

# Workforce Chutes & Education Ladders:

Barriers and Supports in Postsecondary Credentialing  
in Jefferson County, Colorado



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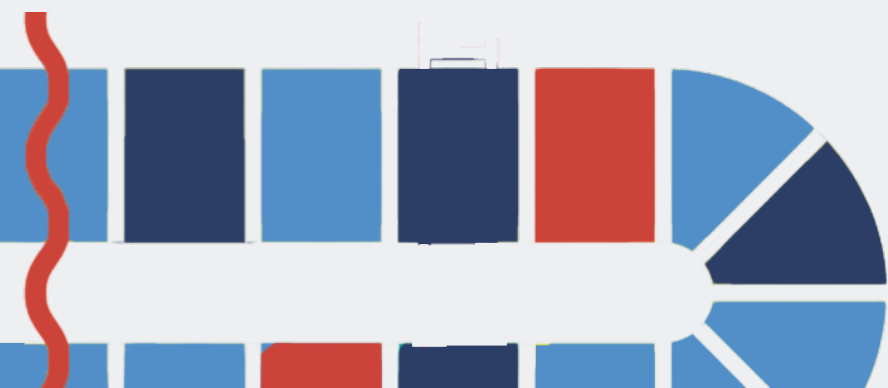
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“Having my children is probably the biggest barrier for me going back to school right now. The college system isn’t really supportive of moms or parents.”

- **Giselle (and Jude)**, 26 years old, Jefferson County, CO



# Executive Summary

As of 2024, Colorado leads the nation in postsecondary educational attainment. Across both undergraduate and graduate degrees, Colorado has seen multi-percentage increases in degree attainment. The state has also seen significant increases in attainment from Coloradans of color, including a 27 percent increase for Latino Coloradans, a 13 percent increase for Native and Indigenous Coloradans, and a 6 percent increase for Black Coloradans.<sup>1</sup>

Despite these increases, Colorado is still facing a severe worker shortage, with only 52 available workers for every 100 open jobs.<sup>2</sup> Colorado ranks fourth-highest in the country for job openings per unemployed person.<sup>3</sup> Between March and April of this year, over 4,600 jobs were added in Colorado in Education and Health Services, more than any other sector. To best prepare young adults to enter the labor market while simultaneously fortifying the Colorado workforce, we must ensure that traditional and nontraditional postsecondary pathways are appealing options for young adults to bolster their futures. To do so, we must deeply examine the experiences of young adults in the Colorado workforce and education system.

Young Invincibles (YI) sought to examine career and educational attainment within Jefferson County, particularly the barriers and supports that young adults identify within the postsecondary landscape. This report explores the current postsecondary systems that young adults navigate, presents key themes from focus groups conducted with young Coloradans in the workforce, and provides recommendations for implementing a stackable credentials program that adequately meets the needs identified by our respondents.

YI utilized a mixed-methods approach to provide a detailed picture of postsecondary attainment in Jefferson County, Colorado. Our quantitative study surveyed 413 young adults ages 18 to 44. We recruited participants through our organization's listserv and in-person outreach in Jefferson County. From the data gathered, we produced descriptive statistics on barriers to career advancement, knowledge of stackable credentials, the importance of stackable credentials, and ways young adults have heard or would like to hear in the future about stackable credential opportunities.

Our qualitative study consisted of eight focus groups and eight 1:1 interviews. Our focus groups and interviews resulted in 37 stories gathered to supplement our quantitative findings. Through both our quantitative and qualitative work we uncovered many chutes and ladders, or barriers and supports, that learners face when trying to navigate their way into postsecondary education or the workforce. These obstacles are often systemic, and threaten the likelihood that a young adult in Colorado successfully completes a credential after high school.

<sup>1</sup> The Lumina Foundation. (2024). A Stronger Nation: Learning Beyond High School Builds American Talent. The Lumina Foundation 2024 National Report. <https://www.luminafoundation.org/stronger-nation/report/#/progress>

<sup>2</sup> Hoover, M., Ferguson, S., & Lucy, I. (n.d.) Understanding Colorado's Labor Market. U.S. Chamber of Commerce. <https://www.uschamber.com/workforce/understanding-colorados-labor-market>

<sup>3</sup> Hernandez, E. (2024, June 2). How do you get a job post-graduation? Colorado experts weigh in on "hard" labor market. The Denver Post. <https://www.denverpost.com/2024/06/02/colorado-job-market-tips-post-graduation/>



### The quantitative data revealed the following:

- Female respondents and respondents of color are more likely to experience barriers to career advancement.
- The top two barriers restricting career advancement were (1) lack of qualifications & skills required and (2) career competitiveness.
- Regardless of income, a majority of respondents believe that pursuing a stackable credential would benefit their career trajectories.
- For respondents who believe stackable credentials to be beneficial, the top three supports they identified in order to pursue a stackable credential were (1) online course offerings, (2) flexible class offerings, and (3) mentorship programming.
- For respondents who are already pursuing a credential, the top three barriers preventing them from obtaining additional credentials were (1) tuition and fee expenses, (2) time constraints, and (3) undecided on the desired program and/or training.

### The qualitative data revealed the following themes:

- The primary barrier to pursuing postsecondary education/credential is cost.
- Despite financial and other obstacles, respondents overwhelmingly agreed that postsecondary education or credentials were ultimately worth pursuing.
- Most respondents indicated they received primary support from family, friends, or partners rather than institutional support from teachers, counselors, or workforce programs.
- Most respondents either performed their own research or relied on their close network to gather information about potential pathways after high school rather than receiving information from a high school program or guidance counselor.
- Among a diverse array of answers, respondents identified the most essential aspect of a potential workplace as “flexibility.”

### Based on the data gathered in both our quantitative and qualitative surveys, we recommend that future efforts:

- Implement a Stackable Credentials program that centers on increasing financial mobility and resources for its participants.
- Expand the required return on investment (ROI) information available to prospective program participants.
- Establish safeguards to ensure that the Stackable Credentials program(s) prioritize student autonomy when choosing a program or credential, specifically protecting the interests of marginalized Coloradans.
- Require transparency from employers in job postings on workplace benefit offerings.



# Introduction

## Context of the problem

Young Invincibles (YI) and Colorado Succeeds seek to understand the young adult workforce in Jefferson County, Colorado. While Colorado boasts high statewide rates of educational attainment, our developing workforce also shows a high projected need for postsecondary education to obtain employment in Colorado.<sup>4</sup> The Colorado workforce is shifting rapidly to prioritize degree-holders, leaving gaps in the workforce in skilled trades and other fields. Just over 50 percent of Jefferson County residents hold four-year Bachelor’s degrees or higher<sup>5</sup>, compared to only 30 percent of Coloradans. Because Jefferson County holds higher degree attainment levels, it is essential to understand our opportunity to strengthen pathways to all postsecondary programs to fulfill the needs of our young adults and our increasing population.

Several workforce-education-linked initiatives exist in Colorado, but many remain siloed within the education sector. Other initiatives are accessible only to those pursuing traditional education pathways. Using the KOF education-employment linkage index, which measures the degree to which actors from the education and employment systems cooperate to provide vocational education and training, we know that Colorado scores very low—2.69 in a scale from 1 to 7.<sup>6</sup> Colorado does, however, boast several “bright spots” in our education-employment system, but the connectedness between programs and initiatives is lacking. This lack of connection means young adults easily miss out on available opportunities due to systemic design.

To better align our education-employment pathways, we must understand firsthand when and why our young adults fall through the cracks. Through our quantitative and qualitative research in Jefferson County, we sought to understand more holistically the barriers and supports to obtaining postsecondary education or credentials in Colorado. Understanding these factors will allow for an informed design of a stackable credentials program that effectively targets young adults. The intentional design of this program could improve educational and career outcomes while bolstering the Colorado workforce.

## Definition of Stackable Credentials

A credential is considered “stackable” when it is part of a sequence of industry-informed credentials that can be accumulated over time to expand a learner’s competencies, help him or her advance within a career pathway, and earn family-sustaining wages.

<sup>4</sup> The Lumina Foundation. (2024). A Stronger Nation: Learning Beyond High School Builds American Talent. The Lumina Foundation 2024 National Report. <https://www.luminafoundation.org/stronger-nation/report/#/progress>

<sup>5</sup> U.S. Census Bureau. (n.d.). Education Attainment (Population 25 Years and Older) in Jefferson County. U.S. Department of Commerce. Retrieved May 3, 2024, from [https://data.census.gov/profile/Jefferson\\_County\\_Colorado?g=050XX-00US08059](https://data.census.gov/profile/Jefferson_County_Colorado?g=050XX-00US08059)

<sup>6</sup> Renold, U., Caves, K., Bolli, T., & Bürgi, J. (2016). From bright spots to a system: Measuring education-employment linkage in Colorado career and technical education (No. 87). KOF Studien.



Stackable credentials don't require students to enroll in a full-time college program but rather allow them to take courses independently. Stackable credentials are an option for students who can't take on a full course load for a variety of reasons. Students will be able to complete courses in a shorter amount of time and can take as many classes as they want to. You can stack these courses to complete prerequisites to create a degree or certificate for other classes.

This type of stacking is vertical stacking. Students can also receive various credentials from classes at the same level, which is horizontal stacking. This is an excellent option for students who want to refresh their education on some career courses.<sup>7</sup>

### Stackable Credentials in Practice

The labor market has changed enormously since the onset of the Covid-19 pandemic. Many employers across skilled trade industries report worker shortages while, simultaneously, more and more jobs require formal education to the level of a Bachelor's degree. These changes in the labor market are also occurring during the time where Colorado's state enrollment rates are dropping. Data from 2021 shows a 1.1% decrease in college-going rates, a metric that's been falling since 2019. Despite our record levels of overall educational attainment, Colorado's college-going rates are about 10% lower than the national average.<sup>8</sup> Yet by 2031, Colorado is expected to boast the highest percentage of jobs that require Bachelor's degrees of all 50 states.<sup>9</sup>

Stackable credentials programs are emerging as a potential opportunity to satisfy employers' need for workers' participation in the workforce and workers' need for flexible educational attainment and living wages.<sup>10</sup> Preliminary data on stackable credential programs show stackable credentials may produce economic gains that are, at the very least, on par with traditional programs.<sup>11</sup> Studies of stackable credentials programs in California Community Colleges have shown that stackable credentials programs often enroll participants age 30 or older and majority non-white with no other postsecondary degree or credential.<sup>12</sup> The same study finds that participants are potentially 10 to 16 percent more likely to stack credentials if the program has pre-sequenced credentials, indicating that stackable sequences may increase credential acquisition.

7 This definition of "stackable credentials" was pulled verbatim from YI's quantitative survey.

8 CDHE. (2023, May 1). Colorado college-going rates continue to decline but at a slower rate. Colorado Department of Higher Education. <https://cdhe.colorado.gov/news-article/colorado-college-going-rates-continue-to-decline-but-at-a-slower-rate>

9 Carnevale, A.P., Smith, N., Van Der Werf, M., & Quinn, M.C. (2023). After Everything: Projections of Jobs, Education, and Training Requirements through 2031. Georgetown University Center on Education and the Workforce. <https://cew.georgetown.edu/cew-reports/projections2031/>

10 Austin, J., Mellow, G., Rosin, M., & Seltzer, M. (2012). Portable, stackable credentials: a new education model for industry-specific career pathways. McGraw-Hill Research Foundation. <https://www.voced.edu.au/content/ngv:59445>

11 Bailey, T. R., & Belfield, C. (2017). Stackable credentials: Do they have labor market value?.

12 Bohn, S., & McConville, S. (2018). Stackable credentials in career education at California community colleges. Public Policy Institute of California.

Our current education system makes it difficult for students to navigate the vast array of pathways available to them. From GEDs to non-credit certificates to traditional degrees to apprenticeships to industry-specific licensure to individual course completion, the options make it easy to get “lost” in the system. Students who are attempting to engage in postsecondary education after earning credentials have a difficult time earning credit in the educational sphere and getting recognition for their previously obtained credentials. Students who have to leave school often have a far harder time returning to it.<sup>13</sup>

In the Colorado Department of Higher Education’s 2023 Strategic Plan, *Building Skills for an Evolving Economy*, they emphasize specifically that organizational work must concentrate resources on learners who have lower completion rates, like nontraditional students and learners of diverse backgrounds, including ethnic, racial, economic, and geographic backgrounds.<sup>14</sup>

The need to support nontraditional learners is a priority in Jefferson County and statewide. While Jefferson County is still less racially diverse than neighboring Denver County,<sup>15</sup> racial demographics in Jefferson County have changed significantly in the last several decades. Some school districts, like Edgewater, are made up predominantly of Latino community students, and upwards of 90 percent of students receive free and reduced lunch rates.<sup>16</sup> Despite this increasing population of non-white students in Jefferson County school districts, the impacts of historic systemic racism are still present, impacting the experiences of learners of color in Jefferson County. A historical analysis of race-based covenants in Jefferson County reveals hundreds of race-based stipulations in county documents, including numerous restrictions requiring owners of residential properties to be Caucasian.<sup>17</sup> This practice, in combination with redlining practices present in Denver and surrounding metro areas, contributes to the development of generational wealth for white people only. Though these covenants and practices have been deemed illegal, the historical practice could contribute to perpetuating generational racial wealth gaps.

With this in mind, evaluating and implementing a stackable credentials program in Colorado must demonstrate intentionality in ensuring racial equity in any postsecondary education workforce program. When implemented equitably, stackable credentials programs could provide economic mobility for young adults previously left out of opportunities to improve their access to education and wealth.

13 Ganzglass, E. (2014). *Scaling” Stackable Credentials”*: Implications for Implementation and Policy. Center for Postsecondary and Economic Success.

14 CDHE. (2022). *Building Skills for an Evolving Economy*. Colorado Department of Higher Education. [https://cdhe.colorado.gov/sites/highered/files/2022\\_CCHE\\_Strategic\\_Plan\\_2.2.23.pdf](https://cdhe.colorado.gov/sites/highered/files/2022_CCHE_Strategic_Plan_2.2.23.pdf)

15 U.S. Census Bureau. (n.d.). *Race and Ethnicity in Jefferson County*. U.S. Department of Commerce. Retrieved May 3, 2024, from [https://data.census.gov/profile/Jefferson\\_County\\_Colorado?g=050XX00US08059](https://data.census.gov/profile/Jefferson_County_Colorado?g=050XX00US08059)

16 Newton, J. (2023, October 1). *The Fight for Education Equity in Edgewater Schools*. Edgewater Echo. <https://edgewatercho.com/2023/10/the-fight-for-education-equity-in-edgewater-schools/>

17 Arnold, E. (2023, January 19). *A look at the suburbs: Map experts dig for roots of racial separation in metro Denver neighborhoods*. Colorado Community Media. <https://coloradocommunitymedia.com/2023/01/19/map-racial-separation-metro-denver-suburbs-covenants-redlining/>




## Quantitative Methodology

In our quantitative survey, we surveyed 413 young adults ages 18 to 44. We recruited participants to take the survey through our YI listserv and in-person outreach on college campuses and in other public spaces in Jefferson County, Colorado.<sup>18</sup> We intentionally oversampled data from community members who are nontraditional learners and learners from diverse ethnic, racial, economic, and geographic backgrounds, as these learners are more likely to fall through the cracks in the education workforce system.

From the data gathered, we produced descriptive statistics to determine whether young adults felt barriers were restricting their career advancement, and we disaggregated by gender, race, and ethnicity. In addition, this section provides data on which types of barriers are affecting career advancement for young adults, their view on the importance of obtaining a stackable credential(s) for current and future career advancement disaggregated by income level, as well as data on the support needed for young adults to pursue a stackable credential and barriers preventing them from obtaining additional credentialing.

The data presented in the following findings section is a fraction of the data gathered from the quantitative survey and is meant merely to show some of the most significant findings from our research. The complete list of questions from the quantitative survey can be found in Appendix A.



“My plan after graduating high school was to go into the military and then go into college, but it did not go as planned...I went straight into the workforce and quickly found out I couldn’t do anything with my high school degree. It was really hard to get a job.”

- **Katalina**, 31, Denver



<sup>18</sup> We also used Cint to gather additional responses to increase our sample size. Cint helps organizations and researchers find the right audience for their online surveys. <https://www.cint.com/market-research-and-insights/>.

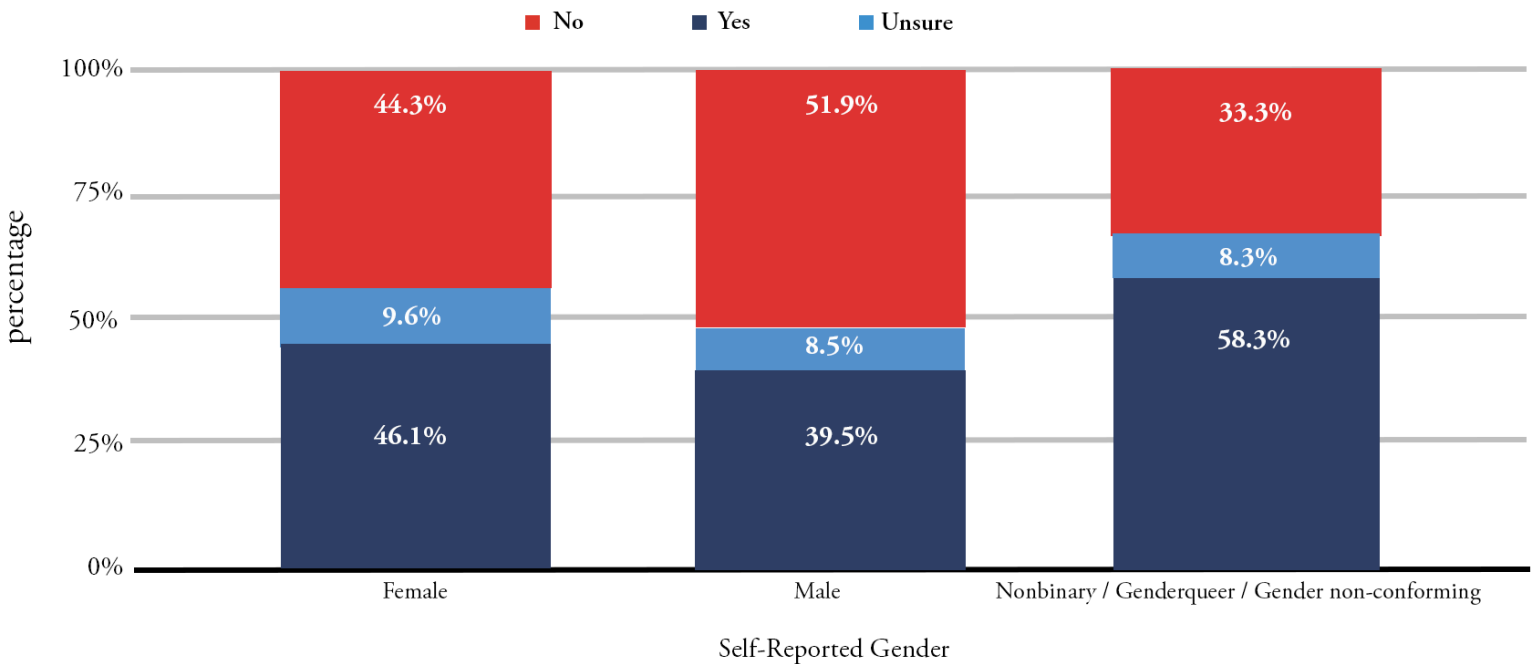
# Quantitative Findings

## Barriers to Career Advancement

To better understand young adults’ perspectives on career advancement, we asked participants, “Were there any barriers that restricted your career advancement?” We disaggregated the data by gender (figure 1.1) and by race and ethnicity (figure 1.2). Figure 1.1 shows male respondents (12.3 percent) are less likely to experience barriers to career advancement than female respondents (30.3 percent). When examining all gender identities, close to half of all respondents (44.6 percent) suggested they experienced barriers when trying to advance their careers.

Figure 1.1

### Barriers to Career Advancement by Gender

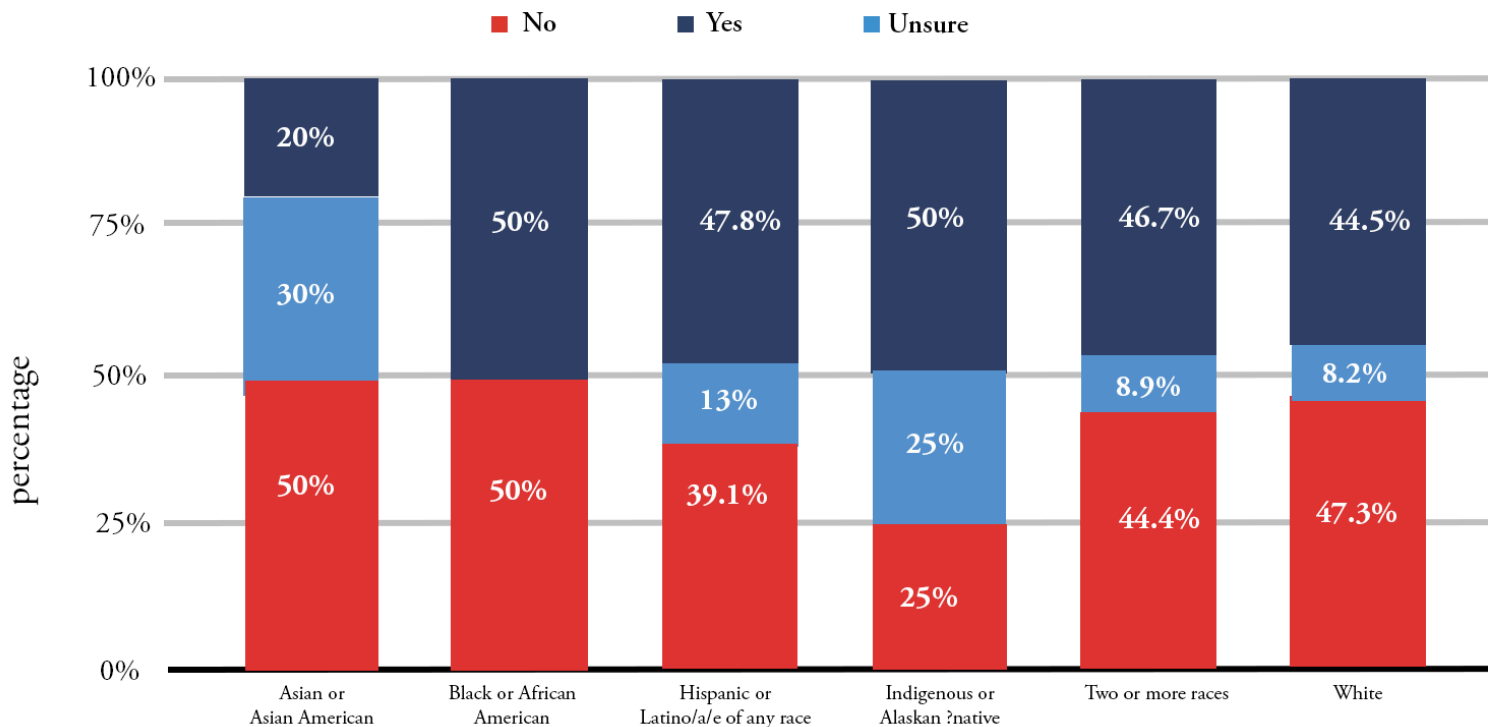


**Note:** For the survey, there was an option for respondents to select “prefer not to say.” While this is not reflected in the figure above, 0.2 percent of respondents selected “yes.”

When examined by race and ethnicity, a little over half of the Hispanic or Latino/a/e respondents (5.3 percent of total respondents) reported experiencing barriers to career advancement, as well as Indigenous or Alaska Native (0.5 percent) respondents. Asian American (1.2 percent), Two or More Races (1.9 percent), and White (33.4 percent) participants had a higher percentage of “no” responses to having barriers to career advancement. In comparison, Black or African American participants responded half for “yes” (1.2 percent) and the other half for “no” (1.2 percent) barriers.

Figure 1.2

## Barriers to Career Advancement by Race and Ethnicity

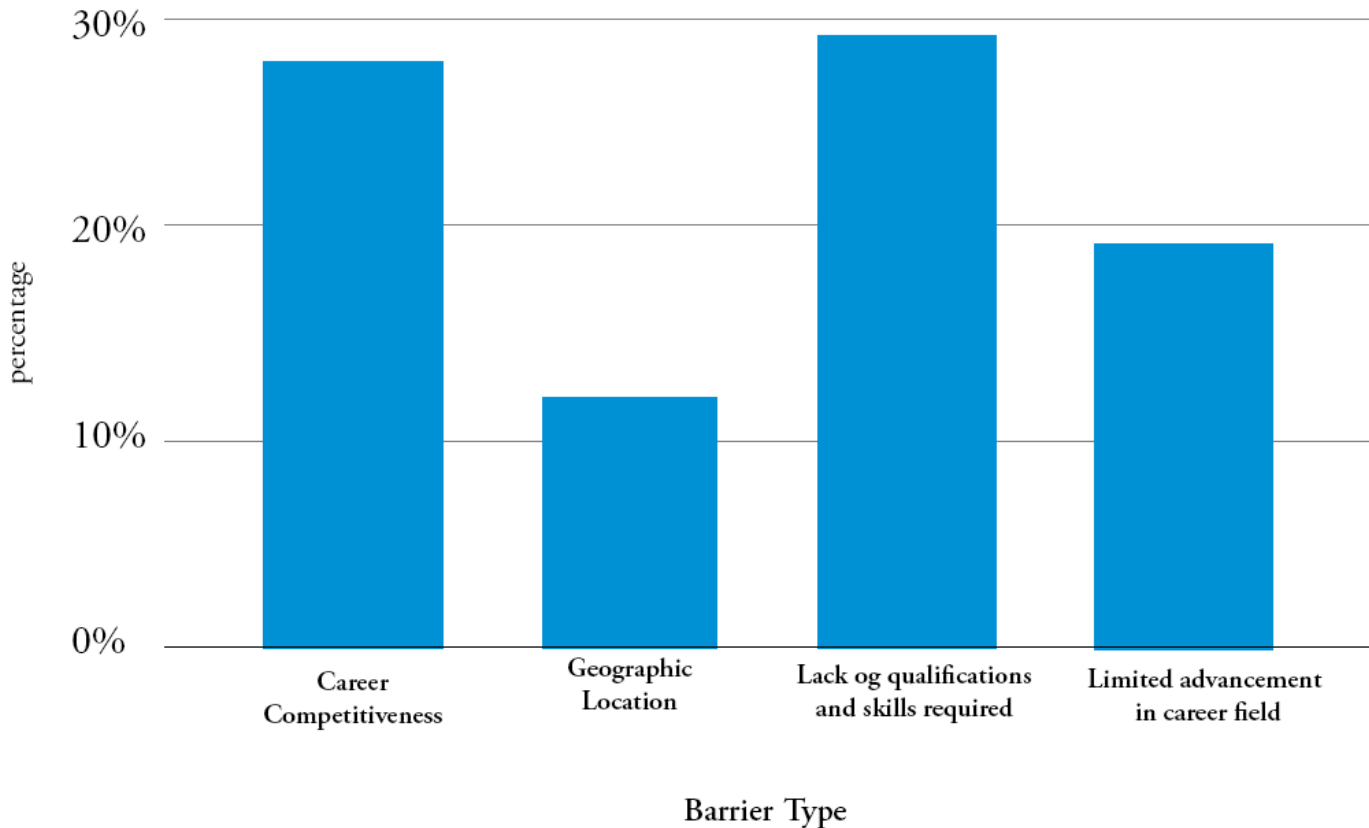


**Note:** The survey included an option for respondents to “select all that apply” regarding their race and ethnicity. During analysis, the “select all that apply” option was combined with the other option, “two or more races.”

When participants were asked, “What barriers restricted your career advancement?” the top two barriers were the lack of qualifications and skills required (29.4 percent) and career competitiveness (28.2 percent).

Figure 1.3

## Barrier Types Affecting Career Advancement



**Note:** This question was only asked to participants who responded “yes” to the following question, “Were there any barriers that restricted your career advancement?”

### Importance of Stackable Credentials

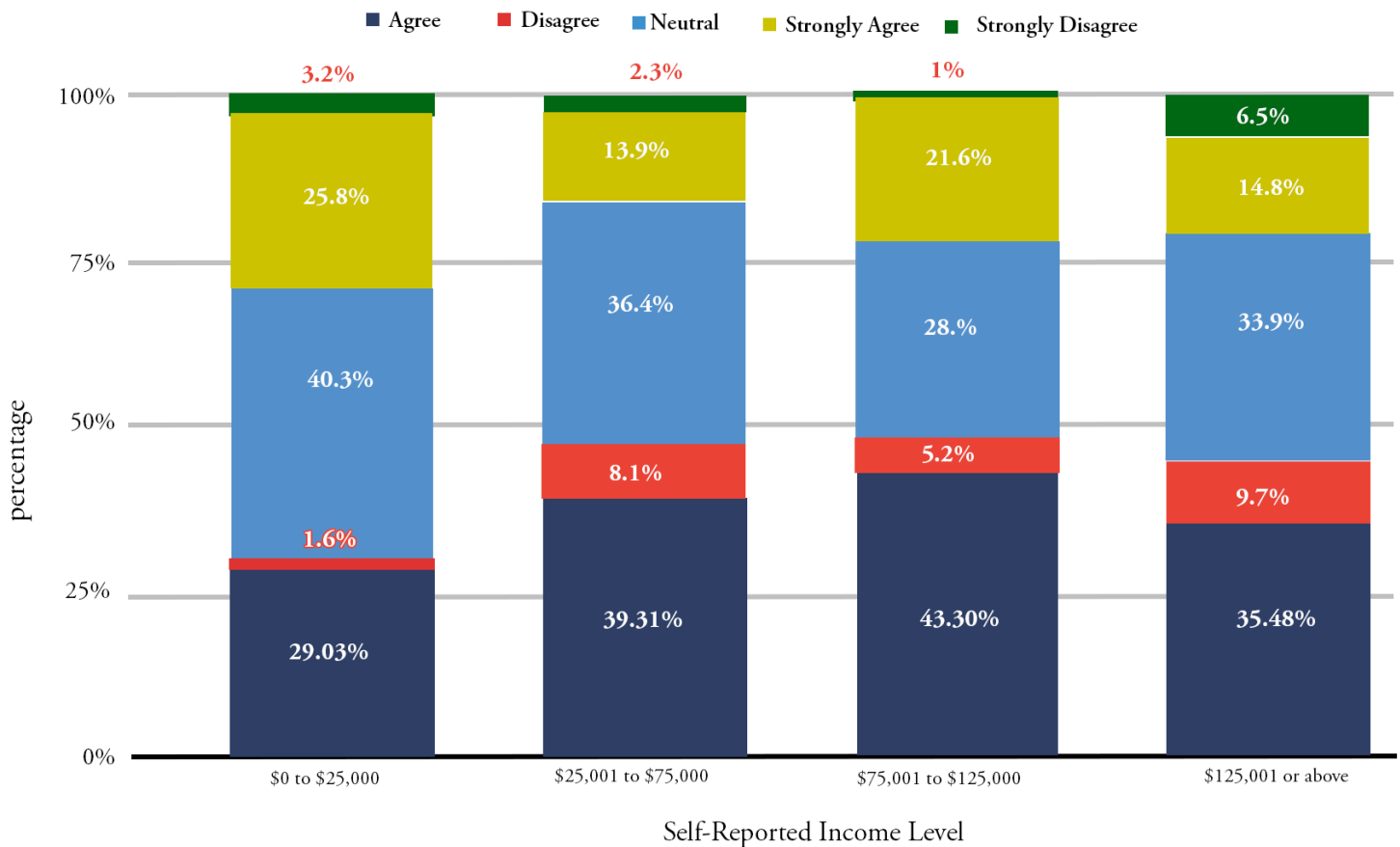
While we want to know whether participants are experiencing barriers to career advancement and the types of barriers affecting such career advancement, we also want to better understand if obtaining a stackable credential is important for their current and future career development. We asked participants, “Do you agree that obtaining a stackable credential is important for your current and future career development?” We disaggregated the data by income (figure 2).



Figure 2 shows that, regardless of income level, the majority of respondents selected they “agree” (37.3 percent) that a stackable credential is important for their current and future career, followed by “neutral” (35.8 percent), and “strongly agree” (17.4 percent). Respondents with a household income of \$25,001 to \$75,000 were more likely to “agree” (16.5 percent) that a stackable credential was important. In comparison, only 4.4 percent of respondents who make between \$0 to \$25,000 “agree” a stackable credential was important, followed by respondents making \$125,001 or above (5.3 percent).

Figure 2

### Stackable Credentials Importance to Current and Future Career by Income



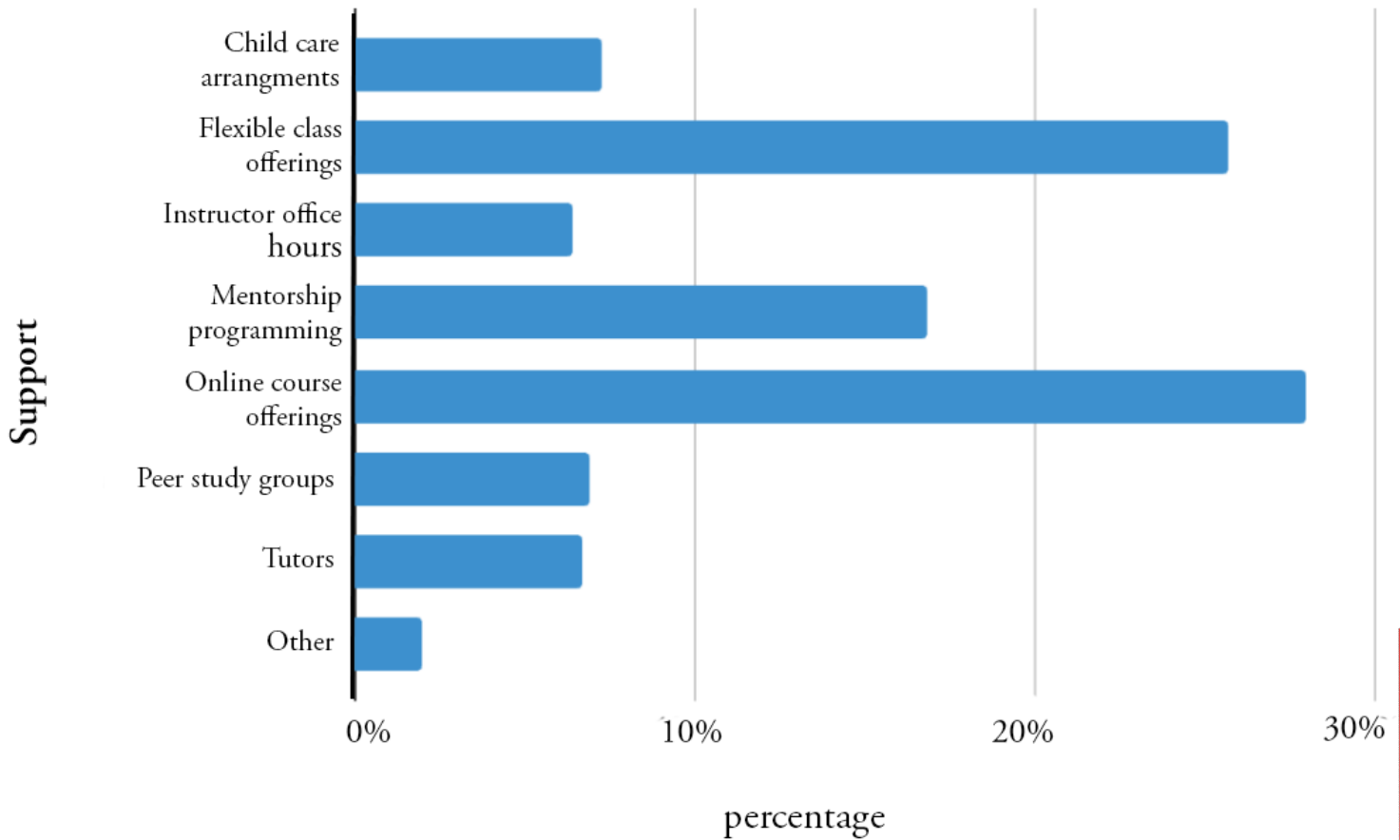
### Stackable Credential Support and Barriers

Since we know that a stackable credential is important to our respondents for their current and future career development, we finally examined the support and barriers of pursuing a stackable credential. We asked the following questions: 1) “Please select the top three (3) support options you would need to pursue a stackable credential?” and 2) “Please select the top three (3) obstacles that prevent you from pursuing additional credentials or certifications within the next two years.”

Figure 3.1 provides data on the support young adults need to pursue a stackable credential. The top (3) selections for support include online course offerings (28.0 percent), flexible class offerings (25.7 percent), and mentorship programming (16.8 percent).

Figure 3.1

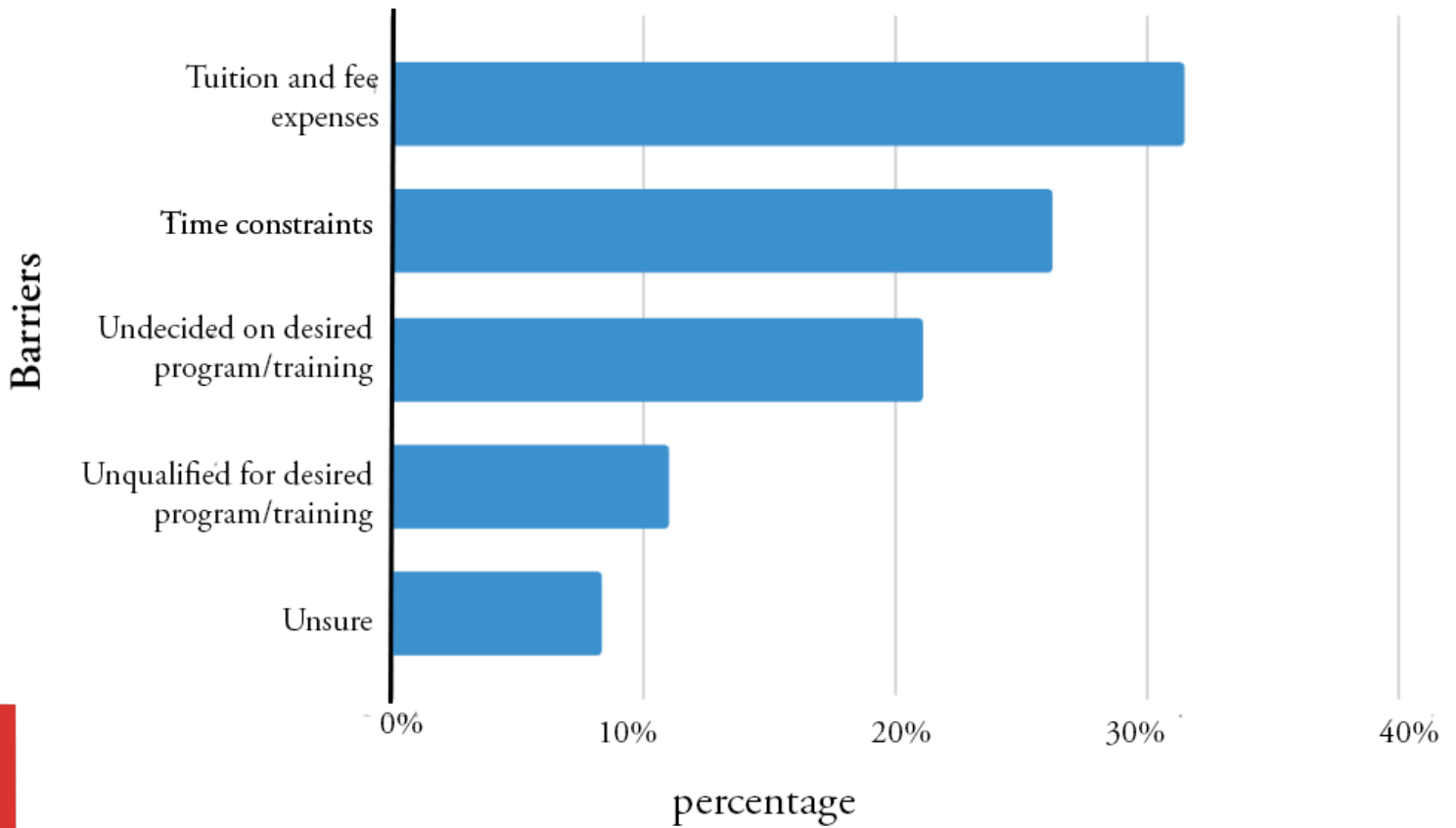
## Support Needed to Pursue a Stackable Credential



For respondents currently pursuing a credential, figure 3.2 provides the top three (3) barriers young adults feel are preventing them from obtaining additional credentialing. The following barriers include tuition and fee expenses (31.5 percent), time constraints (26.3 percent), and undecided on desired program and/or training (21.1 percent).

Figure 3.2  
**Barriers Preventing Additional Credentialing**

# Barriers Preventing Additional Credentialing



# Qualitative Methods

## Data Collection

Our qualitative data was sourced from respondents in two ways. First, respondents participated in a focus group called “Stories and Power,” highlighting the connections between storytelling and policy advocacy. To avoid extractive research practices, we wanted participants to receive training in advocacy in exchange for collecting data from their individual stories. During the training, participants learned about the power of personal storytelling in policy, the key tenets of storytelling, and the role of storytelling in the Colorado legislature. Then, participants wrote an “education and career journey” story, in which they modeled their stories after an example that took them through a guided story journey. This example is included in Appendix B.

Our second data source was a post-survey in which participants responded to six major open-ended questions and a series of demographic questions. This report is informed by both the survey and the participants’ education and career journey stories, both of which supplied our data and the quotes pulled from individual interviewees. The survey questions are located in Appendix C.

We conducted eight focus groups with multiple attendees, each between one and five participants. We also conducted eight additional 1:1 meetings with other participants who were unable to attend a focus group. In total, we received 37 responses and stories.

## Compensation

In a further effort to equitably conduct our research, we provided each participant with a \$35 e-gift card to compensate them for their time. Each focus group lasted around one hour.

## Sampling

We used convenience and snowball sampling. Participants were recruited from in person tabling on college and community college campuses, workforce training programs, our Young Invincibles listservs, and from in person canvassing in public spaces in Jefferson County. After initial recruitment efforts, we encouraged participants to refer others who they felt would be interested in participating in our research efforts.

## Participant Demographics

Our participants represented an array of socioeconomic statuses, educational attainment levels, and social demographics. Our demographics are not intended to be representative of the demographics of Jefferson County, as we intentionally over-sampled individuals with marginalized identities as well as individuals who may have experienced increased barriers in accessing postsecondary credentials.



Figure 1a

## Income Demographics of Qualitative Survey Respondents

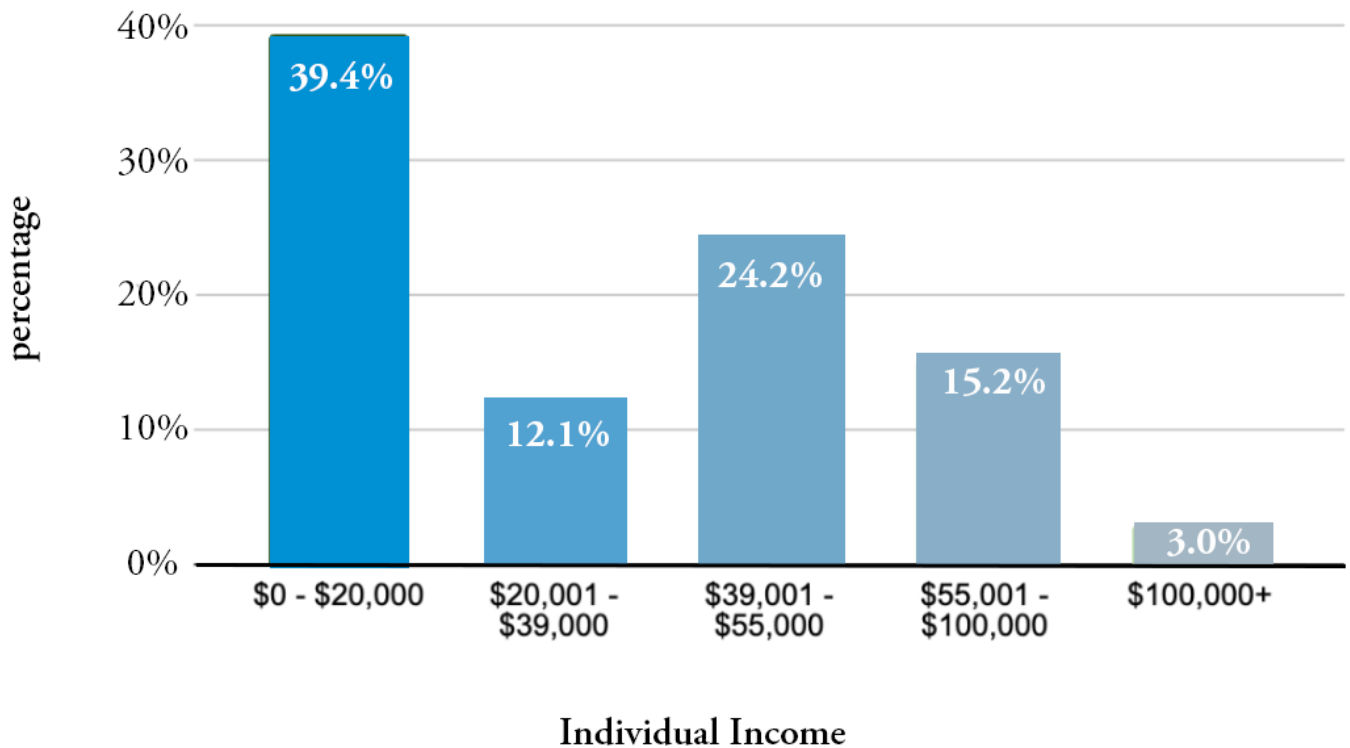


Figure 1b

## Highest Level of Education of Qualitative Survey Respondents

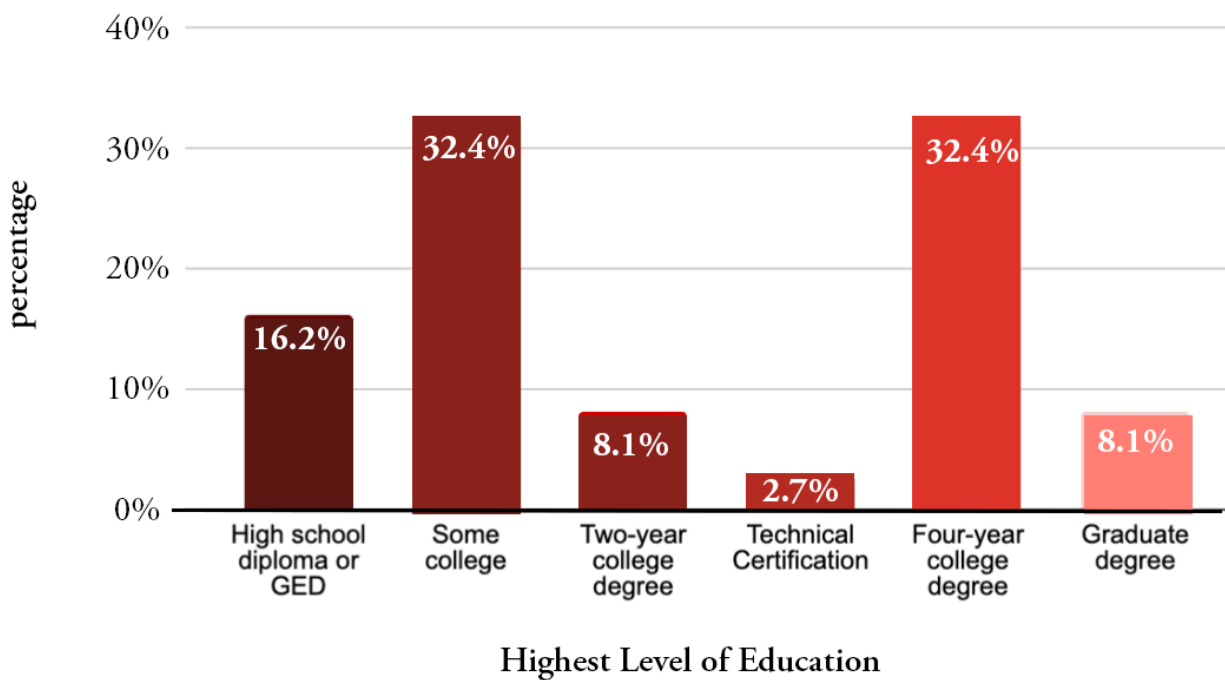


Figure 1c

## Racial Demographics of Qualitative Survey Respondents

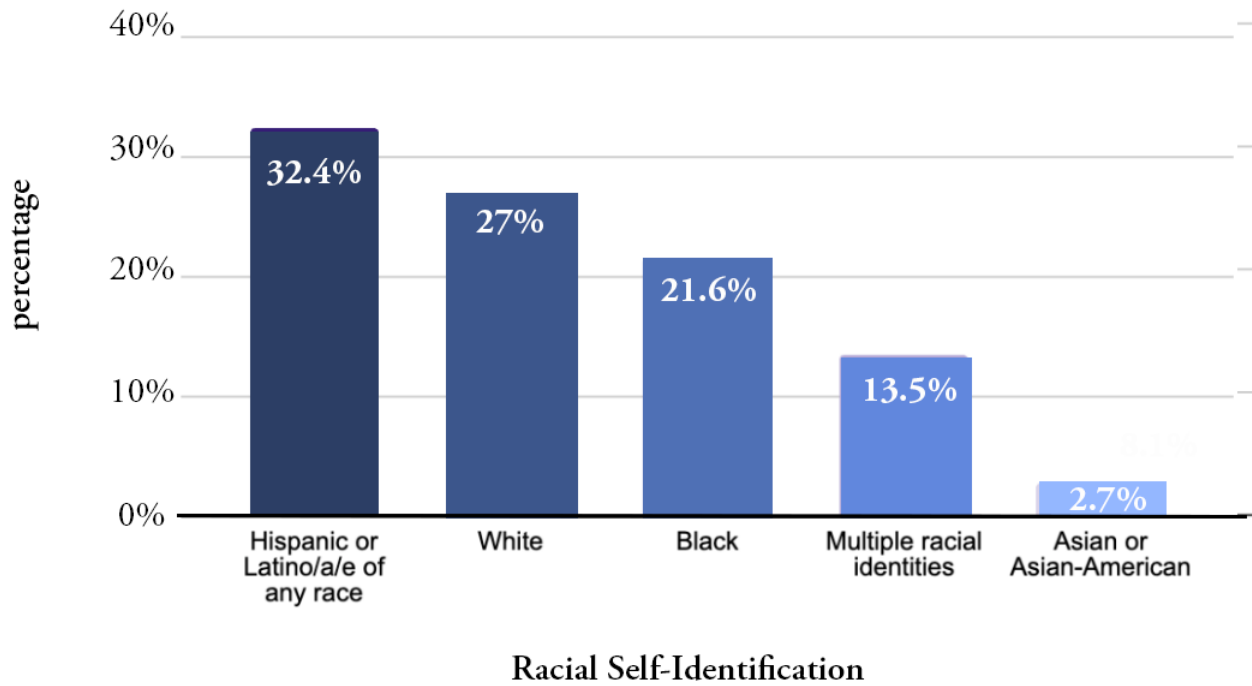
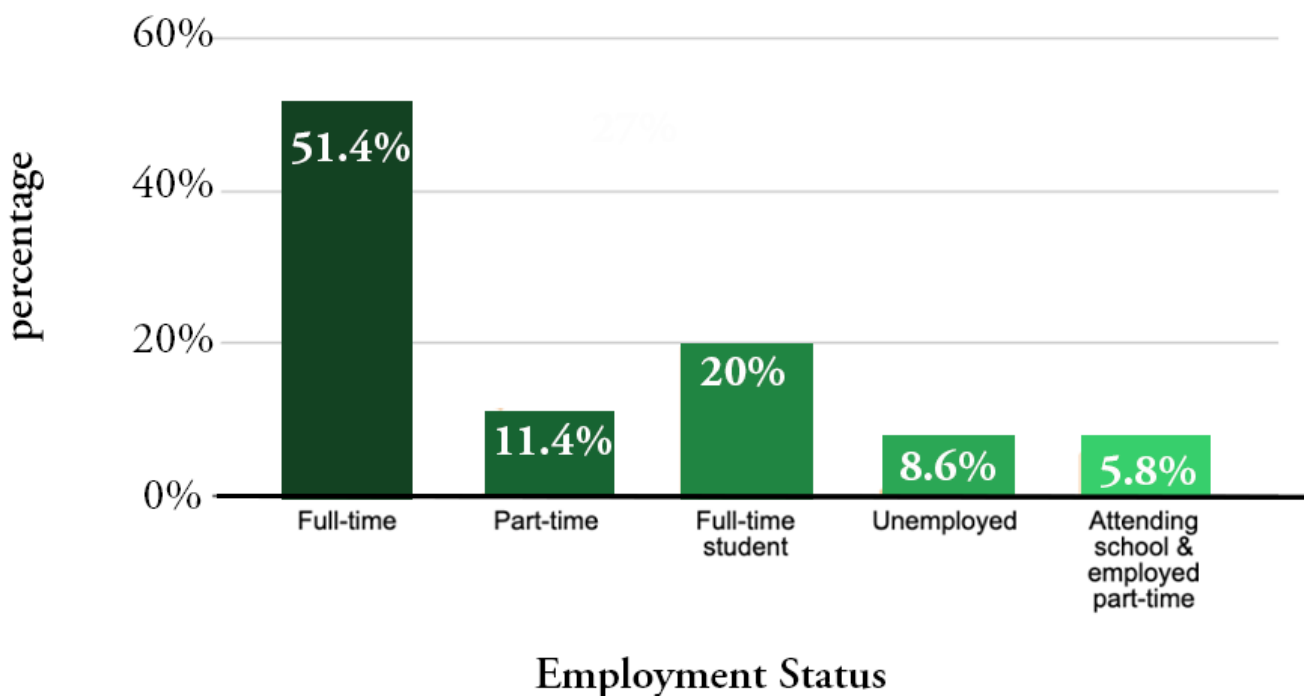


Figure 1d

## Employment Status of Qualitative Survey Respondents



### **Data analysis**

We used thematic analysis to establish general patterns that were drawn from the survey, comparing the answers of each respondent for each question. Following thematic analysis, we utilized narrative analysis to gather supporting quotations from respondents' surveys and journey stories.

### **Limitations**

Generalizability is one of the limitations of this study. There is a small sample size, and the study only examines one community; thus, the findings do not represent the workforce and stackable credentialing perspective of all young adults in Colorado. Further research is imperative in understanding the unique barriers to higher education and stackable credential opportunities for young adults of color in Jefferson County.

In our qualitative survey design, we provided examples of workplace benefits to inform the participants of the context of the question. The examples we included in the initial question may have influenced their answers, creating a potential threat to internal validity.



“I really am inspired by the experiences I had growing up. So right now I am interested in health care careers, and that’s because of the barriers that I’ve faced in trying to access health care.”

-Nicole, 20, Denver



# Qualitative Findings

## Primary Barriers

Seventy percent of respondents cited financial barriers as the biggest barrier to pursuing postsecondary education or credentials. Respondents detailed the numerous ways in which personal finances affect their ability to pursue credentials, including but not limited to tuition and fees, low wages, having to financially support their family, unexpected medical expenses, cost of living, cost of transportation, illness or disability that rendered them unable to work, and lack of understanding about payment options for postsecondary programs. Many respondents demonstrated that they struggled with necessities like housing or food, meaning their desire even to consider postsecondary credentials was dwarfed by their need to provide for themselves on the most basic levels.

**“Going to college in my mind is the path for me... However, [in] the process of going to college you still need to make some income source to be able to 1. Pay rent 2. Food 3. Bills 4. Hygiene/Household items 5. Save. I had to work multiple jobs and still go to food banks at the end of the month because my money wasn’t expanding [sic] all the way to the end of the month.... So sometimes working two to three jobs in one month is what you have to do to make it to the next month.”**

When faced with financial barriers, many young adults rely on scholarships or aid to supplement the price of their credentialing. But for those who have to work during high school, their ability to receive merit-based funding may suffer from an inability to focus solely on school.

**“I come from a low-income, Mexican immigrant community, there were a myriad of different barriers that were seemingly stacked against us in trying to pursue higher education...When your family makes less than \$20k a year and is supporting a family of five, there really wasn’t any time to be thinking of college. There wasn’t any money to be doing that, and I knew that the only way I was going to be able to attend college is to get scholarships, because financial aid was not going to be enough and loans were difficult to get too, especially given my parents’ precarious situation when it comes to federal student aid. Thus, this was the first barrier I [encountered.] The second one was trying to work and do school, given that I needed to help my parents out with something, such as groceries, or gas. Thus, not being able to give my 100 percent at school, made it 10x more difficult to get access to opportunities that were merit-based (SAT awards, or any awards that were based on merit), further compounding my situation.”**

As demonstrated by these responses, acquiring the financial capital to enter any postsecondary credential program is a massive hurdle. However, even young adults who successfully acquire post-secondary credentials experience struggles in gaining employment that provides a living wage and the flexibility to pursue additional credentialing. One respondent, a teacher with an undergraduate education, details the dilemma many degree-holders may face in entering the job market:

**“I have faced financial barriers after graduation. I have struggled with a teacher’s pay and have been on government assistance. I have also had barriers to receiving more education. I want to be a therapist, but for that, you need a master’s degree. I also have to work full-time while needing to get extra credentials. Also, with my type of Bachelor’s degree you usually need a graduate degree to have any viable options for careers that pay decently.”**

At any point in their journey, young adults experience numerous barriers to success. Our respondents indicated that finances alone were one of the most significant obstacles. However, finances coupled with other barriers further exacerbate the difficulty in pursuing credentials. First-generation status, mental health struggles, and disability all compound financial barriers, making postsecondary credentials exponentially more difficult.

**“Being first generation in JeffCo where a lot of friends’ parents had gone to college and knew what they were doing... I had to do everything myself. I had to figure out the puzzle pieces myself; it felt like a guinea pig experiment.”**

**“I’ve faced several obstacles in my educational and professional sectors due to an ADHD diagnosis I got while on campus. This diagnosis, coupled with financial barriers and familial concerns have made completing my degree extremely difficult.”**

**“My senior year, my mental health took a big and life changing hit when one of my best friends died. It wasn’t until college I found a community of people, mentors and peers alike, who believed in who I was and who I could be and didn’t judge me for what I was or wasn’t. Mental health was still a struggle but I didn’t have a choice but to keep going so I got job after job after job and worked hard because I didn’t have a savings account or discretionary funds from my parents to help ease the financial stress.”**

# Primary Supports

Responses to the question “In your opinion, what has been the single most helpful support (person, program, class etc.) in your pursuit of your educational goals?” indicated that support from close networks was more influential than institutional support from teachers, counselors, or programs. More than half of respondents indicated they received support from friends, family, or partners, while less than a quarter identified specific programmatic support or a specific teacher or counselor that provided support in pursuing postsecondary opportunities.

It is clear that the support of close friends and family is important to many young adults. While often family provides support financially, our respondents also indicated numerous ways in which these close networks provided non-monetary social support.

**“My most helpful support in my life is my brother. He is the most wise, strong, kind, hard working person I can think of and I know I can trust him in anything I need help with.”**

**“I’ve received support from family and friends. I especially had career advice from my mom, and she has guided me through my school and work pathways. I have a great support system of friends who have helped me through all my career struggles.”**

**“My friends and sibling have been the most important. I can’t choose between the two because I rely on them equally. I would not be where I am today without them.”**

Of the respondents who identified specific programs as the single most important support in their career and education journey, the majority specifically identified a program that provided financial support, like scholarships or tuition reimbursement. While a minority of students identified these programs as their primary support, the fact that the majority of those who identified financial programmatic support as most impactful may indicate that initiatives focused on supporting learners will have a big impact in direct financial investment in young adults.

One participant detailed their experience dropping out of college, after falling a couple of credits short.

**“I had financial aid from 2011 when I graduated highschool through 2014, and dropped out of college in 2016. I had debt and didn’t have anyone who explained how loans worked.”**

Despite this initial barrier, the same participant later identified a multitude of financial and programmatic supports that enabled her to pursue re-enrollment.

**“The COSI [Colorado Opportunity Scholarship Initiative] grant, which enables me to pay for my tuition, a free laptop from Front Range [Community College] to do online classes, food stamps, state [Medicaid] to cover mine and my 3 year old son’s coverage, universal pre-k program, and C-Campus which covers up to 60 percent of child care.”**

Another participant experienced similar hurdles, dropping out of community college midway due to financial barriers. She describes the lack of support from teachers in guiding her choice in career path, coupled with her first-generation status.

**“My parents have always encouraged college but also encouraged their children to follow their dreams. As a first generation, it has been difficult since my parents had no experience in college. I had very close to no support from teachers, I never received guidance on what was being offered in the world and on the topics of responsible career paths.”**

After working several jobs for the Colorado Department of Corrections, she plans to use the tuition reimbursement offered by CDOC.

**“The Colorado Department of Corrections offers a full reimbursement for college which I am now taking advantage of. Working for the Department of Corrections and the State of Colorado I have become stable financially and feel more comfortable focusing on my education and future rather than eight years ago when I first graduated.”**

Other respondents who identified a program as their crucial support identified the federal TRIO programs,<sup>19</sup> the U.S. Department of Veteran Affairs,<sup>20</sup> Pell Grants,<sup>21</sup> and Concurrent Enrollment opportunities as programmatic supports.

<sup>19</sup> Federal TRIO Programs. Office of Postsecondary Education. <https://www2.ed.gov/about/offices/list/ope/trio/index.html>

<sup>20</sup> U.S. Department of Veteran Affairs. <https://www.va.gov/>

<sup>21</sup> Many respondents identified more than one source of information for their decision-making processes. As a result, each of their answers were considered equally.

# Information Sourcing on Postsecondary Opportunities

Participants identified several methods they utilized to source their information on available schools, programs, or other postsecondary opportunities. The most significant portion of respondents, just under half, performed their own research to learn about potential pathways. Around a quarter of respondents used information from their family, friends, or partners to inform their decisions. Another quarter of respondents utilized information from a teacher or school counselor. A small portion of respondents had opportunities in school through a program, event, or system that provided opportunities to learn about postsecondary options.

First-generation students face the disadvantage of being unable to ask their family members for advice. As a result, they must rely on other sources of information—often themselves. However, using the internet brings disadvantages, such as website navigation and institutional transparency. One first-generation student shared:

**“I primarily gathered information about the programs and industry credentials I wanted to pursue from various websites. While these online resources were my main source, I encountered challenges as many websites proved difficult to navigate, affecting the efficiency of my research process.”**

While some young adults shared positive stories of receiving help from guidance counselors and teachers, others sought information from their counselors or teachers, only to be met with unhelpful or incomplete information.

**“I felt I was let down by high school guidance counselors and teachers as I felt they should have prepared us more with a college plan whether it was a university or community college and described what available career paths there really were.”**



# Return on Investment

Despite the many barriers identified by respondents, they overwhelmingly (84 percent) said that pursuing postsecondary education or credentials was ultimately “worth it.” Five percent of respondents responded that “it depends,” and 11 percent did not think it was worth the barriers they had faced.<sup>22</sup>

Of the respondents who believed higher education was worth its costs, many specifically identified upward social and financial mobility as a direct result of postsecondary education.

**“Yes, it is 100 percent worth it! It has the ability to open so many different doors for you and without it, there is a limited earning potential, which begins to perpetuate this cycle of poverty, if you aren’t from a financially stable background.”**

**“I think pursuing higher education and/or career training is worth it because there are so many opportunities that come from it and your life can go in any direction. You get to meet so many different people and learn so much about yourself. It is hard and it has so many mental and emotional tolls but I think it is worth it.”**

For those who did not believe postsecondary credentials were worth the investment, the financial burden from postsecondary programs was seen as a drawback. One respondent, a social worker, lamented that prospective wages in some fields are far different than in other fields—potentially making education worth the financial investment for some but not all.

**“To be completely honest, I don’t think postgraduate education in social work was worth the financial burden. Going into significant debt and then going into a field that doesn’t offer wages to pay off that debt really does not make sense. I think if I had gone into a STEM field that higher education paid for my degree and then ended up making a livable wage would have made logistical sense. Unfortunately “helping” jobs like social work do not offer this. I am glad I did the degree and the direction it is taking me, but the field needs to change in order for it to be equitable. Teachers & social workers should not have to go into debt to work for the public good; for a healthy society to exist these roles should be valued.”**

<sup>22</sup> These totals add up to 101 percent due to rounding.

Another respondent detailed the rigidity of a traditional degree and its subsequent toll on mental health:

**“I don’t think it is worth it. I’d prefer careers where you learn on the job and have the opportunity to move up within the job over time instead of having to get a degree or certificate. For me, school is very stressful and takes a huge toll on my mental health. My mental health declines so much that it affects my jobs and relationships on top of just school.”**

But despite a couple of respondents feeling that postsecondary credentials did not provide an acceptable return on investment, nearly all identified benefits of postsecondary education. The dominant belief that postsecondary credentials are worth the investment aligns with existing research on upward mobility for young adults in the U.S. We know from prior literature that postsecondary education drives economic mobility for young adults. It is incredibly impactful for young adults with low socioeconomic status and those attending public universities.<sup>23</sup>



23 Raj Chetty et al., “Mobility report cards: The role of colleges in intergenerational mobility,” NBER Working Paper 23618, Revised Version, December, 2017, <https://opportunityinsights.org/paper/mobilityreportcards/>

# What's in a workplace?

Another benefit of upward mobility after receiving credentials is, ideally, the ability to choose a workplace for its qualities and offerings rather than out of necessity. A worker with credentials can select a workplace based on location, schedule, pay, benefits, or other characteristics.

When thinking about the qualities of a workplace that appeal most to workers, respondents identified a multitude of features that would influence their job search. The most frequent answer was “flexibility,” with just over half of respondents identifying it as primarily important. After flexibility, several other workplace qualities followed in order of: pay/wage, health care access, other specifically identified benefits (such as paid time off, paid sick leave, paid family leave, mental health coverage, etc.), remote or hybrid options, and social support (belonging, employee support, work-life balance, and inclusive workplaces.)

It is worth noting that even though respondents all cited financial barriers as most burdensome in their journeys, they responded more with “flexibility” than pay or wages when asked what workplace features appeal most. This may indicate that a flexible path to postsecondary credentials and the benefits of a flexible workplace are more important to workplace satisfaction than compensation alone.



# Recommendations

## 1. The implementation of a Stackable Credentials program should center financial mobility and resources as a primary goal of participation in the program.

When participants identified programmatic support as influential in their journey, they primarily identified programs that included some financial assistance. Respondents overwhelmingly cited financial barriers when asked what the single most significant barrier was to pursuing additional credentials. These two themes echo a more general one—upward mobility through postsecondary credentials presents a catch-22. We know that education after high school is one of the biggest drivers of economic mobility. Still, often the people who can pursue postsecondary education are only those who can already afford it.

Colorado is rapidly expanding several higher education pathways that enable young adults to earn credentials. This year, the Colorado Legislature passed a bill ensuring two years of free college for qualifying Coloradans. While this and other programs will enable some students to access higher education, many rely on retroactive funding through tax credits, loan repayment, or other after-the-fact refund mechanisms. Students must still be able to pay for the program upfront if they want to benefit from the financial assistance.

A stackable credentials program should aim to provide programs to students that use creative funding mechanisms to ensure students can attend the program without first having to support themselves financially. Stackable credential pathways must center on financial freedom and economic mobility if they are truly aiming to increase access to credentials for all.

## 2. Expand the required return on investment information available to a prospective program participant.

Our themes revealed that most potential participants or students do their own research when considering a program. The next largest proportion of respondents utilized information from their close social networks. This highlights two things: First, the state must mandate transparent and thorough collection and display of ROI information for prospective students so they can make an informed decision. Second, potential students who are close with people with postsecondary credentials are at an advantage because they can source their information from experienced participants from a postsecondary program. First-generation students may lack a close social network to give them insight into a specific pathway, program, or school they may be considering. We must find more ways to put information about opportunities directly into the hands of young adult learners themselves.

By requiring program ROI information from postsecondary programs, disaggregated by numerous social demographics, potential participants will be able to select a program that fits their needs and will have a comprehensive understanding of what they will gain from attending a program. This, in turn, will lead to higher completion rates and higher rates of post-program participants entering the workforce in Colorado.



### 3. Establish safeguards to ensure Stackable Credentials program(s) prioritize student autonomy in choosing a program or credential, protecting the interests of marginalized Coloradans.

As aforementioned, if students are influenced primarily by themselves and their close networks, they may be more likely to pursue a field or career that someone in their personal lives is involved in or familiar with. While not necessarily negative, this creates the potential for siloed workforces by connecting specific demographic groups with the same industries. We must work to ensure that a learner has all of the options at their disposal and understand how the ROI may differ for each option and how they may choose a career that provides a characteristic they seek rather than a career out of convenience.

Further, career and technical education (CTE) programs have been shown to “track” students of color and low-income students into less profitable career field programs than white students enrolling in CTE<sup>24</sup>. For example, data collected since 2018 shows that white students are more likely to complete CTE credits in STEM fields, while Black students are more likely to complete credits in fields like Human Services.<sup>25</sup> Earlier data from the Reconstruction Era shows that Black racial tracking has occurred since before the 20th century, with Black students tracked into public education models that promoted manual labor, Christian morals, and steady work habits.<sup>26</sup>

In implementing a Stackable Credential program, institutions and organizations must prioritize the autonomy of students to select their desired pathways and must follow up with resources for BIPOC, low-income, and other marginalized students with resources designed to support their specific needs in their program of choice. This targeted approach must seek to mitigate the outcome of racially divided CTE programs to close the racial education and racial wealth gaps.

### 4. Require increased transparency in benefit offerings.

Participants prioritized various workplace features, like flexibility, PTO, pay, and social belonging. In the same way that we require job listings to post the salary range of a position, we must also require access to transparency around the specifics of benefits packages of the job for potential applicants before they apply. It is clear from our qualitative responses that young adults care deeply about what a workplace may offer them both monetarily and otherwise.

As of January of 2024, amendments to the Colorado Equal Pay for Equal Work Act (EPEWA) require additional pay transparency requirements in job postings and internal promotional notices. Current statute also mandates transparency around general benefits offered, like health care benefits, retirement benefits, any benefits permitting paid days off (including sick leave, parental leave, and paid time off or vacation benefits).<sup>27</sup> But in an age of increasing

<sup>24</sup> Butrymowicz, S. (2021, September 16). First nationwide look at racial breakdown of career education confirms deep divides. The Hechinger Report. <https://hechingerreport.org/first-nationwide-look-at-racial-breakdown-of-career-education-confirms-deep-divides/>

<sup>25</sup> Smith, R. (2019, August 28). Advancing Racial Equity in Career and Technical Education Enrollment. Center for American Progress. <https://www.americanprogress.org/article/advancing-racial-equity-career-technical-education-enrollment/#:~:text=Data%20from%20the%20National%20Center,a%20rate%20of%2078%20percent.>

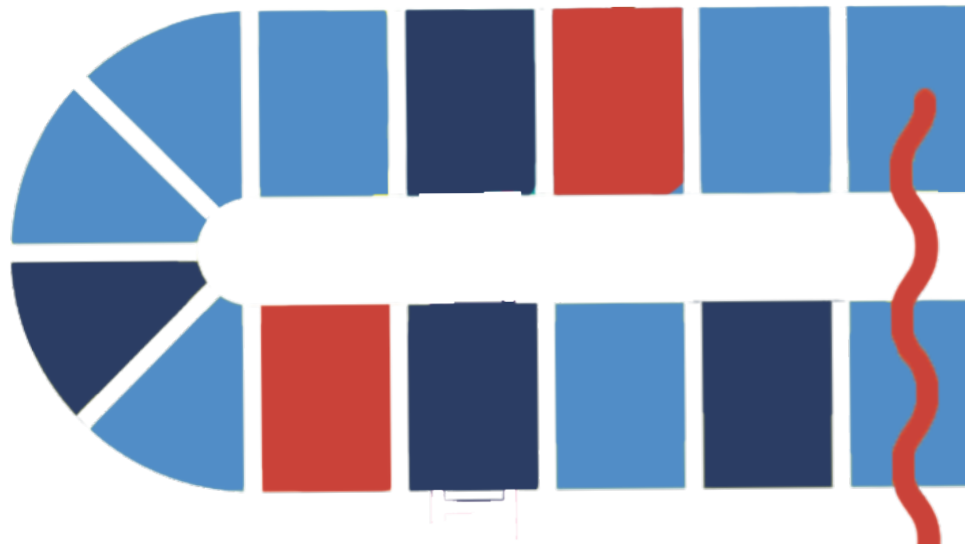
<sup>26</sup> McCardle, T. (2020). A critical historical examination of tracking as a method for maintaining racial segregation. *Educational Considerations*, 45(2), 4.

<sup>27</sup> Harpole, J., McGuire, G., & Gilewski, L. (2023, December 22). Colorado Pay Transparency Amendments Go Live Jan-



options to work remotely, young adults care about their flexibility options within a workplace. Further, though a general description of benefits is required already, it is unclear to a prospective employee the breakdown of employer/employee contribution to gain benefits around health care, retirement, or other benefits. An employer offering a “generous PTO package” meets the requirements for job transparency posting, but the descriptor provides little to no information about what the policy means. Potential employees invest time, effort, and sometimes money into applying for jobs, completing interviews, and weighing their options, often to find out too late that a position does not offer benefits satisfactory to their needs.

There is much left to be desired around other opportunities for transparency, like employer contribution to retirement accounts, healthcare, childcare, and other features. With these benefits labeled more clearly, respondents will be able to discern which positions align with their desires more easily. Simultaneously, it could encourage employers to increase their benefit offerings to match those of other employers in the market.




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January 1, 2024, Requiring Application Deadlines and Post-Selection Notices. Littler. <https://www.littler.com/publication-press/publication/colorado-pay-transparency-amendments-go-live-january-1-2024-requiring>

# Conclusion

Our quantitative and qualitative work intersect to paint a complex picture of a postsecondary landscape in Colorado that leaves much to be desired. Within our findings we see several patterns indicating promise for stackable credentials programs if they focus on providing the resources that learners need most.

Our quantitative data revealed racial and gender gaps in career and workforce barriers—demonstrating that female respondents and respondents of color are more likely to have experienced barriers when pursuing postsecondary credentials. It also revealed that income did not significantly affect a respondent’s likelihood of desiring stackable credentials, indicating that stackable credentials are appealing to many Coloradans at different stages in their career journeys. At the same time, we know from our qualitative data that credential programs that provide financial assistance are the most impactful programs for young adults pursuing postsecondary credentials, and we know from existing research that stackable credential programs can bring economic mobility to low-income learners.

Both our qualitative and quantitative data revealed several systemic barriers to career advancement, including lack of qualifications and skills required, career competitiveness, limited advancement in a career field, geographic location, tuition and fees, time constraints, or being unqualified for a desired program/training.

Numerous supports were also highlighted, such as online course offerings, flexible class offerings, mentorship programming, child care arrangements, instructor office hours, peer study groups, tutors, close friends and family, tuition assistance, scholarships, tuition reimbursement, dual enrollment, and Pell grants.

To determine what draws individuals to career fields in Colorado, we investigated the most enticing workplace features. Participants indicated that flexibility was of primary importance, closely followed by pay/wage, health care access, other specific benefits like PTO or family leave, remote/hybrid options, and social support within the workplace.

Following the results of our quantitative and qualitative studies, we recommended four considerations for policy change surrounding stackable credential programs and education workforce improvement. First, we recommend that stackable credential programs center financial mobility and resources as a primary goal of participation in the program. Postsecondary education continues to be a driver of economic mobility, and stackable credentials should emphasize financial mobility as a success metric, especially since nontraditional learners experience wealth gaps compared to traditional postsecondary learners. Second, we must continue to rigorously require return-on-investment information to be available to program participants transparently. By requiring ROI information from postsecondary programs, coupled with disaggregation by social demographics, including race and income, participants will be able to select a program that fits their needs. Third, we recommend that stackable credential programs prioritize student autonomy, especially

to protect the interests of marginalized Coloradans. Historically, many CTE programs have tracked students of color and low-income students into less profitable career fields while uplifting the trajectories of white and higher income students. Providing resources based on the needs of low-income and learners of color could mitigate wealth gaps and increase program completion. Lastly, we recommend increasing transparency in benefit offerings so that job-seekers have a better idea of the workplace benefits available when they apply for a job. If job-seekers have a clearer picture of both monetary and non-monetary benefits available to them, they will be able to select a position based on their needs. This will secondarily increase job satisfaction and encourage workplaces to increase their benefits to compete with other hiring organizations.

Through this work, we have witnessed many strengths within the Colorado education workforce system. But we have also witnessed the deep structural gaps that leave young adults confused, despaired, and immobilized. For learners, the postsecondary landscape can feel like a complex game—a field of chutes and ladders navigated through trial, error, and luck. Through our participants' stories, we have witnessed tribulations and triumphs in their navigation of this postsecondary landscape. We hope, in conducting this research, to build on our deep strengths and further empower our workforce, our learners, and our state.





# Appendix A - Quantitative Survey

## Demographics

1. What is your age?
2. How do you describe yourself?
  - a. Female
  - b. Male
  - c. Genderqueer/Gender non-conforming
  - d. Non-binary
  - e. Prefer to self-describe: \_\_\_\_\_
  - f. Prefer not to say
3. Do you identify as transgender?
  - a. Yes
  - b. No
  - c. Prefer not to say
4. What is your sexual identity? *(Select all that apply)*
  - a. Heterosexual/Straight
  - b. Lesbian
  - c. Gay
  - d. Bisexual
  - e. Queer
  - f. Asexual
  - g. Unsure/Questioning
  - h. Other: \_\_\_\_\_
  - i. Prefer not to say
5. Please indicate the racial or ethnic groups that best describe you? *(Select all that apply)*
  - a. Asian or Asian American
  - b. Black or African American
  - c. Indigenous or Alaska Native
  - d. Hispanic or Latino/a/e of any race
  - e. Native Hawaiian or Other Pacific Islander
  - f. Two or more races
  - g. White
  - h. Unknown or Non-reporting
  - i. Other: \_\_\_\_\_
  - j. Prefer not to say
6. What is your marital status?
  - a. Single
  - b. Domestic partnership

- d. Widowed
  - e. Divorced
  - f. Separated
7. Are you a citizen of the United States (U.S.)?
- a. Yes, born in the United States
  - b. Yes, born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas
  - c. Yes, born abroad of U.S. citizen parent or parents  
*Please specify the birth country: \_\_\_\_\_*
  - d. Yes, U.S. citizen by naturalization  
*Please specify the country before naturalization: \_\_\_\_\_*
  - e. No, not a U.S. citizen  
*Please specify the country of citizenship: \_\_\_\_\_*
8. What is your Zip Code?
- a. Zip Code drop-down menu
9. Are you the parent or guardian of any child under the age of 18 living in your household?
- a. Yes
  - b. No
10. Are there any adults you help support in your household over the age of 18?
- a. Yes
  - b. No
11. Is your house, apartment, or mobile home:
- a. Owned by you or someone in this household (without a mortgage or a loan)
  - b. Owned by you or someone in this household with a mortgage or loan (including home equity loans)
  - c. Rented
  - d. Occupied without payment of rent
  - e. Other: \_\_\_\_\_
  - f. Prefer not to say

### **Education & Employment**

12. What is the highest level of education you have completed?
- a. Less than a high school diploma
  - b. High school diploma or equivalent
  - c. Some college
  - d. Technical certification
  - e. Two-year college degree
  - f. Four-year college degree

- g. Post-graduate degree
13. What is the highest level of education that your mother completed?
- a. Less than a high school diploma
  - b. High school diploma or equivalent
  - c. Some college
  - d. Technical certification
  - e. Two-year college degree
  - f. Four-year college degree
  - g. Post-graduate degree
  - h. Not sure
14. What is the highest level of education that your father completed?
- a. Less than a high school diploma
  - b. High school diploma or equivalent
  - c. Some college
  - d. Technical certification
  - e. Two-year college degree
  - f. Four-year college degree
  - g. Post-graduate degree
  - h. Not sure
15. What is your employment status?
- a. Employed full-time (30 hours or more per week)
  - b. Employed part-time (fewer than 30 hours per week)
  - c. Unemployed: Currently looking for work
  - d. Unemployed: Not currently looking for work
  - e. Student
  - f. Disabled
  - g. Homemaker or stay-at-home parent
  - h. Retired
  - i. Other: \_\_\_\_\_
  - j. Prefer not to say
16. Do you have more than one job?
- a. Yes
  - b. No
17. [IF YES] Do any of the jobs you hold classify as a “Gig Economy Job”? (e.g., DoorDash, Tutor, Babysitter, Developer, Uber, etc.)
- a. Yes
  - b. No
  - c. Prefer not to say

18. During the year 2022, what was your annual **household** income? (*The total amount that each individual in your home made during 2022*)
- \$0 to \$25,000
  - \$25,001 to \$75,000
  - \$75,001 to \$125,000
  - \$125,001 or above
  - Prefer not to say
19. During the year 2022, what was your total **individual** income?
- \$0 to \$25,000
  - \$25,001 to \$75,000
  - \$75,001 to \$125,000
  - \$125,001 or above
  - Prefer not to say

### **Career Decision-Making**

20. How long do you see yourself staying at your current place of employment?
- Less than 1 year
  - 1-3 years
  - 4 years or more
21. Would you say that you are currently living paycheck-to-paycheck?
- Yes    No
22. How would you describe the opportunities for advancement and growth at your current/most recent job? (i.e. promotions, raises, training, etc.)
- Very promising
  - Somewhat promising
  - Not very promising
  - Not available at all
23. How would you rank your current understanding of the concept of stackable credentials?
- Not knowledgeable at all
  - Slightly knowledgeable
  - Moderately knowledgeable
  - Very knowledgeable
  - Extremely knowledgeable

### **Stackable Credentials Definition:**

A credential is considered stackable when it is part of a sequence of industry-informed credentials that can be accumulated over time to expand a learner's competencies, help him or her advance within a career pathway, and earn family-sustaining wages. *Stackable credentials don't require students to enroll in a full-time program in college and rather allow them to take*

*courses on their own time. Stackable credentials are an option for students who can't take on a full course load for a variety of reasons. Students will be able to complete courses in a shorter amount of time and can take as many classes as they want to. You can stack these courses to complete prerequisites for other courses to then create a degree or certificate. This type of stacking is vertical stacking. Students can also receive a variety of credentials from classes that are at the same level which is horizontal stacking. This is a great option for students who want to refresh their education on some courses for their careers.*

### **Why would stackable credentials be important to someone?**

*Students choose stackable credentials for a variety of reasons. Some students want to advance in their careers but don't want to go back to school full-time. They can take these quick courses to sharpen their skills to get a pay raise or promotion at work. For others, stackable credentials allow them to focus on one or two classes at a time so they can study harder and do better in those classes. Not everyone learns at the same pace, so students can take their time to build the degree they want when they don't have to take a full course load.*

### **Stackable Credentials Appeal (Based on the definition provided please answer the following questions)**

24. Are you currently pursuing a stackable credential?
- Yes
  - No
  - Unsure
  - Prefer not to say
25. Do you feel obtaining a stackable credential is important for your career development?
- Yes
  - No
  - Unsure
  - Prefer not to say
26. [IF YES] Would you be able to obtain a stackable credential while working full-time?
- Yes
  - No
  - Unsure
  - Prefer not to say
27. [IF YES] Would you be able to obtain a stackable credential while working part-time?
- Yes
  - No
  - Unsure
  - Prefer not to say

28. What will keep you in a stackable credential program?

Please rate your agreement or disagreement with each of the following statements:

- Stackable Credentials prepare people for jobs that are stable.
- Stackable Credentials prepare people for jobs that are not stable.
- Stackable Credentials prepare people for jobs that pay well.
- 
- Stackable Credentials prepare people for jobs that pay poorly.
- Stackable Credentials prepare people for jobs that pay better than most other jobs.
- Stackable Credentials prepare people for jobs that pay worse than most other jobs.
- 
- Stackable Credentials prepare people for jobs that are more stable than most other jobs.
- Stackable Credentials prepare people for jobs that are less stable than most other jobs.



# Appendix B - Career and Education Story

## YOUR CAREER & EDUCATIONAL JOURNEY



### 1. PRESENT

Describe what life after high school looks like for yourself. What schooling/jobs have you had?

Describe any obstacles or barriers that you have faced in pursuing higher education or additional credentials.

- Financial barriers
- Working multiple jobs
- Caregiving for a family member

What are your dreams and goals regarding where you want to end up with your educational and career journey?

### 5. DREAM A LITTLE!

### 2. WHAT SUPPORTS DID YOU HAVE?

Describe key supports you received through your educational and career pathway?

- Family support,
- Support of Teachers/ Counselor
- Financial support
- Access to opportunities
- Support from your friends and peers

### 3. WHAT OBSTACLES HAVE YOU FACED?

Describe any factors that contributed to your decisions about steps post-high school.

- Finances
- Expectations of family
- Access to opportunities and information
- Friends and peers

### 4. HOW YOU MADE THE DECISIONS YOU MADE



# Appendix C - Qualitative Survey for Focus Group Participants

## Demographic Questions

1. Do you currently live in Jefferson County?
  - a. Yes
  - b. No
2. Do you currently work or attend school in Jefferson County?
  - a. Yes
  - b. No
3. What is your age?
  - a. 18-25
  - b. 26-34
  - c. 35-44
  - d. 45-54
  - e. 55+
4. What is your race?
  - a. Asian or Asian American
  - b. Black or African American
  - c. Indigenous or Alaska Native
  - d. Hispanic or Latino/a/e of any race
  - e. Native Hawaiian or Other Pacific Islander
  - f. Two or more races
  - g. White
  - h. Unknown-or non-reporting
  - i. Other\_\_\_\_\_
  - j. Prefer not to say
5. How do you describe your gender?
  - a. Female
  - b. Male
  - c. Genderqueer/gender-nonconforming
  - d. Non-binary
  - e. Prefer not to say
6. Do you identify as transgender?
  - a. Yes
  - b. No
  - c. Prefer not to say
7. What is your marital status?
  - a. Single
  - b. Married
  - c. Domestic Partnership
  - d. Widowed
  - e. Divorced
  - f. Separated



8. What is your zipcode?
9. Are you the parent or guardian of any child under the age of 18 living in your household?
  - a. Yes
  - b. No
10. Are there any adults you help support in your household over the age of 18?
  - a. Yes
  - b. No
11. What is the highest level of education you have completed?
  - a. Less than a high school diploma
  - b. High school diploma or equivalent
  - c. Some college
  - d. Technical certification
  - e. Two-year college degree
  - f. Post-graduate degree
12. What is your employment status?
  - a. Employed full-time (30 hours or more per week)
  - b. Employed part-time (fewer than 30 hours per week)
  - c. Unemployed: currently looking for work
  - d. Unemployed: not currently looking for work
  - e. Student
  - f. Disabled
  - g. Homemaker or stay-at-home parent
  - h. Retired
  - i. Prefer not to say
13. Do you have more than one job?
  - a. Yes
  - b. No
14. Do any of the jobs you hold classify as a “Gig Economy Job”? (e.g., DoorDash, Tutor, Babysitter, Developer, Uber, etc.)
  - a. Yes
  - b. No
  - c. Prefer not to say
15. During the year 2022, what was your annual **household** income? (The total amount that each individual in your home made during 2022)
  - a. \$0 to \$20,000
  - b. \$20,001 to \$39,000
  - c. \$39,001 to \$55,000
  - d. \$55,001 to \$100,000
  - e. \$100,000 or above
  - f. Prefer not to say
16. During the year 2022, what was your total individual income?
  - a. \$0 to \$20,000
  - b. \$20,001 to \$39,000
  - c. \$39,001 to \$55,000
  - d. \$55,001 to \$100,000

- e. \$100,000 or above
- f. Prefer not to say

### **Open-Ended Questions**

17. What advice (related to education/career) would you give your 16 year-old-self?
18. In your opinion, what has been the single biggest barrier or challenge in pursuing your educational goals?
19. In your opinion, what has been the single most helpful support (person, program, class etc.) in your pursuit of your educational goals?
20. What features or benefits are most important to you when considering a job/ career and why? (i.e. flexible workplace, remote work, maternity/paternity time)
21. How and where did you get your information to decide which programs/industry credentials to pursue?
22. Is pursuing higher education and/ or career training "worth it" to you? Why or why not? (Consider money spent, time spent, and any mental/emotional tolls.)
23. Is there anything else you would like us to know?