Workforce and Postsecondary Education: Measurement in a Changing Economy

Julia Lane (NYU/Coleridge) and Sarah Turner (University of Virginia), Organizers
An Online Convening June 28, 2021
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The online convening on June 28th brought together federal, state and philanthropic experts to discuss the data infrastructure needed for the design and evaluation of programs connecting working adults to high-value post-secondary credentials. More than 180 individuals representing constituencies as diverse as state workforce agencies, federal agencies, post-secondary institutions, umbrella organizations (SHEEO, NASWA) and researchers joined the event.

The experts addressed the question of how better articulation among workforce and post-secondary program measures might lead to greater utilization of existing policy resources and, hopefully, gains in earnings and employment.

Setting the stage

The organizers opened the convening by noting that the United States is at a pivotal moment for improving evidence and decision making at the intersection of workforce and post-secondary programs. As the economy emerges from the massive shock of COVID-19, state and federal agencies face an urgent need for programming that aligns skill development and workforce success. Yet workforce programs like Unemployment Insurance (UI) and post-secondary programs are not always well-aligned. The limited information about federal financial aid and performance measures to compare programs means that UI recipients and other adult workers often face a confusing pathway to access training and credentials. In addition, evaluating the efficacy of different efforts will likely be limited if they are not implemented in the context of a robust measurement infrastructure.

Even when the Department of Labor, the Department of Education and states are able to engage coordinated programmatic action such as the 2009 effort to send letters to UI recipients notifying them of eligibility for federal Pell grants, evaluation of the efficacy of such efforts is impeded by limited data infrastructure connect workforce and post-secondary outcomes.

*There is reason for optimism.* The Foundations of Evidence-based Policymaking Act charges agencies with enhancing the infrastructure necessary for data-driven policy, data sharing, data linkage and privacy protection. There are successful examples of infrastructure development, including organizations like the MidWest Collaborative and state longitudinal data systems, upon which to build. And, the joint appearance of representatives of the Department of Labor (Chike Aguh, Chief Innovation Officer) and Department of Education (Jordan Matsudaira, Deputy Undersecretary) signaled the considerable new enthusiasm to build data infrastructure that allows for better articulation of workforce and post-secondary programs.

Comments from Federal Agencies

Jordan Matsudaira opened by noting that unprecedented amounts of funds were being proposed to support post-secondary education: Pell grants of $85 billion, community college funding of
With the potential for additional resources combined with the recent Higher Education Emergency Relief Fund (HEERF), it is now critical to make sure to maximize the return on these investments. **How? And, how does our data infrastructure matter?**

One important place where data matters is to make sure that everyone who is eligible to receive and might be interested in pursuing further training is aware of the benefits they're eligible for -- especially Pell grants along with related programs that offer training for workforce credentials. Many who are eligible never apply. Targeted outreach may be necessary to help: for example, UI recipients who have college credits already may benefit from information on how to pursue degree completion. It will also be necessary to provide better information to help individuals choose among training options given needs, goals and local labor market conditions. While past efforts led to increased enrollment, the impact on earnings and credential attainment has been unclear.

Another place where investment is needed is in the development of measures of program performance that reflect differences in expected returns related to individual and labor market circumstances. Current estimates are only aggregate and descriptive. When differences in earnings between credentials are observed – e.g., earning $70k for a degree in dental support services ($70k) vs. $38k for an HVAC technical certificate – it is unclear whether differences in background characteristics of students in different programs partially explain these results. There is little evidence to identify what programs work best for different types of students.

Chike Aguh highlighted the massive scale of the labor market shock, with 14 million weekly new claims at the peak, and the challenges that state data systems had in responding to state needs. Now, with new investments also being made in apprenticeships and educational credentials, he argued it will be critically important to enhance state data infrastructure in order to measure and strengthen the return on investment for both existing programs. The impact on workers, firms, and economic growth could be substantial.

Like Matsudaira, Aguh emphasized the importance of better program integration across agencies, with low take-up often following from difficult to navigate administrative systems. He emphasized the need for systems that make programmatic "silos" imperceptible to workers, while eligibility for human services programs like SNAP and educational benefits like Pell need not require redundant and confusing applications.

In his view, the ideal data system would be transparent, and based on human centered principles so that information can be used to inform decision-making. Such a system could provide unemployed workers with recommendations about quality training aligned to their skills to get them to the next job. He used the example of occupational connections that might not be obvious: an expeditor at a restaurant and a factory line manager both have strong organizational and flow management skills.

Both Matsudaira and Aguh emphasized their willingness to consider ways to address existing barriers including greater harmonization at the federal level and better integration with states, including efforts to facilitate research pilots and guidance around data sharing.
Response of the state panel

Five state agency representatives with expertise in education and labor data identified priorities for investments, opportunities for innovation, and areas where federal support is likely to be an important catalyst for change.

They noted that combining administrative data such as educational records of enrollment and credential attainment with workforce data such as wage record, workforce development and unemployment insurance data is crucial. Alone, these systems or records provide critical information about program participants, barriers they may have, credentials, skills, and training attained but it must be taken a step further and data linkages must be done both within and across state boundaries. The state representatives pointed to the success of the MidWest Collaborative with nine state members who share data to address common economic challenges with particular focus on interstate collaboration.

In one example, a set of the states responded to the crisis by building an Unemployment to Reemployment portal - visualizations on UI claimant behavior in local labor markets (weekly demographic composition of certified claimant counts and time trend, by industry and occupation, and duration of unemployment by weekly cohorts). That portal is being expanded to develop reemployment visualizations on whether claimants returning to the same employer, different employer same industry, or different industry. The governor’s office, other state agencies, and Workforce Boards see it as a critical tool for strategic decision making in reopening of the IL economy. Multiple states have implemented the UI portal so analysts are able to analyze UI claimant behavior in shared border areas.

In a second example, a group of MidWest Collaborative states worked together to build rich information on education to workforce transitions as evidenced in the Multi-State Postsecondary Report. Although each state will have some unique components, the process of building the dashboard encourages common data mapping, methodology discussions, and ultimately encourages cross-state collaboration. The participation starts off with training programs, and then each participating state develops a state-specific interactive dashboard, built on aggregated and pre-redacted data, displaying broader, regional employment and wage outcomes for the state’s postsecondary completers. Additionally, each participating state in the collaborative will develop the state-specific code and documentation necessary to continue refining this work in the future, kick-starting the capacity for cross-state collaboration.

The states pointed out that training is also crucial. Analysts need training around data management, data analysis and machine learning, but that training must also incorporate privacy protection and ethical uses of the data. They pointed to the success of the state agencies and universities working with the Coleridge Initiative to produce Applied Data Analytics classes. States need to have a secure place to share/access and analyze data, and promote collaboration while ensuring the responsible use of data. They noted the value of a recent USDOL supported data analytic training on the Unemployment to Reemployment portal with 120 analysts representing 30 states; this training required a significant contribution of time by the analysts and importantly, the agencies released these individuals for this commitment because it was deemed of sufficient importance.

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1 Jessica Cunningham (Kentucky) Anna Hui (Missouri), Coretta Pettway (Ohio), George Putnam (Illinois), Tod Massa (Virginia)
Federal guidance on the sharing of administrative data across agency and state lines would be extremely helpful. Current state decisions can be impacted by organizational culture and legal precedent; both of these elements could impede the extent to which new federal guidance can promote innovation. Federal legal guidance to support innovation could include a series of professional development trainings targeting legal staff, particularly use peer-to-peer learning to challenge culture and precedent specifically in the area of privacy and confidentiality in sharing administrative data and with a particular focus on technological advances that can effectively address privacy and confidentiality concerns. This would ensure a balance between new data uses and the cultural norms that often limit data integration. Infrastructure with appropriate security and protocols is also imperative for data sharing across agencies and states; the existing Administrative Data Research Facility provides a model.

There are many concrete areas where additional information would provide particularly high return including alignment with federal employee data, armed services employment, other human services programs (SNAP and TANF), criminal justice records and federal financial aid records. A common theme was the importance of geographical location to provide the best local guidance to users.

The potential for partnerships between state and federal agencies was emphasized by all of the presenters, who noted the particular need to achieve “two-way” data flows (not just state to federal) while also building trust among agency providers and the public to use data infrastructure to improve service delivery (not just compliance).

The Philanthropic Sector

As the convening turned to forward-looking steps, Nicole Ifill (Bill & Melinda Gates Foundation) underscored some of underlying motivation for continued philanthropic investment in building data infrastructure. Foremost on the list is the broad objective of breaking the link between race, ethnicity and family income as predictors of student and workforce success. As part of the ideal data structure coverage (all learners including non-completers of college), granularity (need to have the capacity to identify intersectionality and potential heterogeneity in program impacts), and access to a range of constituencies while protecting privacy and confidentiality are key ingredients. With these objectives, Ifill previewed a challenge by multiple philanthropies to catalyze state and federal partnerships, place-based initiatives and related efforts that strengthen measurement infrastructure to improve skills and long-run labor market outcomes.

Concluding comments

The takeaway message necessarily includes both a sense of optimism and enthusiasm for addressing long-standing problems. With this message comes a need for concrete action, which includes:

- Potential data-driven pilot and demonstration projects;
- Guidance and training to facilitate data sharing across agencies and geography while ensuring needed privacy protections;
- Longer-term investments that will allow for scaling and expansion of successful pilot initiatives.