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Patterns of Community College Use Among Working Adults

By Paul Osterman

As American workers continue to face the proliferation of new technologies and worsening earning inequality, as well as dislocation driven by the COVID-19 pandemic, there is an increasingly urgent need to assist people in transitioning to new, and hopefully better, jobs. Community colleges are central to this issue both because of their scope and the positive returns to those who obtain degrees or certificates from these institutions (Belfield & Bailey, 2017; Jepsen et al., 2014; Stevens et al., 2019).

Despite the centrality of community colleges in advancing the job prospects of American workers, relatively little is known about the patterns of utilization of these institutions by adults who are seeking to improve their work skills. Additionally, it is important to recognize that skill provision operates within a large ecosystem. Employer-provided training is the dominant form of skill development among American workers (Osterman, 2021), but when it comes to training that people can seek out on their own, community colleges are just one of many options that include job training programs run by government agencies, nonprofits, proprietary schools, online programs, and unions. Someone looking to improve their economic prospects may consider the full range of these options, and policymakers may also make a similar calculation about where to invest public money.

Despite the centrality of community colleges in advancing the job prospects of American workers, relatively little is known about the patterns of utilization of these institutions by adults who are seeking to improve their work skills.

In this brief, I describe results from a nationally representative survey of American workers between the ages of 24 and 64 to learn what training providers they have used and what their experiences have been with these providers. The survey finds that 48% of working adults have utilized community colleges at some point in their lives and that Black, Hispanic, and female workers did so at a somewhat higher rate than did White and male workers. Of those who used community colleges, 26% did so as adults, well after graduating from high school. A large majority of those who used community colleges—68%—reported positive outcomes such as earning a degree or certificate or transferring to a four-year college. One challenge that community colleges face is that they are often competing with other programs for students. I provide some evidence on the nature of this competition and the underlying factors that drive it.

Background and Data

Given the importance of community colleges, surprisingly little is known about the extent to which adults use them to improve their job skills or to search for new employment. Data

from the Integrated Postsecondary Education Data System and administrative data from community colleges and state systems contain limited information on the characteristics of students and virtually no information on students' employment circumstances. National surveys, including the large-scale Current Population Survey, capture educational attainment and a few employment variables, but the education and training variables are limited, as are the employment variables. Furthermore, these surveys do not ask about how people go about improving their skills and in what venues. Indeed, the most recent federal survey on employer-provided training, the National Employer Survey, was conducted in 1997. The Survey on Income and Program Participation, which is conducted every four years, collects detailed training data only for those below 200% of the poverty line. The Adult Training and Education Survey—a component of the National Household Education Survey that is sponsored by the National Center for Education Statistics—is a large nationally representative survey most recently conducted in 2016. The purpose of the survey is to measure attainment of certifications and other credentials among adults, but it does not collect information on training (formal or informal) that does not lead to such credentials, and the data on employment circumstances is very limited. Finally, the National Longitudinal Survey of Youth provides rich data on employment, education, and training, but the age limitations prevent it from being representative of the entire workforce.

The American Training Survey, on which this brief focuses, has overcome these limits. It was conducted in January 2020 (just prior to the onset of the COVID-19 pandemic) by the National Opinion Research Corporation (NORC) and draws from the standing nationally representative AmeriSpeak panel (Osterman, 2021). The sample of 3,648 respondents is limited to employed people between the ages of 24 and 64. See Appendix 1 for a more extensive discussion of the survey data.

Survey Findings

Attendance and Outcomes

The 2020 survey asked several questions regarding attendance at community colleges, and here we begin by considering attendance and outcomes. The survey asked whether the respondent attended a community college shortly after high school, as an adult, or under both circumstances. These patterns are provided in Table 1. In considering these data and comparing them to other sources, it is important to remember that the present survey was limited to employed adults. Results for the entire population and all age ranges would naturally differ.

Table 1.
Community College Attendance

Attendance Status	Percentage of Students
Ever attended (%)	48.4
Attended only after high school (%)	21.9
Attended only as an adult (%)	15.1
Attended both after high school and as an adult (%)	11.1

Source for all tables: 2020 American Training Survey, in which the sample is employed adults ages 24–64.

As is apparent, nearly half of the working adult population has attended a community college. What is new, and striking, is that just over a quarter of those who attended community college did so as adults. As I will discuss later in the brief, this high rate of adult attendance confirms that community colleges are one of the predominate skill providers for adult workers other than employer-provided training.

Much of the discourse regarding community colleges focuses on outcomes, and the commonly reported success rates of community college students as measured by credential attainment are somewhat low, with six-year credential (degree or certificate) attainment rates among first-time students at about 40% (Causey et al., 2020). Table 2 shows success rates for survey respondents who attended community college at any point, either just after high school or as an adult, and the findings are much more positive. Again, the explanation for this is likely that the data here are limited to people who are employed, whereas the data that is often cited include people who are out of the labor force as well as people who are unemployed. But the data on outcomes in this survey indicate a favorable view of community college success among employed adults.

Table 2.
Community College Outcomes (Among Those Who Attended Community College)

Outcome	Percentage of Students
Obtained degree (%)	36.2
Obtained certificate (%)	21.8
Transferred to a four-year college (%)	33.2
At least one of the above (%)	67.7

Equity: Attendance and Outcomes by Gender and Race/Ethnicity

Data suggest that community colleges are especially important in providing opportunities to first-generation college students, people from lower-income families, and underserved racial and ethnic groups (American Association of Community Colleges, 2021; Community College Research Center, n.d.). The American Training Survey did not collect data on parental income and parental educational background but did capture data on respondents' gender and race/ethnicity. Table 3 shows the attendance patterns and Table 4 the outcome patterns for respondents based on these demographic characteristics.

Table 3.
Community College Attendance by Gender and Race/Ethnicity

	Ever attended	Attended only after high school	Attended as an adult	Attended both after high school and as an adult
Female (%)	51.3	23.2	13.1	15.0
Male (%)	45.7	20.8	9.4	15.3
Asian (%)	39.1	24.3	6.9	17.4
Black (%)	56.0	24.9	13.4	17.2
Hispanic (%)	51.3	20.9	11.4	18.6
White (%)	46.5	22.0	10.2	14.1

A consistent pattern in the data is that Black respondents attended community college with greater frequency than did White respondents. Somewhat less consistent but still notable is the higher rate of attendance of Hispanic respondents compared to White respondents and female respondents compared to male respondents. To test whether these patterns are statistically significant, I estimated a regression (logit) probability model for overall attendance at a community college. The results are reported in Appendix 2 and affirm that these differences are significant.

Table 4 provides data on outcomes for each demographic group. Here, the differences between groups are muted, and the good news is that all groups are relatively equal in their success rates. Indeed, the only significant difference (in the table and in a probability regression) is that Black respondents were more likely to receive a degree or a certificate than White respondents and that female respondents had a higher chance of obtaining a certificate than male respondents.

It is also important to note that because attendance rates are higher for Black, Hispanic, and female respondents than for White and male respondents, when these are considered jointly with outcomes overall, the chances of a positive outcome from a community college are higher for these groups than for White men.

Table 4.

Community College Outcomes by Gender and Race/Ethnicity (Among Those Who Attended Community College)

	Obtained degree	Obtained certificate	Transferred to four-year college	At least one positive outcome
Female (%)	34.4	24.2	32.7	68.7
Male (%)	39.0	19.3	33.8	66.6
Asian (%)	45.6	16.9	46.8	71.6
Black (%)	40.1	25.6	32.5	67.7
Hispanic (%)	38.4	24.6	32.4	69.6
White (%)	34.6	20.4	33.1	67.4

Reasons for Community College Attendance as an Adult

The survey provides an opportunity to explore the impetus for adult workers to attend community colleges based on two survey questions, each of which was followed up with additional questions if the answer was affirmative:

- Was there a time when you attended a **public** community, technical, or junior college later in life because it was **required by your employer**?
- Was there another time in which later in life you attended a **public** community, junior, or technical college voluntarily for your own interests and **not** because your employer required it?

Table 5.

Reasons for Adult Community College Attendance

	Required by employer	Attended voluntarily
Ever (%)	4.1	19.5
In 12 months prior to survey (%)	0.5	1.8

In the survey, 55.7% of respondents received formal employer-provided training in the previous year (Osterman, 2021), but employer use of community colleges as a venue for training is limited. As is apparent in the data, most adult workers who attended community college did so voluntarily rather than to satisfy an employer requirement. Only 4.1% of respondents reported that they had ever attended a community college as part of their employment, with only 0.5% having done so in the year prior to the survey. By contrast, just under 20% of respondents used community colleges on their own at some point in their careers. Utilization in the previous year stood at 1.8%.

Community Colleges in the Larger Training Ecosystem

When someone decides to seek out additional skills training, they have several possible venues to choose from, only one of which is community colleges. Table 6 shows the utilization of each venue by respondents on their own (i.e., not required by an employer).

Table 6.

Utilization of Training Venues (Not Required by Employer) as an Adult

	Ever used as an adult	Used five or more years prior to survey	Used less than five years prior to survey	Used in the past year
Community colleges (%)	19.5	13.1	6.3	1.8
Four-year colleges (%)	14.9	8.7	6.1	2.2
Proprietary schools (%)	14.3	7.0	7.3	2.5
Online programs (%)	29.3	3.8	25.5	15.0
Online programs, paid or unpaid courses[a] (%)	22.3	2.8	19.5	11.2
Job training programs (%)	11.8	3.0	8.7	4.1
Union programs (%)	3.8	1.8	1.9	0.8

[a]Does not include YouTube or similar venues.

The data show that, when considering use of training venues across workers' entire careers, they were more likely to use community colleges than any venue except online programs. But these data also make clear that, over time, community colleges lost ground to many other venues, most strikingly to online programs. Presumably this pattern is due in part to changing interests and circumstances among workers as they age and is no doubt also driven by the increased availability of online programs in recent years (given that many, if not most, were not available for older respondents when they were young). The considerable utilization of online programs is striking, particularly given that the survey was administered prior to the COVID-19 pandemic, which led to a widespread shift to virtual learning. When probed on the nature of the online programs that they used, 16% of respondents reported using YouTube or similar streaming platforms, 38% said that they utilized online courses (outside YouTube or similar platforms) for free, 38% said they paid for courses, and 7% indicated that the courses were "something else."

All this said, it is also important to note that community colleges lost ground to the other venues as people aged. At five or more years prior to the survey, community colleges were the leading source of training that people sought out on their own, but within the year prior to the survey, community colleges had a lower utilization rate than all venues with the exception of union programs.

A first step to understanding how workers think about attending community colleges versus alternative training venues is to examine how the choice varies by demographics and by the nature of workers' employment situations, since this presumably affects the choices they make regarding further training investments. We consider

Earnings: On the one hand, people in low-wage jobs may be more motivated to seek out training to improve their circumstances. On the other hand, high-wage employees may have a range of advantages (e.g., access to more information and finances) that make them more likely and more able to undertake training outside of work.

Employment status: Freelance workers typically do not have an employer who is likely to provide training and hence may feel the need to undertake training on their own. It is also possible that people who report themselves as likely to quit their current job are, for obvious reasons, more likely to undertake training on their own.

Skill training from the employer: On the one hand, people who receive skill training from their employer may feel less need to enhance their skills on their own. On the other hand, receiving employer-provided skill training may indicate that the person is interested in training and hence likely to seek out more.

These data are shown in Table 7. In order to in some sense level the playing field, we restrict the use of online training to courses, paid or unpaid, and hence eliminate YouTube or other similar venues since these might mean simply watching a video.

Table 7.
Utilization of Training Venues (Not Required by Employer) in Past 12 Months, by Gender, Race/Ethnicity, and Employment Situation

	Used community college	Used proprietary school	Used online programs: paid or unpaid courses[a]
All respondents (%)	1.8	2.5	11.2
Female (%)	2.0	3.2	10.9
Male (%)	1.6	1.9	11.6
Asian (%)	1.4	3.0	20.8
Black (%)	2.6	3.9	10.8
Hispanic (%)	2.9	1.9	8.6
White (%)	1.5	2.5	11.4
Received employer training in past year (%)	2.5	3.3	13.7
Freelance worker (%)	0.6	2.4	15.3
Contract company employee (%)	1.4	2.4	11.0
Top 25% of earnings (%)	1.1	2.6	13.7
Bottom 25% of earnings (%)	3.3	2.5	8.3
Likely to quit job in next year (%)	3.6	3.7	13.0

[a]Does not include YouTube or similar venues.

The best way to think about the patterns in this table is to compare the utilization rate of each row with the overall utilization rate. As an example, whereas 1.8% of working-age adults overall used community colleges in the year prior to the survey, the rate was higher for Black and Hispanic respondents (2.6% and 2.9%, respectively) and lower for White respondents (1.5%). Another notable finding is that high earners (i.e., people in the top 25% of earnings) were more likely than low earners (i.e., people in the bottom 25% of earnings) to use online programs. The patterns for proprietary schools also diverged in some ways from the patterns for community colleges, with Hispanic respondents being less likely and Asian respondents being more likely than overall respondents to have utilized them in the past year.

Another approach to understanding the underlying dynamics of how working adults choose a venue for training is to examine their attitudes about and familiarity with the venues. For each venue, the survey asked, "How confident are you that each of the following could provide you with the training you need?" The patterns are shown in Table 8.

Table 8.
Confidence and Knowledge Regarding Alternative Training Venues

	Community colleges	Four-year colleges	Proprietary schools	Online programs	Job training programs	Union programs
Very confident (%)	22.3	28.7	18.5	15.7	13.3	9.1
Somewhat confident (%)	38.3	28.9	34.0	47.3	37.3	22.1
Non confident (%)	26.4	27.5	27.5	22.7	30.7	39.3
Non familiar (%)	12.7	14.5	19.8	14.0	18.6	29.3
Neither confident nor familiar (%)	39.1	42.0	47.3	36.7	49.3	68.6

The findings indicate that community colleges face serious competition from four-year colleges, proprietary schools, and online programs for the attention of working adults. Community colleges may need to do a better job of marketing and outreach to help workers learn about the programs they offer and how these opportunities may benefit workers' careers. In addition, the high utilization of online programs relative to community colleges, discussed earlier, combined with the roughly equal assessment of confidence and familiarity of the two venues is strongly suggestive that ease of access and cost are important considerations when workers decide to undertake training to improve their skills. Overall, these patterns suggest that if community colleges want to increase attendance among working adults, they need to place more emphasis on accessibility as well as on explaining the value proposition of their training programs—including financial aid for students who qualify—to working adults.

Conclusion

Community colleges are America's premier training institutions, and almost half of all employed adults have utilized them at some point in their lives. Even setting aside people who attended community college only just after high school, 26% of workers attended community college as adults. Encouragingly, workers who used community colleges also reported fairly

high success rates as measured by the attainment of degrees or certificates or transfer to a four-year institution. Finally, utilization of community colleges was relatively high among Black, Hispanic, and female workers, and their rates of positive outcomes were also impressive.

Yet the findings reported in this brief also point to significant challenges. When it comes to seeking out skills training, nearly 40% of respondents were either not familiar with community colleges or not confident that community colleges would offer what they need. Online training dominates community colleges when it comes to adults seeking training, likely because of cost and convenience. Given the documented payoffs of positive outcomes among those who attend community colleges (see, e.g., Belfield & Bailey, 2017, and Carnevale et al., 2020), there are substantial opportunities for community colleges to make their case, improve their accessibility, and contribute even more than they do now to meeting the skill needs of the American workforce.

Appendix 1. The Survey

The survey discussed in this brief was conducted in January 2020 by the National Opinion Research Corporation (NORC) and draws from the standing nationally representative AmeriSpeak panel.

NORC describes the survey as follows:

> *Funded and operated by NORC at the University of Chicago, AmeriSpeak® is a probability-based panel designed to be representative of the U.S. household population. Randomly selected U.S. households are sampled using area probability and address-based sampling, with a known, non-zero probability of selection from the NORC National Sample Frame. These sampled households are then contacted by U.S. mail, telephone, and field interviewers (face to face). The panel provides sample coverage of approximately 97% of the U.S. household population. Those excluded from the sample include people with P.O. Box-only addresses, some addresses not listed in the USPS Delivery Sequence File, and some newly constructed dwellings. (AmeriSpeak, n.d.)*

For the survey reported here, the completion rate was .943.

The present survey was limited to people between the ages of 24 and 64 who were working in civilian nonagricultural jobs. The survey was conducted largely online in English and Spanish. Respondents had the option of answering via telephone, but only 89 out of 3,648 respondents availed themselves of this option. Appendix Table 1 provides the relevant data for the sample and benchmarks it against the Outgoing Rotation Group of the Current Population Survey. As is apparent, the weighted survey is a close match on demographic dimensions.

Appendix Table 1.
Sample and Benchmark

	2019 Census ORG ages 24–64, employed	2020 American Training Survey, unweighted	2020 American Training Survey, weighted
Female (%)	46.9	43.2	47.4
Mean age (years)	42.7	42.	42.8
Asian (%)	7.0	4.5	3.8
Black (%)	11.7	11.8	11.6
Hispanic (%)	17.6	17.7	17.5
White (%)	61.5	61.4	61.7
Completed less than high school (%)	5.6	2.9	5.1
Completed high school only (%)	26.1	22.7	31.7
Completed some college (%)	26.5	25.5	21.3
Completed college degree (%)	41.6	48.9	41.9

A potential concern regarding the survey is that it was conducted largely online and might bias the findings given that not everyone utilizes the internet. As noted, the survey did provide a telephone option, but the take-up was very low. However, research on possible biases in online surveys is reassuring. In 2015, Pew, a leading national survey firm, executed parallel surveys in the mail and online and searched for differences in responses between the different forms (Keeter & McGeeney, 2015). At the time, Pew reported that 89% of the population had access to the internet, a figure that has likely increased since then. In their study, out of 406 survey items, two thirds of the items had only a 1 percentage point difference in the responses between the two forms, and only nine items had a difference of 5 percentage points or more. When they examined differences within subgroups, the most important consideration was age: those 65 and over showed more differences between the two survey forms because a lower fraction of this age group was on the internet, so those who replied via that mode are more likely to be a biased sample. This is not a concern for the present research since our age range tops out at 64. The central conclusion of the Pew report was that "most survey estimates produced by Web surveys will be a little different from those produced by surveys that cover the entire public" (Keeter & McGeeney, 2015, para. 21).

These results are reinforced by a separate study comparing probability sampling and interviewing via random digit dialing (RDD) versus via the internet. Chang and Krosnick (2009) concluded that the internet methodology was equivalent with respect to representativeness and superior with respect to self-reporting accuracy (largely due to the lower rate of social desirability response bias).

Appendix 2. Logit Model

Appendix Table 2.
Logit Model of Community College Attendance

Age	.003*** (.0007)
Female	.065*** (.017)
Asian	-.054 (.040)
Black	.067** (.026)
Hispanic	.064*** (.022)
N	3,639

Note: Dependent variable is whether the respondent ever attended community college. The coefficients are marginal effects evaluated at the means of all variables.

*** significant at the 1% level

** significant at the 5% level

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