COMMUNITIES OF PRACTICE:

IMPROVING ACCESS TO STATE POSTSECONDARY DATA SYSTEMS

DUSTIN WEEDEN
CHRISTINA WHITFIELD
This paper is based on research funded in part by the Bill & Melinda Gates Foundation. The findings and conclusions contained within are those of the author(s) and do not necessarily reflect positions or policies of the Bill & Melinda Gates Foundation.
TABLE OF CONTENTS

State Legislatures and Legislative Staff ........................................................................................................ 5
How Legislatures and Legislative Staff Use State Data Systems ................................................................. 5
Concerns of Legislative Staff ........................................................................................................................... 6
Education Journalists .......................................................................................................................................... 6
How Education Journalists Use State Data Systems ................................................................................... 7
Concerns of Education Journalists ................................................................................................................ 7
Institutional Researchers ..................................................................................................................................... 8
How Institutional Researchers Use State Data Systems ............................................................................... 9
Concerns of Institutional Researchers .......................................................................................................... 10
Foundations and Advocacy Organizations ................................................................................................. 10
How Foundations and Policy Organizations Use Data ............................................................................... 10
Concerns of Foundations and Advocacy Organizations ........................................................................... 11
Case Study: Texas Data Fellows .................................................................................................................... 12
Opportunities for the Community of Practice ............................................................................................. 14
Appendix: Community of Practice Participants ........................................................................................... 15
State postsecondary education data systems are vital information assets for policymakers, researchers, and the public. The Communities of Practice project (funded by the Bill & Melinda Gates Foundation) at the State Higher Education Executive Officers Association, builds upon SHEEO's ongoing efforts to measure the capacity and effective use of state postsecondary data systems, and provides states with opportunities to develop solutions to common issues with those systems. Since 2010, SHEEO has conducted periodic studies of the content, structure, and use of state postsecondary data systems through its Strong Foundations surveys and associated site visits and meetings. The Communities of Practice project extends this work to provide professional development and technical assistance to state postsecondary policy analysts and researchers. Beginning in the fall of 2017, SHEEO will hold a series of Communities of Practice convenings. Each of these events will bring together teams from multiple states, and launch an ongoing network for Community of Practice members to share information, analyze solutions, and provide assistance to practitioners in other states.

The first Community of Practice convening, “Improving Access to State Postsecondary Data Systems,” was held in Boulder, Colorado, in November 2017. The two-day meeting included representatives from eight states—Arizona, Colorado, Florida, Georgia, North Carolina, Tennessee, Texas, and Washington—and several partner organizations. Invitees participated in professional development and shared ideas regarding how to broaden access to state data systems and increase the analytical capacity of end users. A key strength of the event was the diverse set of constituencies included. State teams were comprised of representatives from SHEEO agencies, postsecondary institutions, legislative staff, college systems, and journalistic and advocacy organizations. SHEEO’s intent in including this range of stakeholders was to reflect the broad ecosystem of producers and consumers of state postsecondary data.

This white paper highlights the key themes and findings of the convening and suggests topics for further consideration by the Community of Practice. The paper outlines how legislative staff, education journalists, institutional researchers, and policy and advocacy organizations use state data systems; their concerns regarding those systems; and opportunities for SHEEO agencies to improve the use of state postsecondary data. A case study of the Texas Data Fellows Program is an example of professional development and outreach regarding postsecondary data that might be adapted in other states.

STATE LEGISLATURES AND LEGISLATIVE STAFF

During the last few election cycles, state legislatures underwent a period of significant turnover in membership. One result of this turnover is an increase in the number of legislators with very little state-level political and policy experience. For instance, 20 percent of state legislators took the oath of office for the first time in 2017. In some chambers, the turnover rate was as high as 40 percent. New legislators lack the deep institutional and policy knowledge that is developed over years of public service. Consequently, legislative staff—which tend to have lower rates of turnover—have taken on a more important role as legislatures in many states now rely on staff to be the institutional and policy content experts. Legislative staff serve a variety of roles, and their numbers vary greatly by state. Legislative staff can be nonpartisan or partisan, work for individual legislators, staff committees, draft bills, and conduct research. In each of these roles, they frequently rely on state-level data to answer specific questions and provide legislators with the information they need to make policy decisions.

HOW LEGISLATURES AND LEGISLATIVE STAFF USE STATE DATA SYSTEMS

State legislatures are both reactive and proactive in their use of data. New and experienced legislators regularly react to constituent concerns or seek information about how their state is performing compared to others, especially after hearing about a new policy in another state. These ad hoc data requests are frequently assigned to legislative staff who conduct the research and obtain the necessary data to answer legislators’ questions. For example, in 2012, the Texas Higher Education Coordinating Board (THECB) began moving forward with developmental education reform. The following year, as the legislature advanced developmental education bills, legislative staff needed to use data to understand how the legislative proposals differed from the coordinating board’s efforts. Access to and use of data ultimately helped to ensure that the legislative action was aligned with the coordinating board’s policies.

Legislatures are also proactive in their use of data. When considering potential problems that may require legislative action, legislators rely on data to inform the scope of the problem and to narrow the range of policy solutions. For example, legislative staff in Colorado proactively seek data to make enrollment forecasts. Because Colorado uses a unique voucher-type stipend approach for allocating a portion of state appropriations, the Joint Budget Committee needs high-quality data in order to provide accurate enrollment forecasts that influence budget recommendations.

Legislative staff tend to take full advantage of the data made publicly available by SHEEO agencies. Websites, dashboards, and data tables that make state-level and institution-level data easily accessible are of value to legislative staff who are often working on tight deadlines. However, time constraints and the inability to locate specific data elements via publicly available data resources may require legislative staff to regularly request assistance from SHEEO agency staff to supply data. Representatives of the SHEEO agencies involved in the Community of Practice were cognizant of the pressures faced by legislators and legislative staff to serve multiple constituencies.

---

3. Ibid.
and develop expertise in multiple policy arenas. Several participants reflected on the importance of prioritizing legislative and gubernatorial information requests, especially during legislative sessions, to foster a positive environment for public policy related to postsecondary education.

CONCERNS OF LEGISLATIVE STAFF

The chief concern of the legislative staff who participated in the Community of Practice was ready access to data. While staff in some states were provided with the data they need—as in North Carolina, which statutorily requires the University of North Carolina system to supply data for legislative requests—legislative staff in other states were frustrated by their experience trying to find the correct information to answer a request. When legislative staff are unable to find the data needed in a publicly reported format or receive the information from the SHEEO agency, they will often make the request of individual institutions. These one-time requests of institutions reduce the efficiencies state-level data systems provide. Legislative staff acknowledged that, in some cases, SHEEO agencies’ responsiveness was hampered by a lack of capacity—the SHEEO agency might be understaffed or facing competing priorities and unable to fulfill a request on a tight deadline. In other instances, legislative staff voiced concerns that the data were not provided because of political concerns or wariness of SHEEO agency staff about how the information would be used. Despite these potential constraints, SHEEO agency staff are well served by expediting information requests from legislative staff. Political momentum for a policy solution can be an overwhelming force, and legislative staff value the power of credible and transparent data to help slow or alter political momentum.

EDUCATION JOURNALISTS

Education writers—like all journalists—operate in a rapidly-changing and highly-pressured environment. The growing popularity of online media consumption and the variety of nontraditional outlets has led to a dramatic transformation of traditional media outlets. According to The Pew Charitable Trusts, digital and print subscriptions for newspapers have been declining since the 1990s and were down 8 percent in 2016 compared to 2015. The declining number of subscribers has resulted in revenue and staff capacity challenges, for newspapers in particular. Since 2004, the number of newspaper employees has declined by 37 percent or 24,000 employees. Even in the face of significant head winds, journalists covering education topics strongly believe their work has a positive impact on society.

---

7. Ibid.
HOW EDUCATION JOURNALISTS USE STATE DATA SYSTEMS

Education writers view their role as a conduit between data and the individuals using and making decisions based on the data. As a result, writers are looking for data that answer interesting questions readers are likely to ask or should be asking. Questions related to student outcomes, higher education costs, and changing student demographics—such as how adult students are doing—are of significant interest to writers. The ability to make interstate comparisons helps writers for national and local media outlets tell compelling stories.

Data are especially helpful for education writers making decisions about which topics will make the best stories. As Matthew Watkins with *The Texas Tribune* stated, "I use statewide data all the time in my stories. We hear a lot of anecdotes about trends or other issues in higher education, but I’m always cautious to report about those things without some sort of data to back it up. The more available the data is, the more quality work I can do on the higher education beat." The use of data by education writers helps expand the audience and the reach of state-level data. For example, the data used by Watkins to highlight changes in financial aid over time was discussed during a legislative hearing. Learning about new data sources or data releases often sparks ideas for news stories. After attending the Community of Practice convening, Katherine Long with *The Seattle Times* used data from the Washington Education Research & Data Center to write a story highlighting earnings outcomes of graduates by degree program.

Time is a crucial factor for writers developing accurate and useful stories. Embargoed data and report releases that allow members of the media a few days to review and digest findings help reporters have time to write stories using the data. Without an advance opportunity to review data, writers struggle—given other responsibilities—to write a timely story following a data release. Education writers also benefit greatly from SHEEO agency staff taking the time to explain the nuances of data and help guide them regarding which questions can and cannot be answered with the available data. Building relationships with members of the media can help ensure that state-level data are reported accurately and open the door to future opportunities for mutually beneficial collaboration.

For SHEEO agencies with important stories to tell with their data, writers are open to receiving press releases or pitches. However, it is important for the pitches to have a personal connection that will resonate with readers. It is useful to develop a “cocktail party” pitch that succinctly explains why the information will be important to a wide audience of readers. Blanket public relations releases are frequently perceived as self promotion on the part of systems or institutions and are less likely to attract the attention of the writers or their readers.

CONCERNS OF EDUCATION JOURNALISTS

Economic realities for news organizations make it difficult for education writers to balance the business need for revenue with the responsibility to provide intellectual and informative content. For example, the current business model utilized by many news websites relies on ad revenue based on the number of views. This model requires catchy headlines to grab readers’ attention.

---

9. Matthew Watkins, personal communication, January 11, 2018
Writers may not be able to predict what will resonate with audiences, and they do not want to write “click-bait” stories that rely on sensational headlines. As a result, writers are looking for data that tell a unique story and provide readers with fresh information.

Building relationships with reporters can also help address some of their primary concerns. Because reporters cover many issues and are not trained data experts, they are concerned about knowing when the data is being spun to tell a favorable story. Working with SHEEO agency staff who know the nuances and limitations of data can help education writers identify and better understand the most compelling data elements. Purposefully developing relationships with education writers will help ensure data are reported accurately and help inform end users of state-level data.

Because state postsecondary data systems vary greatly, not only in the data elements collected but also in which elements are released publicly, education writers voiced frustration about their ability to locate the information necessary to make interstate comparisons. Writers expressed a desire for more standardization of data elements and metric definitions to facilitate comparisons. Additionally, education journalists discussed the need for access to more information regarding costs and post-collegiate outcomes, in order to help them respond to the primary concerns of their readers.

“I use statewide data all the time in my stories. We hear a lot of anecdotes about trends or other issues in higher education, but I’m always cautious to report about those things without some sort of data to back it up. The more available the data is, the more quality work I can do on the higher education beat.” Matthew Watkins, The Texas Tribune

INSTITUTIONAL RESEARCHERS

Institutional researchers operate within a context that is changing “alongside the evolution of the expectations of higher education to be increasingly accountable and data informed.” Institutional research offices are responsible for a wide range of duties, including mandated reporting, strategic planning, long-term research projects, and responding to ad hoc research requests. The Association for Institutional Research (AIR), as part of an ongoing effort to outline these responsibilities, recently categorized essential IR duties as identifying information needs, collecting and analyzing information, planning and evaluation, serving as information stewards, and educating data consumers.

12. As one outcome of the Community of Practice, SHEEO is developing a compendium of state postsecondary data websites.
Institutional research offices are challenged by the range of their responsibilities, by the need to serve multiple constituencies, and, in many cases, by the size and analytical capacities of their staffs. Institutional researchers operate in a wide range of organizational contexts. At well-resourced flagship institutions or system offices, the capacity of institutional research offices may equal or exceed the research capacity of state agencies. On average, however, institutional research offices are relatively small operations with one director and 2.6 FTE employees. While all institutional researchers can benefit from improved access to the information resources housed in state postsecondary data systems, small organizations with less staff capacity can especially benefit.

**HOW INSTITUTIONAL RESEARCHERS USE STATE DATA SYSTEMS**

Institutional researchers have a binary relationship with state data systems; they are both producers and consumers of the data housed within them. As producers of data, they have a special interest in reducing reporting burden, and in ensuring appropriate use of data. As consumers, they benefit when improved access to state data systems bolsters the capacity of institutional research offices. Institutional researchers benefit from access to data that allows for ready comparisons across institutions. Access to standardized state-level data, or metrics calculated across institutions, allows institutional researchers to compare the characteristics or performance of their institutions with others in the state, with confidence in the quality and comparability of the data. SHEEO agencies that use their data systems to comply with IPEDS or other reporting requirements on behalf of institutions significantly reduce the burden on individual IR shops, freeing resources for other priorities. A robust state data system further reduces the burden on institutions by providing a “one-stop shop” for information for other constituencies (such as legislative staff or journalists), thereby reducing the number of ad hoc requests received by individual institutions.

Access to information linked through state postsecondary data systems also provides an advantage for institutional researchers. A majority of states have the ability to link postsecondary data with data from K-12, workforce, or other agencies, but this capacity is much less common at the institutional level. Access to linked data gives institutional researchers the ability to more fully examine important policy questions such as the effects of high school preparation on collegiate performance, the performance of transfer students, or post-collegiate employment outcomes. During the convening, an institutional researcher from Eastern Washington University cited an example that demonstrated the value of access to data linked through the state postsecondary data system. Researchers commonly use Pell eligibility as a proxy for low-income status, but this method yields incomplete information, as not all low-income students apply for federal aid. EWU researchers were able to more accurately identify and determine outcomes for low-income students because the Washington Education Research & Data Center linked K-12 and postsecondary data, and used participation in free or reduced-price lunch programs to more accurately determine low-income status.

---


17. For detailed information about which states can link which sectors, see Armstrong and Whitfield, “The State of Postsecondary Data Systems.”
CONCERNS OF INSTITUTIONAL RESEARCHERS

Institutional researchers have a deep understanding of and familiarity with the data collected at their institutions, and are vested in appropriate use of that data. Institutional researchers are concerned that the nuances and limitations of their data are not always understood by end users. Information resources created via state postsecondary data systems—especially those produced for public consumption—should clearly document the data sources used to produce them and acknowledge differing institutional contexts.

Given the often-constrained resources within institutional research offices, practitioners can be sensitive to the burden entailed in complying with state reporting requirements. Institutional researchers may seek assurance that the data elements housed within state systems are being used effectively and responsibly (i.e., to inform policy development or strategic planning), rather than being “collected for collection’s sake.” SHEEO agency decision-makers can help alleviate these concerns by developing cooperative relationships with institutional representatives, and inviting them to participate in the governance of state data systems and encouraging their input regarding data collection decisions.

Access to standardized state-level data, or metrics calculated across institutions, allows institutional researchers to compare the characteristics or performance of their institutions with others in the state, with confidence in the quality and comparability of the data.

FOUNDATIONS AND ADVOCACY ORGANIZATIONS

State-based foundations and advocacy organizations also seek access to state data systems to inform their advocacy positions. Representatives of three advocacy organizations—the Greater Texas Foundation, Tennessee Achieves, and the Bell Policy Center in Colorado—participated in the Community of Practice. Among these, the two former are focused exclusively on education issues, while the latter has a broader policy focus. The variety of policy topics each organization focuses on can influence the level of postsecondary education specialization any given organization and its staff may have.

HOW FOUNDATIONS AND POLICY ORGANIZATIONS USE DATA

Because state-based foundations and advocacy organizations have a wide range of missions, their uses of data vary. Some organizations are nonpartisan with a research focus, while others are partisan and have a mission focused on research and influencing public policy. No matter the aim of the organization, access to state-level data can help advocacy organizations fulfill their missions. Writing blog posts, white papers, and research reports that reach the organization’s target audience—the public, legislators, or other policy-focused organizations—are among the most common uses of state-level data. In the spring of 2017, the Bell Policy Center released a handbook exploring economic opportunity in the state of Colorado. A primary component of this report used data from the Colorado Department of Higher Education to explore college affordability. Tennessee Achieves serves a special role as a nonprofit organization responsible

for providing mentoring and other support services for the Tennessee Promise Scholarship. Tennessee Achieves closely tracks state-level data made available by the Tennessee Higher Education Commission in order to understand the progress of Tennessee Promise recipients and inform strategies to help these students be successful.

CONCERNS OF FOUNDATIONS AND ADVOCACY ORGANIZATIONS

Like many of the constituencies that participated in the Community of Practice, staff of advocacy organizations serve many roles that divide their attention. Many of these state-based organizations have small staffs faced with competing demands on their time. While many higher education advocates are data savvy, they may not have the human capital to perform in-depth data analysis. As a result, higher education advocates were interested in targeted training or professional development opportunities to help them become better consumers of state data. The Texas Data Fellows program (profiled below), which trains a wide range of constituencies to use Texas postsecondary education data, is an example of the type of training programs that are of benefit to postsecondary education advocates.

While many higher education advocates are data savvy, they may not have the human capital to perform in-depth data analysis. Targeted training or professional development opportunities can help them become better consumers of state data.
STATEMENT OF PRACTICE: IMPROVING ACCESS TO STATE POSTSECONDARY DATA SYSTEMS

CASE STUDY: TEXAS DATA FELLOWS

State-level data can be instrumental in the development, tracking, and achievement of educational attainment goals, and in aligning the production of postsecondary credentials with workforce needs. The Data Fellows program at the Texas Higher Education Coordinating Board (THECB) provides a successful example of how states can encourage better utilization of state data as part of a broader effort to achieve important higher education goals. THECB specifically created the Data Fellows program to help users of state data better understand and use data in support of the state’s higher education strategic plan.

For nearly two decades, Texas has been a leader in articulating a statewide public agenda for postsecondary education. Data have played a very important role in the state’s two most recent higher education strategic plans. The current plan, known as 60x30TX, sets four broad postsecondary attainment and workforce readiness goals for the state of Texas. If the plan is successful, by 2030:

- At least 60 percent of Texas residents ages 25-34 will have a postsecondary certificate or degree,
- At least 550,000 students will complete a postsecondary credential from Texas higher education institutions in that year,
- All graduates from public institutions will complete programs with identified marketable skills, and
- Student debt will not exceed 60 percent of first-year wages for graduates of public institutions.

THECB relies on data to articulate the importance of the 60x30TX plan, track progress toward achieving the goals, and develop targeted policy solutions. The Data Fellows program is an important outreach effort to promote the use of publicly available data resources and the understanding of the strategic plan and four main goals. The program convenes groups of stakeholders—including K-12 administrators, higher education associations, philanthropic entities, advocacy organizations, and employees of higher education institutions—for training on the 60x30 goals and the data available to support progress toward achieving those goals.

The Data Fellows program consists of two-day workshops designed to be the first step in a longer communication strategy. Data Fellows are selected, in part, based on their ability to share data with others after the initial workshop. Each Data Fellow commits to providing at least one presentation for colleagues in their district, institution, or professional network within three months of completing the program.

Through October 2017, 45 Data Fellows had completed the program and had, in turn, shared their deeper understanding of the strategic plan with approximately 800 colleagues.  

The Data Fellows program has helped create efficiencies as a variety of groups learn about and utilize data the Texas Higher Education Coordinating Board already makes public. In other words, data users do not need to “reinvent the wheel when looking for information.” The workshop provides active-learning opportunities for Fellows to gain a better understanding of the data.

The Data Fellows program also provides valuable feedback to the THECB staff. Fellows provide insight into how users interact with publicly available data and data tools. THECB staff use this feedback to identify ways to enhance the usability of data. Some of the initial feedback includes making sure terminology is clear and easily understood. For example, how does attainment differ from completion? What is the difference between certifications and certificates? Data Fellows are eager to learn solutions and how data can inform best practice reforms, and the program has provided a valuable opportunity to bring various stakeholders together and identify potential strategies that improve the state’s educational attainment.

23. Ibid.
24. A list of these resources can be found at: http://www.txhighereddata.org
OPPORTUNITIES FOR THE COMMUNITY OF PRACTICE

Based on the input of the four groups outlined in this paper, there are several opportunities to strengthen the Community of Practice:

- **Create and maintain publicly available data resources**
  Setting up data dashboards—and ensuring that state-level data are easily accessible—creates several efficiencies. Making data available to a wide range of Community of Practice members can reduce the total number and frequency of data inquiries SHEEO agencies receive. This also creates efficiencies for members of the community using data who do not have to wait for SHEEO agency staff to respond to a data request. Publicly available data resources should be clearly documented and regularly updated.

- **Cultivate relationships with end users**
  Time invested in developing relationships with members of the Community of Practice using state postsecondary data is likely to yield a high return. These relationships can be mutually beneficial as SHEEO agency representatives better understand the context in which members of the community operate, and members better understand the data housed in state systems. Further, developing relationships with education writers can also help SHEEO agencies disseminate valuable information when new data become available.

- **Provide training opportunities for data consumers**
  SHEEO agencies should promote awareness of publicly available data and information resources, and provide professional development to members of the Community of Practice regarding their appropriate use.

- **Work toward comparability of data**
  Members of the Community of Practice should work to develop further consensus around definitions and accountability metrics, and to promote access to results from outcomes measures.

Adoption of these recommendations will encourage wider and more effective use of state data systems across a range of stakeholders.
APPENDIX: COMMUNITY OF PRACTICE PARTICIPANTS

Josh Abram  
Senior Fiscal Analyst  
Colorado Legislative Council  
Colorado General Assembly  
josh.abram@state.co.us

Chris Ammons  
Research Analyst  
Colorado Dept of Higher Education  
chris.ammons@dhe.state.co.us

Dan Anderson  
Director of Institutional Research  
Arizona Board of Regents  
dan.anderson@azregents.edu

Rob Anderson  
President  
SHEEO  
randerson@sheeo.org

John Armstrong  
Policy Analyst  
SHEEO  
jarmstrong@sheeo.org

Laura Bageant  
Director, Data & Analytics  
University of North Carolina System  
lebageant@northcarolina.edu

Angela Bell  
Associate Vice Chancellor of Research and Policy Analysis  
Board of Regents of the University System of Georgia  
angela.bell@usg.edu

Amanda Bickel  
Chief Legislative Analyst  
Colorado General Assembly, Joint Budget Committee Staff  
amanda.bickel@state.co.us

Andrew Carlson  
Principal Policy Analyst  
SHEEO  
acarlson@sheeo.org

Kim Clark  
Assistant Director  
Education Writers Association  
kclark@EWA.org

Archie Cubarrubia  
Vice Provost for Institutional Effectiveness  
Miami Dade College  
acubarru@mdc.edu

Jenna Cullinane Hege  
Deputy Assistant Commissioner  
Texas Higher Education Coordinating Board  
jenna.cullinanehege@thecb.state.tx.us

Krissy DeAlejandro  
Executive Director  
tnAchieves  
krissy@tnachieves.org

Lloyd Dunkelberger  
Reporter  
News Service Florida  
l.dunkelberger@newsserviceflorida.com

Bamby Fields  
Interim Director, Institutional Research  
Eastern Washington University  
bfields@ewu.edu

Lisa Fox  
Senior Fiscal Analyst  
North Carolina General Assembly, Fiscal Research Division  
lisa.fox@ncleg.net

Alex Harris  
Higher Education Reporter  
Miami Herald  
aharris@miamiherald.com