World Economic Forum, *The Future of Jobs Report* (2018), accessed October 1, 2019 from http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf

ⁱⁱⁱ Washington Center for Equitable Growth, *Occupational Segregation in the United States* (September 2017), accessed September 23, 2019 from <https://equitablegrowth.org/fact-sheet-occupational-segregation-in-the-united-states/>

^{iv} This figure represents 1 minus the percentage of white, non-Hispanic workers, according to the 2017 American Community Survey.

^v This is the benchmark for non-traditional occupations, or occupations or fields of work for which individuals from one gender comprise less than 25% of the individuals employed in that field. See Carl D. Perkins Career and Technical Education Improvement Act S.250, 109th Cong. 6(2006).

^{vi} National Alliance for Partnerships in Equity, *Nontraditional Career Preparation: Root Causes & Strategies* (2009), accessed September 23, 2019 from <https://www.napequity.org/nape-content/uploads/Root-Causes-Document.pdf>

^{vii} A. Hegewisch & B. O'Farrell, *Women in the Construction Trades: Earnings, Workplace Discrimination, and the Promise of Green Jobs* (April 2015), accessed September 23, 2019 from <https://iwpr.org/wp-content/uploads/wpallimport/files/iwpr-export/publications/C428-Women%20in%20Construction%20Trades.pdf>

^{viii} See, for example, Indiana Institute for Working Families, *Wages, wealth, and poverty: Where Hoosier women stand and ways our state can close the gaps* (2017), accessed September 5, 2019 from <http://incap.org/iwfw/wagegap.html>

^{ix} A. Hegewisch & B. O'Farrell, *Women in the Construction Trades: Earnings, Workplace Discrimination, and the Promise of Green Jobs*.

^x National Alliance for Partnerships in Equity, *Nontraditional Career Preparation: Root Causes & Strategies* (2009).

^{xi} See, for example, National Alliance for Partnerships in Equity, *Nontraditional Career Preparation: Root causes & strategies*, Accessed July 22, 2019 from <https://www.napequity.org/nape-content/uploads/Root-Causes-Document.pdf>; M. Olsson & S. E. Martiny, *Does exposure to counterstereotypical role models influence girls' and women's gender stereotypes and career choices? A review of social psychological research* (Dec 2018), *Frontiers in Psychology*, accessed June 24, 2019 from <https://www.ncbi.nlm.nih.gov/pubmed/30581398>

^{xii} See, for example, the number of women in construction who learned about opportunities from career counselors in A. Hegewisch & B. O'Farrell, *Women in the Construction Trades: Earnings, Workplace Discrimination, and the Promise of Green Jobs*.

^{xiii} National Association for College Admission Counseling, *State-by-state student-to-counselor ratio report: 10-year trends* (2016), accessed September 23, 2019 from <https://www.schoolcounselor.org/asca/media/asca/Publications/ratioreport.pdf>

^{xiv} M. Fleck, *Indiana School Counseling Research Review* (2014), *Indiana Chamber Foundation*, accessed September 23, 2019 from <https://www.indianachamber.com/wp-content/uploads/2017/09/INChamberSchoolCounselingReport.pdf>

^{xv} *Ibid.*

^{xvi} National Association for College Admission Counseling, *College counseling in secondary schools* (2015), accessed September 23, 2019 from https://www.nacacnet.org/globalassets/documents/publications/research/soca_chapter4.pdf

^{xvii}W. Ludwikowski, H. Schechinger, & P. Armstrong, Are interest assessments propagating gender differences in occupations? (2019), accessed September 23, 2019 from <https://journals.sagepub.com/doi/full/10.1177/1069072718821600>

^{xviii}W. Ludwikowski, H. Schenchinger, & P. Armstrong, Are interest assessments propagating gender differences in occupations?

^{xix}A. Hegewisch & J. Anderson, Women-only pre-apprenticeship programs, *National Center for Women's Equity in Apprenticeship and Employment*, accessed September 23, 2019 from http://womensequitycenter.org/wp-content/uploads/2017/10/Women-Only-Pre-Apprenticeship-Programs_low-res.pdf