



Bipartisan Policy Center

# Are Short-Term Pell Grants a Good Idea?

THE NEED FOR AN  
EXPANDED PILOT STUDY

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# Introduction

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There is a growing educational divide in the American workforce. Workers with only a high school education have experienced economic stagnation over the past 40 years despite substantial gains for those with postsecondary credentials. Adjusting for inflation, the median wage of workers with only a high school diploma fell by 11% between 1979 and 2019. Meanwhile, the median wage of those with a bachelor's degree increased by 15% over the same period.<sup>1</sup> In addition to declining wages, less educated workers have consistently higher unemployment rates and greater job losses during recessions than those with further education.<sup>2</sup> The consequences of this growing divide may extend beyond workers' wallets: college attainment is also associated with a variety of positive outcomes, such as higher job and life satisfaction, better self-reported health, lower likelihood of committing crime, and greater civic and community engagement.<sup>3,4</sup>

In response, policymakers continue to explore ways to expand access to higher education. One suggestion gaining support among legislators is to expand Pell Grants to short-term vocational programs lasting less than 600 clock hours or 16 weeks. Proponents argue that those with a short-term vocational credential have better outcomes than those who only possess a high school diploma, noting that a lack of access to federal grant aid for students pursuing these programs inhibits participation. Given the significant time and monetary costs of traditional higher education, advocates argue that expanding Pell Grants to short-term programs would create an attractive alternative for those who might not pursue a two- or four-year degree.

Critics of expanding Pell Grant eligibility to these programs, however, argue expansion could waste taxpayer dollars and leave students without significant gains. Although some short-term programs produce earnings gains for students, outcomes differ substantially by program and across demographic groups, raising questions about the value of these credentials. In addition, previous attempts to expand federal financial aid eligibility to trade schools resulted in fraudulent and poor-quality programs that produced limited job placement upon graduation, further heightening concerns.<sup>5</sup>

To evaluate the impact of expanding Pell Grant eligibility to short-term vocational programs, the U.S. Department of Education conducted an experimental pilot that found significant gains in enrollment and course completion for grant recipients in these programs.<sup>6</sup> However, the pilot did not

measure students' post-graduation wage and labor market outcomes.<sup>i</sup> The lack of data on these outcomes leaves unanswered questions about the effectiveness of a potential Pell expansion.

Given the uncertainties regarding the longer-term effects of extending Pell Grant eligibility to short-term programs, there is a need for a new and robust experimental pilot to examine the post-completion outcomes of grant recipients.

## What Are Pell Grants?

The Pell Grant program is the federal government's largest source of need-based aid for higher education, with more than \$28 billion disbursed to 6.7 million students through the program during the 2019-20 award year.<sup>ii,7</sup> Eligibility is limited to undergraduate students with financial need, as determined by their personal income and family size. The size of the grant is determined by financial need, the cost of attendance, and the number of credit hours for which a student is enrolled. Pell Grants can be used for tuition, fees, room and board, or other educational expenses. Unlike student loans, a Pell Grant does not need to be paid back. The maximum Pell award was \$6,495 during the 2021-22 award year.<sup>8</sup>

As the largest federal grant program for college students, Pell Grants play a critical role in increasing access to higher education among low-income students and students of color. Nearly half of students receiving Pell Grants during the 2019-20 award year had incomes below \$20,000, and 72% of full-time full-year Black students received a Pell Grant during the 2015-16 academic year.<sup>9,10</sup> Pell Grants can also improve educational attainment, with research finding that an additional \$1,000 in aid increases the number of credits a student earns by 21%.<sup>11</sup>

To receive a Pell Grant, a student must complete the Free Application for Federal Student Aid (FAFSA) and be enrolled in an eligible program. For a program to be Pell-eligible, it must be offered by an institution approved to disburse Title IV aid and be equivalent to at least two-thirds of an academic year (600 clock hours or 16 credit hours), meaning that short-term vocational programs of less than 600 clock hours or 15 weeks long are currently ineligible for Pell Grants.<sup>iii</sup>

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i The original pilot failed to measure students' employment and earnings due to difficulties obtaining data from other agencies with labor-market data.

ii Disbursements were lower during the 2020-21 award year due to declining enrollment as a result of the COVID-19 pandemic. In that award year, \$26 billion was disbursed to 6.3 million students.

iii Most student aid offered by the federal government is authorized by Title IV of the Higher Education Act. This includes federal student loans, Pell Grants, federal work-study, and several other programs. Institutions that do not distribute Title IV aid may participate in other federal student aid programs, such as the post-9/11 GI Bill grant program operated by the Department of Veterans Affairs.

## What Are Short-Term Vocational Programs?

Although definitions vary, the term “short-term vocational program” generally refers to brief educational programs that allow participants to gain job-training, skills, or credentials. They can range from a few weeks to several months in length and are offered by public, nonprofit, and for-profit institutions; a plurality are offered at public community colleges. These programs address skills and credentials relevant to a wide variety of industries, with certificates in manufacturing and consumer services among the most common.<sup>12</sup> Short-term programs can be divided further into for-credit and noncredit programs; credits earned in the former can sometimes be counted toward meeting requirements for future academic degrees, whereas experience in noncredit programs usually cannot.

Short-term programs often serve different student populations than two- or four-year programs, and the number of certificates awarded by public institutions increased by 51% between the 2009-10 and 2018-19 academic years.<sup>13</sup> Their popularity may have increased because, given the rising costs of attending a four-year university or college, gaining a certificate from a short-term program can be a student’s best gateway into the labor force.

The shorter time commitment and lower overall cost also influences the students these programs serve. Short-term vocational programs generally appeal to older independent adults, instead of dependent students straight out of high school typically served by four-year institutions. In fact, 56% of students pursuing a certificate during the 2015-16 academic year were over the age of 25.<sup>14</sup> Women and students of color also enroll in short-term programs at higher rates, representing 60% and 52% of students, respectively, pursuing certificates during the 2015-16 academic year.<sup>15</sup>

There is inconsistent evidence regarding the impact of short-term credentials on labor-market outcomes. Descriptive evidence suggests that short-term programs can improve the earnings of high school-educated workers but generally yield lower returns than an associate degree.<sup>16</sup> Importantly, these gains differ greatly based on a student’s background, the sector of the institution they attended, and their field of study. For example, the median earnings of program graduates range from \$44,000 in mechanical fields to only \$21,000 for education, liberal arts, and fine arts certificates. The median earnings of male certificate holders is \$18,000 higher than female holders. This earnings gap between men and women with certificates is proportionally larger than the gap between men and women with a high school diploma only, those with an associate degree, or those with a bachelor’s degree.<sup>iv,17</sup> More than one-third of those employed with a short-term certificate have an annual income of \$20,000 or less, and 2 out of 5 certificate holders are not employed at all.<sup>18</sup> This variability suggests

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iv These earnings differences are partially attributable to the type of certificates held by men and women, as women generally hold certificates in lower-paying fields, such as health care and consumer services.

that not all short-term programs improve students' prospects, raising questions about whether expanding Pell Grants to these programs without appropriate safeguards is a productive use of taxpayer dollars.

Despite the lack of evidence surrounding post-graduate outcomes, significant support exists in Congress for extending Pell Grants to short-term programs. A group of policymakers led by Senator Tim Kaine (D-VA) has proposed extending Pell Grants to short-term vocational programs as part of the workforce training provisions of the Jumpstart Our Businesses by Supporting Students Act of 2021, or JOBS Act for short.<sup>19</sup> These changes would expand Pell Grant eligibility to students pursuing certificate programs that last between 150 and 600 clock hours, require between eight and 15 weeks of instruction time, and meet the needs of the local or regional workforce. Students pursuing certificate programs at for-profit institutions would be excluded from the JOBS Act's proposed changes.

## The Original Pilot: What We Know and Don't Know About Expanding Pell

To explore the impact of expanding Pell Grant eligibility to short-term vocational programs, the U.S. Department of Education initiated an experimental pilot that ran from 2011 to 2017, with the results released in 2020.<sup>v</sup> The experiment, which tested an approach similar to what is embodied in recent congressional proposals such as the JOBS Act, expanded Pell Grant access to some short-term occupational training programs lasting eight to 15 weeks.<sup>vi</sup>

In this study, Title IV-eligible institutions volunteered to participate and were tasked with identifying Pell-eligible students who showed an interest in enrolling in short-term vocational programs. Once identified, students were randomly assigned to treatment and control groups, with each student having a 60% chance of being assigned to the treatment group and offered an experimental Pell Grant. The two groups were then compared at several points to

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v The experimental pilot to expand Pell Grant access to short-term occupational training programs was conducted at the same time as a second experimental pilot that investigated providing Pell Grant access to students who had already received a bachelor's degree and were pursuing a vocational program. It cost roughly \$3 million to conduct these two experimental pilot studies. For more on these studies, see "Evaluation of the Pell Grant Experiments Under the Experimental Sites Initiative" on the National Center for Education Evaluation and Regional Assistance (NCEE) website, available at: [https://ies.ed.gov/ncee/projects/evaluation/pathways\\_pell.asp](https://ies.ed.gov/ncee/projects/evaluation/pathways_pell.asp).

vi Students in this study did not have a bachelor's degree, but about half (53%) had some college experience and the vast majority (98%) were high school graduates. The JOBS Act would limit eligibility for short-term Pell Grants to students without a postsecondary degree.

judge the impact of the Pell Grant expansion on enrollment and completion. In total, 28 institutions and 2,270 students participated in the pilot.<sup>20</sup>

## What the Original Pilot Found

The original pilot found that eight months after random assignment, students who were offered an experimental Pell Grant (treatment group) were 15 percentage points more likely to enroll in any program at a study institution than those not offered Pell support (control group).<sup>21</sup> A similar, though less pronounced, trend emerged in completion rates. Ten months after random assignment, students in the treatment group were 9 percentage points more likely to have completed a program at a study institution, with a proportional increase in the likelihood of completing a program in a high-demand field in their state.<sup>22</sup> These observed differences were statistically significant and consistent across student characteristics, suggesting that experimental Pell Grants boosted both enrollment and completion for short-term programs.<sup>vii,23</sup>

## What We Still Don't Know

Although the original pilot provided evidence that experimental Pell Grants improved enrollment and completion rates, it left unanswered questions about student outcomes after graduation. The original pilot was unable to assess employment rates or earnings following completion, making it unclear whether expanding Pell to short-term programs is a worthwhile public investment.

While students offered short-term Pell Grants were more likely to complete programs in high-demand fields, those programs do not always lead to stable, high-paying jobs. For example, among students who completed a program in a high-demand field, 65% studied transportation and material moving.<sup>24</sup> Programs in this field frequently lead to jobs in truck driving, an industry with a 70-90% annual turnover rate.<sup>25</sup> The second-largest group of students who completed credentials in high-demand fields were pursuing health professions (24%), an industry known for low wages and high turnover.<sup>26,27,28</sup> The original pilot therefore did not demonstrate that gaining a short-term credential, even in a high-demand field, improves job security and earnings.

The original pilot was also unable to measure whether completing a short-term program affected the future educational enrollment of participants. Advocates of short-term credentials point out that they are stackable, meaning that earning a certificate can act as a stepping stone to higher-level degrees, such as an associate or bachelor's (progressive stacking), or can be complemented by additional certificates that further increase wages (independent stacking).

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vii The pilot also examined whether access to an experimental Pell Grant impacted student loan borrowing, but no difference was found between groups. The pilot collected information reported through the FAFSA on participants' age, sex, high school graduation status, prior post-secondary experience, expected family contribution (EFC), dislocated worker status, adjusted gross income, marital status, household size, veteran status, risk of homelessness, independent status, and whether participants were enrolled at a study school prior to the study period. Information on race and ethnicity was not collected. For more information on the sample and the type of programs students enrolled in, see **Tables 1 and 2.**

Critics of short-term programs, however, believe the opposite, arguing that students treat these certificates as a substitute for higher-level degrees and may not seek further education.<sup>29</sup> With minimal research currently available to inform this debate, the original pilot missed an opportunity to answer questions about how earning a short-term credential affects the pursuit of future education.

In addition to lacking detail about outcomes after graduation or separation, the original pilot had an unrepresentative sample of certificate programs, and of greater concern, it neglected to explore the varying impact that a Pell expansion could have across different types of programs (**Table 1**). The sample was overwhelmingly comprised of public two-year institutions and concentrated in the southeastern region of the United States. Given the worry that some for-profit institutions will be bad actors under a potential expansion,

**Table 1: Relative Characteristics of Pell Grant Experimental Pilot Institutions and Students**

Characteristic	Pilot Sample <sup>a</sup>	All U.S. Certificate Institutions/Students <sup>b</sup>	All U.S. Postsecondary Institutions/Students <sup>c</sup>
<b>Institutional Characteristics</b>			
<b>Type of Institution</b>			
Public, two-year	72%	28%	25%
Other	28%	72%	75%
<b>Regional location</b>			
Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)	46%	26%	24%
Other	54%	74%	76%
<b>Student Characteristics</b>			
<b>Demographic<sup>d</sup></b>			
Male	63%	45%	43%
Female <sup>e</sup>	36%	55%	57%
Under age 25	32%	43%	73%
25 and older	68%	57%	27%

a Study schools were those approved by the Department of Education's office of Federal Student Aid (FSA) to participate in either or both experiments and which identified at least one eligible participant by March 31, 2017. "Student Characteristics" only reflect participants in the experiment focused on short-term certificates.

b "All U.S. certificate programs" refers to certificate programs at institutions that reported awards taking less than one year to complete. Data reflect the 2017-18 IPEDS survey.

c "All U.S. postsecondary schools" refers to all institutions with undergraduate enrollment. Data reflect the 2017-18 IPEDS survey.

d Demographic data for "all U.S. certificate students" reflect those completing certificates, while demographic data for "all U.S. postsecondary students" reflect undergraduate enrollment.

e Gender information was missing for 1% of the pilot sample.

Sources: U.S. Department of Education, "The Effects of Expanding Pell Grant Eligibility to Short Occupational Training Programs: Results from the Experimental Sites Initiative," Pilot Study Appendix, Exhibit A.7, December 2020; Integrated Postsecondary Education Data System, 2018.

**Table 2. Comparison of Field of Study between Pilot Participants and Recent Postsecondary Certificate Holders**

Field of Study	Pilot Sample <sup>a</sup>	All U.S. Certificate Students <sup>b</sup>
Transportation and materials moving	56%	4%
Health professions and related programs	27%	25%
Homeland security, law enforcement, firefighting, and related protective services	7%	8%
Construction trades	6%	6%
Precision production/manufacturing	1%	5%
Other	4% <sup>c</sup>	56%

- a The “pilot sample” represents the students who completed a short-term FSA-approved program—only 44% completed; the other 56% of study participants did not complete a program in a study school.
- b The “all U.S. certificate students” category comprises students who reported (on the 2016 Adult Training and Education Survey) receiving a postsecondary certificate from a program lasting between 160 and 960 hours.
- c The “other” category from the pilot sample includes data categorized as missing.

Source: U.S. Department of Education, National Center for Education Statistics, 2016 Adult Training and Education Survey (ATES); BPC staff calculations of U.S. Department of Education, “The Effects of Expanding Pell Grant Eligibility to Short Occupational Training Programs: Results from the Experimental Sites Initiative,” Pilot Study Appendix, Exhibit C.11, December 2020.

the underrepresentation of that sector in the pilot raises serious concerns. The student sample was also disproportionately male, and no information was collected on the race and ethnicity of participants. Additionally, the program fields that participants completed under the pilot were very different from the fields that most certificate holders have studied (**Table 2**). These substantial differences between the pilot’s sample and the general population of short-term vocational programs and certificate holders warrants skepticism about the ability to generalize the original pilot’s findings.

Finally, the original pilot did not measure how institutions would respond to the ability to access additional federal funds through the Pell Grant program expansion—creating an opportunity for bad actors to take advantage. In the 1970s, Pell Grants were expanded to for-profit vocational schools with minimal oversight around program quality or student outcomes. As a result, a flurry of new, poor-quality proprietary institutions capitalized on the opportunity to defraud students and capture federal funds. In fact, among some of the most egregious programs receiving federal funds, 88% of students dropped out and less than 10% of initial enrollees ever found jobs within their field of study.<sup>30</sup> Although reforms were made to address these problems, the perverse response of some institutions to the sudden availability of new federal funding remains a concern. Without an investigation of how institutions would respond to this new funding opportunity and the implementation of appropriate safeguards, expanding Pell-eligibility to short-term programs could once again lead to the proliferation of low-quality programs.

# The Need for an Expanded Pilot Study

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The original pilot study was a good starting point for evaluating the expansion of Pell Grants to short-term programs, but it lacked evidence and nuance on several important questions. Among the major issues are that it did not measure post-completion outcomes, it examined a nonrepresentative sample of schools and students, and it did not consider the potential institutional responses to a Pell Grant expansion. A more robust experimental pilot is needed to provide a comprehensive picture of the costs and benefits of a Pell expansion and to help policymakers calibrate potential accountability measures.

This new pilot should have four main goals:

- 1. Measure Return on Investment** – The new pilot should collect information on post-graduation labor-market outcomes, including earnings and employment data, and future educational decisions. Tracking these metrics can help ensure that an expansion would not waste Pell Grant dollars and students' time.
- 2. Identify Factors That Lead to Variation in Outcomes** – Given the wide degree of variability in postsecondary student outcomes, the new pilot should provide comprehensive data that allows for the disaggregation of results by sector, field of study, region, race and ethnicity, and other potentially relevant factors.
- 3. Assess Institutional Response** – To prevent the proliferation of fraudulent and ineffective short-term programs, the new pilot should include mechanisms to assess how institutions might change their behavior in response to Pell expansion.
- 4. Estimate the Cost of Pell Expansion** – It is unclear how much funding would be needed to finance a full expansion of Pell eligibility to short-term programs without draining Pell program funding away from currently eligible students and programs. Accordingly, the new pilot should provide policymakers with robust data to estimate the costs of adequately funding a Pell expansion.

With these four goals in mind, BPC consulted with various academics and experts on short-term vocational programs for input on how a new experimental pilot should be designed.

## Recommendations for Study Design

A new pilot should expand on the previous study by using random assignment across two different groups: eligible institutions that offer short-term programs and eligible students.

### Institutional Sample

To construct the sample of participating programs, the Department of Education should announce the opportunity to participate in the experimental pilot and describe the specific eligibility requirements and the application process for institutions to volunteer. We recommend that the department make this announcement at least a year before the pilot begins to allow adequate time for institutions to learn about the opportunity and apply to participate. Additionally, eligibility should be limited to institutions already approved to participate in federal student aid programs under Title IV. Although limiting eligibility to Title IV institutions would likely exclude some institutions that might be eligible for short-term Pell Grants under some proposals, it seems infeasible to shepherd programs through the lengthy Title IV approval process given the limited time frame and resources available in a pilot study.<sup>viii</sup>

Within an eligible institution, a short-term vocational program should be eligible for the pilot if it has existed for at least a year, is between 150 and 600 credit hours, lasts between eight and 15 weeks, and is officially accredited. Eligibility should also be limited to credit-bearing programs or noncredit programs with institutional credit articulation.<sup>ix</sup> These requirements for participation in the study are loosely based on current congressional proposals for expanding Pell, such as the JOBS Act, in order to glean lessons that are as relevant and applicable as possible.<sup>31</sup>

To increase the diversity and representativeness of institutions recruited compared to the original pilot, the Department of Education should perform outreach to identify and advertise this new funding opportunity to institutions with eligible programs. Beyond this initial recruitment effort, the organizers of the pilot should also provide technical assistance throughout the application process. Care should be taken to construct a sample of institutions that is representative of those offering eligible programs, both by level of institution (non-degree-granting, two-year, and four-year) and sector (public, nonprofit,

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viii To participate in Title IV financial aid programs, an institution must be legally authorized to provide postsecondary education in the state where it operates, be accredited or pre-accredited by a recognized accrediting agency, and be certified as eligible to participate by the Department of Education. For more information on Title IV eligibility and the approval process, see the Congressional Research Service report, "Institutional Eligibility for Participation in Title IV Student Financial Aid Programs," available at: <https://fas.org/sjp/crs/misc/R43159.pdf>.

ix Credit articulation agreements within or between institutions allow students in noncredit programs who take courses aligned with a degree program to receive credit if they continue toward that degree. For more information on articulation agreements for short-term noncredit programs, see the Education Strategy Group's report, "A More Unified Community College: Strategies and Resources to Align Non-Credit and Credit Programs," available at: <https://edstrategy.org/resource/a-more-unified-community-college/>.

and for-profit).<sup>x</sup> For example, in the original pilot, 72% of participating institutions were two-year public colleges, but these colleges make up only 28% of institutions in the United States that offer certificates requiring less than one year of enrollment (**Table 1**). This issue is particularly important, as some proposed legislation would preclude for-profit institutions from distributing Pell Grants to students in short-term vocational programs. Broader institutional recruitment for this study would allow policymakers to examine whether the outcomes for students at those programs are significantly poorer than in other sectors.

The department should explore the possibility of three experimental conditions for institutions: a control group, a treatment group where all eligible students at an institution receive new Pell Grants, and a treatment group with student-level randomization determining Pell Grant receipt. At an institution placed in the control group, no students would be eligible for experimental aid. This would create a potential problem for institutional recruitment, however, as institutions placed in the control group would have no incentive to participate. Thus, to mitigate this concern, we recommend providing all participating institutions—regardless of their assignment to treatment or control conditions—with a financial incentive large enough to cover staff time and other costs of supplying institutional data to researchers.

Placing institutions into two separate treatment conditions would expand the previous pilot's design by allowing researchers to study institutional response with greater clarity. With student-level randomization, an institution is unsure whether any given student will receive an experimental Pell Grant. Therefore, the institution may have less financial incentive to change their behavior by offering additional student support services, modifying the length of existing programs to qualify, or changing recruitment practices to secure additional funds. Conversely, in the treatment condition without student-level randomization, all prospective students with financial need at an institution would be eligible for experimental Pell Grants, creating a stronger incentive for institutions to modify their behavior.

Institutional randomization also creates a more accurate simulation of expanding Pell eligibility to short-term programs. If expanded, all students with financial need attending an institution's short-term vocational programs would become eligible for Pell Grant funding, not just those randomly selected. This realistic treatment condition would allow the department to identify potential consequences that may be missed with only student-level randomization.

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<sup>x</sup> The JOBS Act would exclude all short-term vocational programs offered by for-profit institutions from a Pell Grant expansion. Notably, however, our proposed pilot study would include for-profit institutions.

## Student Sample

In addition to establishing which institutions are eligible to participate, the Department of Education must specify eligibility requirements for students. We recommend limiting student eligibility to prospective students at participating institutions who lack a college degree and have sufficient financial need to be eligible for a Pell Grant. Similar to the original pilot, institutions should oversee the identification of eligible students. The Department of Education, however, should supply institutions with sufficient guidance on student eligibility to create consistency across the study and provide recruitment support where necessary.<sup>xi</sup> In addition to this guidance, institutions should be encouraged to work with local workforce partners to advertise the existence of new grants for short-term programs and recruit prospective students.

Under the original pilot, eligible students within an institution were randomly assigned to treatment and control groups, with a 60% chance for any student to be placed in the treatment group and offered an experimental Pell Grant. The amounts of these grants were prorated based on program length. For the new expanded pilot, the same procedures should be followed. Student-level randomization should also continue to be practiced for institutions in the relevant treatment group, as it allows for a causal analysis of the individual-level impacts of expanding Pell. With an adequate sample size, results can be disaggregated by student backgrounds. Because the student-level randomization treatment replicates the design of the original pilot, this approach would also allow results to be compared and verified across these two studies, facilitating a confirmation of and expansion upon the first study's results. At institutions in the treatment condition without student-level randomization, all students with financial need would be Pell-eligible.

## Timeframe

The new pilot should run for several years to allow adequate time to include multiple cohorts of students, reach a large enough sample size to conduct disaggregated analysis, and capture any institutional responses. Optimally, we suggest conducting the pilot over at least five years.<sup>xii</sup> A five-year period would allow the study to include three years of short-term vocational student cohorts and at least two years of follow-up on these participants. Collecting data over several student cohorts would increase the sample size of the study and enable better data disaggregation and analysis, increasing chances that the new pilot study could identify factors that lead to varying student outcomes. A period of at least five years would also allow more time for institutions to react to the new funding opportunity and potentially modify their behavior.

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xi Only half of schools approved by FSA to participate in the original pilot went on to identify eligible students for the study. On average, those institutions took nearly nine months from approval to identify their first eligible student and begin participating in the experiment. This challenge was attributed to school financial aid offices having little experience with recruitment and difficulties in identifying eligible students.

xii The original pilot was conducted over a five-year period from 2012 to 2017. For more information see, "The Effects of Expanding Pell Grant Eligibility for Short Occupational Training Programs: Results from the Experimental Sites Initiative," available at: <https://ies.ed.gov/ncee/pubs/2021001/>.

## Outcomes Measured and Data Sources

To achieve the four goals laid out above, the new pilot must collect a variety of data on participant characteristics and study outcomes. It is critical that the new pilot's results be accurate and predictive, so each data point must be collected consistently across sites or come from a verified external data source.

**Table 3. Suggested Outcome Measures and Potential Data Sources for New Pilot**

Outcome	Description	Purpose	Potential Data Source
<b>High Priority</b>			
<b>Pell Uptake Rate and Average Grant Amount</b>	The percentage of prospective students offered a Pell Grant that accept it and the average award amount	<ul style="list-style-type: none"> <li>Estimate the Cost of Pell Expansion</li> </ul>	U.S. Department of Education, Office of Federal Student Aid
<b>Enrollment and Completion Rates</b>	The percentage of study participants who enroll and the percentage who complete a short-term program	<ul style="list-style-type: none"> <li>Measure Return on Investment</li> </ul>	National Student Clearinghouse; Participating Institutions
<b>Earnings and Relative Wage Gains</b>	The earnings of study participants pre-enrollment in the study and six months, one year, and two years following their expected program completion date	<ul style="list-style-type: none"> <li>Measure Return on Investment</li> </ul>	Internal Revenue Service; College Scorecard; Census Bureau's Post-Secondary Employment Outcomes
<b>Employment and Retention Rates</b>	The percentage of study participants that are employed in their field of study six months, one year, and two years following their expected program completion date; this would include a breakdown of full-time versus part-time employment	<ul style="list-style-type: none"> <li>Measure Return on Investment</li> </ul>	Internal Revenue Service; Student Participant Survey
<b>Price and Length of Participating Short-Term Credential Programs</b>	The published price of program attendance; length (in credit hours or weeks) of participating programs	<ul style="list-style-type: none"> <li>Assess Institutional Response</li> </ul>	IPEDS; Participating Institutions
<b>Moderate Priority</b>			
<b>Continuing Education</b>	The percentage of study participants who pursue further education outside of their initial short-term program of interest	<ul style="list-style-type: none"> <li>Measure Return on Investment</li> </ul>	National Student Clearinghouse
<b>Marketing Spending</b>	Spending on network TV, cable, television, spot television, national magazine, newspaper, outdoor, and internet display ads, including dollars spent by parent and/or subsidiary companies	<ul style="list-style-type: none"> <li>Assess Institutional Response</li> </ul>	Participating Institutions
<b>Demographic Composition of Participating Students and Institutions</b>	The age, field of study, gender, first-generation-student status, and race and ethnicity of students participating in the study and at the participating institution as a whole	<ul style="list-style-type: none"> <li>Identify Factors That Lead to Variation in Outcomes</li> <li>Assess Institutional Response</li> </ul>	IPEDS; Participating Institutions
<b>Low Priority</b>			
<b>Student Services</b>	The availability and types of support services available to students enrolled in the short-term vocational programs	<ul style="list-style-type: none"> <li>Identify Factors That Lead to Variation in Outcomes</li> </ul>	IPEDS; Participating Institutions; Student Participant Survey
<b>Employer Participation</b>	Whether and how local employers engage with a short-term program; whether student participants receive employer financing to attend a program	<ul style="list-style-type: none"> <li>Measure Return on Investment</li> <li>Identify Factors That Lead to Variation in Outcomes</li> </ul>	Participating Institutions; Student Participant Survey
<b>Student Loan Outcomes</b>	The percentage of tuition and average amount borrowed by student participants; the cohort repayment and default rates of participants one and two years after expected program completion date	<ul style="list-style-type: none"> <li>Measure Return on Investment</li> <li>Estimate the Cost of Pell Expansion</li> </ul>	U.S. Department of Education, Office of Federal Student Aid

In **Table 3**, we suggest data points and outcomes that should be measured in the new pilot, potential data sources for each item, and relative importance in achieving the four goals of the new pilot. Each item should be disaggregated by institutional and student characteristics where feasible, thereby allowing for comparisons across groups and the identification of factors that lead to variations in outcomes. We also recommend that the Department of Education provide financial resources and additional guidance where necessary to incentivize and assist institutions in collecting this data.

### **Pell Uptake and Grant Amount**

The new pilot should once again collect information on whether students who are offered experimental Pell Grants accept that aid (uptake rate) and on the average amount of the grant award. Although included in the original pilot study, collection in the new pilot would allow for comparison across the two studies and enable verification of previous results.<sup>xiii</sup> These data are critical, in part, because they would be used to estimate the cost of the new Pell Grant expansion. If costs are underestimated, policymakers may wrongly believe that expansion is a worthwhile investment. Moreover, appropriations to finance the expansion could fail to cover increased demand, creating a shortage of Pell funding and harming Pell-eligible students pursuing associate and bachelor's degrees. As in the original study, data on uptake and award amounts would be provided by the Department of Education's office of Federal Student Aid (FSA).

### **Enrollment, Completion, and Continuing Education**

Enrollment and completion outcomes were assessed in the original pilot study, and the new pilot should collect this information again, both for comparison and for evaluating the new treatment condition. Furthermore, if gains in enrollment and completion are replicated in the new study, it would extend those findings to a wider set of institutions and programs. Data on enrollment should also be collected from neighboring institutions, similar to the original pilot study, to assess whether students who did not have access to an experimental Pell Grant decided to enroll in another school instead.<sup>xiv</sup> Additionally, when combined with data on labor market outcomes, enrollment and completion data would allow the department to compare labor market outcomes between those who enrolled and completed a certificate and those who did not.

To shed light on how enrolling in these short-term programs may affect decisions to pursue further education, the new pilot should also capture whether participants continue their education after earning a credential.

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xiii Under the original pilot, 52% of students offered an experimental Pell Grant for a short-term program took it, and the average Pell Grant award was \$1,312.

xiv The original pilot study examined whether selected students enrolled and completed a program at any institution, not just institutions participating in the study. For more information, see Appendix B of, "The Effects of Expanding Pell Grant Eligibility for Short Occupational Training Programs: Results from the Experimental Sites Initiative," available at: <https://ies.ed.gov/ncee/pubs/2021001/>.

Of interest are the types of programs participants join to continue their studies, as well as whether they pursue unrelated credentials (independent stacking) or higher-level degrees within the same field (progressive stacking).<sup>32</sup> Understanding how short-term credentials impact future education would help answer questions about the return on investment of a Pell Grant expansion. Evidence that independent or progressive stacking occurs would indicate that short-term credentials are a stepping stone to further education—as supporters have suggested. On the other hand, the original pilot found directional but not statistically significant evidence that placement in the experimental grant condition reduced the likelihood of pursuing an associate degree program. Replicating this analysis would provide insight into the possibility that pursuing short-term credentials displaces students from degree programs—as critics have warned.

Data on enrollment, completion outcomes, and continuing education should come from the same sources as the original study: participating institutions and the National Student Clearinghouse (NSC). The NSC tracks the enrollment and completion status of students in postsecondary education. NSC data are especially valuable for tracking whether students enroll at multiple institutions or switch to a new institution. NSC’s database covers 99% of public two-year institutions but only 28% and 12% of two-year private nonprofit and two-year for-profit institutions, respectively.<sup>33</sup> If an institution participating in the study does not report enrollment data to NSC, school records could be used instead. Unfortunately, some gaps in data on student behaviors may remain if institutions that neighbor those participating in the study do not participate in NSC data collection.<sup>xv</sup> Enrollment in and outcomes for continuing education should be tracked at six-month intervals for the duration of the study following a participant’s expected graduation date in the program for which they received an experimental Pell Grant.

### **Earnings and Relative Wage Gains**

The largest outstanding question regarding the effectiveness of short-term Pell Grants is post-completion earnings and wage gains, which were not captured in the first pilot. Earnings data are necessary to answer questions about the individual and societal return on investment of short-term vocational programs. We recommend that earnings information be collected for all participants wherever possible, regardless of whether they were in a control or treatment condition and whether they enrolled and completed a short-term program. Wage outcomes should be tracked at six-month intervals for the duration of the study after a participant’s expected program completion date. If possible, follow-up studies should be conducted on participants’ outcomes five and 10 years after the expected program completion date, as there is conflicting research on the long-term gains from earning a short-term credential.<sup>34,35</sup>

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xv A survey of participants could fill in missing data if gaps are substantial, but a survey should be avoided if possible given high costs, poor coverage, and inability to verify results.

Optimally, earnings data should originate from the Internal Revenue Service (IRS) and be anonymized for use. IRS data would have almost universal coverage of participants, would be highly accurate, and could capture both pre- and post-enrollment wages. IRS data are currently used to estimate earnings outcomes for Title IV-eligible programs in the College Scorecard thanks to a data sharing agreement between the Treasury Department and the Department of Education. The use of these data is limited by privacy considerations, however, especially for small programs that might need to have multiple cohorts combined to reach privacy thresholds. Highly specialized programs may have their data “rolled up” with similar programs in College Scorecard data, making it difficult to distinguish program outcomes for purposes of this study. Other potential data sources carry similar or sometimes greater constraints, as legal limitations and privacy concerns apply to the use of all federal data sets.<sup>xvi,36</sup> An alternative promising source for wage data could be the Census Bureau’s Post-Secondary Employment Outcomes data set, which draws on state data systems, but it currently only includes 17 states.<sup>37</sup>

Both annual earnings and wage gain (comparing earnings before and after program completion) are important outcome metrics. Wage-gain estimates help policymakers understand the effect of earning a short-term credential on students’ wages. Additionally, capturing wage gains is necessary given that many students in vocational programs are already employed during enrollment. The annual earnings of participants is also an important marker, however, as policymakers may be hesitant to fund programs that, despite producing gains, still pay low or even poverty-level wages. Moreover, some participants may not have an employment history prior to enrollment, meaning their wage gains are incalculable.

### **Employment and Retention Rates**

In addition to collecting wage data, the new pilot should look to the same source to capture the job placement of study participants, particularly in jobs related to their field of study.<sup>xvii</sup> This data point would shed further light on student outcomes and the workforce impact of earning a short-term credential. Similar to wage data, these data should be collected at six-month intervals for the duration of the study after the expected program completion date. If feasible, a follow-up study should also be conducted on the labor market outcomes of participants five and 10 years after their expected graduation.<sup>xviii</sup>

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xvi Some federal data sources are prevented by law from being used for studies such as the proposed pilot. For instance, the National Directory of New Hires (NDNH) is a comprehensive database of job hires and employer payroll information, operated by the Office of Child Support Enforcement. Statute forbids the use of the NDNH for most research purposes.

xvii IRS data would capture a participant’s employer and their NAICS Industry Code, which could be used to match field of study. Alternatively, if a survey is conducted, participants could be asked to self-report if their occupation is within their field of study, although we recommended verification efforts where possible.

xviii This follow-up study should include information on the average amount of time graduates have been employed over the period and the average length of employment with each employer (retention data).

While beneficial to collect, job placement rates are notoriously unreliable. This is due in part to a lack of consistent definitions regarding which jobs count as in-field placements and meet the required hours or duration of employment. In addition to harming comparability, poorly defined job placement rates make it easier for institutions to game their numbers by encouraging graduates to secure any job possible regardless of relevancy to the field for which they trained.<sup>38</sup>

The Department of Education should provide consistent definitions for whether a job qualifies as being within an intended field. Additionally, job placement rates should be broken into full-time and part-time employment to better capture the labor market outcomes of study participants. If feasible, more granular data on the hours of employment per week should also be captured, but this may only be possible through a prohibitively expensive direct survey.

The use of data from the IRS or another government source to measure job placement rates would minimize concerns about poor compliance with definitions, because the department itself would be able to develop and apply them. If data on job placement rates instead come from participating institutions or a survey, the department should provide clear and consistent guidance.

Whether participants stay with an employer over time (retention rate) should also be tracked, given the high turnover rates in many of the occupations at which short-term credentials are targeted. Retention rates could serve as an additional indirect measure of job quality.

### **Demographic Composition of Participating Institutions and Students**

To improve upon the original pilot, the new pilot should capture information about the demographic distribution of the student body at participating institutions and programs, not just among students participating in the study. This demographic information should include student age, field of study, gender, first-generation student status, and race and ethnicity. Much of this information would likely be available from an institution's student records and existing institutional reporting (e.g., to IPEDS), but additional surveys could be conducted if deemed feasible and necessary.

Broader data on demographic composition would be of interest for several reasons. First, collecting this information could help explain variation in outcomes across programs. Institutions that serve a larger proportion of nontraditional students with greater resource needs often have worse outcomes overall, an effect that could spill over into the sample and create otherwise unexplained variation.<sup>39</sup> Second, changes in student demographic data may also expose changes in institutional behavior. Spikes in enrollment among

certain groups, such as students of color, could signify adjustments to how an institution is recruiting and highlight potentially predatory targeting.<sup>40</sup> Third, changes in the student body could be the result of wider trends (exogenous changes) with implications for expanding Pell. While some of these trends could be visible in data from treatment institutions and students receiving experimental grants, data collection at control group institutions and for students not receiving experimental grants would help identify trends occurring across conditions. Finally, collecting institution-level demographic data would allow for assessment of the effectiveness of institutional randomization and ensure comparability across treatment and control groups.

### **Student Services**

The student experience is not monolithic. Students encounter various uncertainties and obstacles during enrollment and following graduation. This is especially true for many of the low-income students who receive Pell Grants, as these students are more likely to experience financial instability and academic barriers while pursuing a degree.<sup>41</sup> The resources and support services that institutions offer to their students outside the classroom can be crucial to overcoming these barriers. For low-income students in particular, comprehensive services that connect students to a variety of supports can be paramount to success. Evidence from a review of eight evaluative studies found that postsecondary students with access to comprehensive services have higher persistence and completion rates, and may even have greater earnings several years after graduation.<sup>42</sup>

With evidence suggesting that access to student services can impact student outcomes, the Department of Education should collect data from participating institutions on the availability and types of support services available to students enrolled in their short-term vocational programs. Services at short-term programs vary, but can include coursework and career advising, post-graduation job fairs, and math and English aptitude assessments, among others. For students in short-term programs or at non-degree institutions, services taken for granted in other academic contexts—like library access or study space—may or may not be accessible. Coursework may even take place off-campus, further limiting access to support services. Given variation across institutions, the availability of services could be an important factor in explaining diverging student outcomes across programs. If the study finds that institutions offering students certain services have higher rates of program completion, guidelines for a potential expansion could include encouraging the availability of those services. Comprehensive data on student services would likely need to be self-reported by institutions, though some data are already in the Integrated Postsecondary Education Data System (IPEDS). If possible, interviews with students should be conducted to assess the quality of services offered and to identify the elements of these services that students found beneficial.

## **Employer Participation**

Many employers partner with short-term vocational programs directly or finance employee enrollment in the programs. These direct partnerships can take several forms. Employers may serve on governing and advisory boards, aid in the design of programs' curricula, provide mock interviews and mentorship, provide financial support to programs, or recruit program graduates for job openings.<sup>43</sup> Similar to student services, measuring if and how local employers engage with different participating institutions could explain some of the variation in outcomes across programs. For example, if employers are directly involved with a program, graduates may have higher job placement rates. Employer participation could also signal program quality, as employers may only partner with the best local programs that produce students with the skills necessary to succeed in the field. Understanding if and how local employers' participation in short-term programs affects outcomes could be used to inform future guidelines for expanding Pell and develop best practices for employer participation in short-term and workforce education programs. The Department of Education should clearly define categories of employer participation and collect this data from participating institutions.

In addition to measuring direct employer involvement within a program, the new pilot should also try to assess whether a participating student's attendance is being financed by their employer. Given the short-term nature of these programs, employers sometimes agree to pay for a share of their employee's costs to attend. One 2005 survey found that about 40% of students who were employed when they participated in a vocational or technical training program had a portion of their tuition and fees paid by an employer.<sup>44</sup> Measuring whether Pell expansion impacts employers' financing of short-term vocational programs could therefore capture potential unintended consequences. For example, it is plausible that Pell Grant expansion could cause employers to stop financing their employees' enrollment if they perceive their employees to have adequate support from the federal government. If Pell Grant funds replace employer financing, an expansion could cost taxpayers without improving access for these students.

Data on employer financing would likely have to be collected in a survey of participants, which could increase the cost of the study. If participants are already being surveyed for other purposes, however—such as to assess student service access and use—the benefits of asking about employer financing may outweigh the costs.

## **Modifications to Program Characteristics**

To capture the response of institutions to expanding Pell eligibility, data on program price and length of study, as well as data on marketing activity and expenses, should be collected from participating institutions. Price is important to capture given that some institutions may increase tuition prices

knowing that eligible students can use Pell Grant funds to cover increasing costs. Assessing changes to program lengths could capture whether institutions are strategically altering their programs to meet the new cutoff for Pell eligibility. For example, some institutions may stretch short programs solely to qualify for Pell Grant funding. Both institutional responses could harm students, either by driving up tuition costs or by unnecessarily shortening or stretching programs—making those programs either academically insufficient or wasting student time and energy. Finally, measuring whether institutions change the resources they put toward marketing short-term programs could signal changes in recruitment strategies.<sup>xix</sup> Significant increases in marketing and advertising could indicate that institutions are using increases in enrollment revenue from Pell to attract more students and capture additional Pell funding instead of investing new revenues into providing a better-quality education for students.<sup>45</sup>

Although measuring these data points could highlight behavioral changes by institutions, there are limitations to the ability of the proposed study to surveil institutions. Aware they are being monitored, institutions may behave differently than they would under a permanent expansion of Pell Grants when close monitoring has ceased.<sup>xx</sup> Moreover, data on marketing would likely have to be self-reported by institutions, raising concerns about its reliability.

## Student Loan Outcomes

Lastly, the new pilot should capture data from FSA on student loans, like the original study did, and provide additional insight by collecting repayment outcomes for participants. Although the original pilot found no difference in student borrowing between the treatment and control group, the new pilot could verify these results across a wider set of programs. In addition, the new pilot should build off the original by examining student loan repayment and default rates one year after a participant's expected graduation date and for the duration of the study thereafter.<sup>xxi</sup> Capturing borrowing and repayment outcomes would not only help policymakers understand student outcomes—high default and low repayment rates would raise questions about the value of the programs—but these data could also improve the cost estimates of a Pell expansion. For example, if borrowers who receive Pell Grants take out fewer loans or have improved repayment outcomes, these impacts could produce

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xix Marketing spending should be measured similarly to the methodology used in Kantar Media's "Ad\$ponder" data, which contains the universe of unique network TV, cable, television, spot television, national magazine, newspaper, outdoor, and internet display ads, as well as estimates of dollars paid by each institution's parent company and their subsidiaries for advertising in the 100 largest media markets in the United States. For more information on this dataset, see: [https://www.brookings.edu/wp-content/uploads/2020/05/Commercials-for-college\\_Appendix.pdf](https://www.brookings.edu/wp-content/uploads/2020/05/Commercials-for-college_Appendix.pdf).

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xxi Because federal student loans have a six-month grace period following graduation during which borrowers are not required to make payment, repayment data would not be collected at this interval.

budgetary savings and affect the overall costs of a Pell Grant expansion. Nonetheless, lessons from this data may be limited given low borrowing among students at short-term credential programs.<sup>46</sup>

## Challenges and Alternatives

While a new and comprehensive pilot study would be the most effective way to determine the merits of expanding Pell Grants to short-term vocational programs, conducting such a pilot may be politically difficult. The original pilot cost the government almost \$3 million. Because our proposed pilot would have a larger sample size, greater recruitment efforts and Department of Education involvement, and collect additional data points, its costs would likely be higher.<sup>47</sup> These costs may be politically unpalatable given that the new proposed pilot would recreate a recently completed experiment, albeit with methodological improvements. Supporters of expanding Pell Grants to short-term programs would also likely disapprove of needing to wait at least five years for further study results before a potential expansion.

If it is deemed infeasible to conduct the proposed new pilot study given these constraints, further action should still be taken to investigate the post-graduation outcomes of students in short-term vocational training programs before expanding Pell Grants to these programs. For example, Congress could direct the Department of Education and the IRS to share data on earnings outcomes for participants of the original pilot study. This data-sharing could provide greater insight into the return on investment from a potential Pell expansion by enabling comparisons between participants who enrolled and graduated from short-term programs and those who did not. Comparisons could also be made across participants grouped by program, shedding light on the relative value for students of different programs. This approach would be significantly cheaper and take less time than conducting a new pilot study. Despite these benefits, methodological issues from the original pilot study would persist, such as its unrepresentative sample and concerns about the ability to generalize its results. Therefore, a new and more robust pilot study remains preferable.

Another option for a less costly investigation would be a Government Accountability Office (GAO) study to examine the current landscape of short-term vocational training programs. GAO could examine a variety of federal and state funding streams that support short-term vocational training, such as the Workforce Innovation and Opportunity Act and Virginia's FastForward program.<sup>48,49</sup> GAO could explore the different structures and goals, eligibility requirements, and outcomes measured under each program. While this study would provide greater insight into the return on investment from short-term programs, potentially informing implementation of a Pell expansion, it would not provide any information on the benefits of expanding Pell Grants to these programs.

Finally, if Congress decides to expand Pell Grant eligibility to students pursuing short-term credentials without first commissioning a pilot study, most elements of this paper’s proposed study could be conducted as the expansion occurs. Such monitoring would allow policymakers to receive real-time information on the impact of expansion and make reforms where necessary. Without a randomized controlled trial, however, it would be more difficult to draw clear conclusions about the ramifications of the policy change. Furthermore, identifying problems with the program could mean detecting harm to students and wasted taxpayer dollars only after they have widely occurred. Conducting an evaluative study as rollout progresses would be more beneficial than conducting no research at all, but a pilot study is paramount.

## Impact of a New Pilot Study

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Although momentum for expanding Pell Grants to short-term programs is increasing, concerns remain about whether it would be a responsible use of federal student aid dollars. The pilot study proposed in this paper would seek to answer outstanding questions about the impact of a Pell Grant expansion by providing robust quantitative data disaggregated by demographics and program characteristics.

Our hope is that the study’s results will not only inform whether Pell Grants should be expanded to short-term credentials but also help determine the safeguards necessary for a successful expansion. Policymakers should develop eligibility requirements and accountability standards based on the new pilot’s findings—potentially requiring that programs be limited to certain fields or offer a minimum level of student services, while also better defining adequate completion rates, post-graduation wages, job placement and retention rates, and other outcomes institutions should be meeting to ensure a positive return on investment. Ultimately, the policies governing the distribution and use of Pell Grants should be informed by high-quality evidence.

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