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State Higher Education Funding Research: Findings, Themes, and Future Directions

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The State Higher Education Executive Officers Association (SHEEO) serves the chief executives of statewide governing, policy, and coordinating boards of postsecondary education and their staffs. SHEEO promotes an environment that values higher education and its role in ensuring the equitable education of all Americans, regardless of race/ethnicity, gender, or socioeconomic factors. Together with its members, SHEEO aims to achieve this vision by equipping state higher education executive officers and their staffs with the tools to effectively advance the value of higher education, promoting public policies and academic practices that enable all Americans to achieve success in the 21st century, and serving as an advocate for state higher education leadership. For more information, visit sheeo.org.

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INTRODUCTION

The examination and changes to higher education funding models to circumvent the growing reductions of state funding have become more apparent in the last couple of decades (Layzell, 2007). The persistent problem of decreases in funding to higher education has led to greater shifts in finding different approaches to provide support so that colleges can financially sustain themselves. Specifically, there is a growing research literature that has recently begun to incorporate adequacy- and equity-based funding frameworks to examine state higher education funding models (Dziesinski & Hillman, 2024; Fernandez et al., 2023; Romano & Palmer, 2023). Through adequacy- and equity-based funding frameworks, policymakers and institutional leaders can examine their funding models to ensure resources are being distributed to promote institutional financial sustainability and student success (Fernandez et al., 2023; Hillman et al., 2024; Dziesinski & Hillman, 2024). The concept of adequacy-based funding has largely been adopted from the K-12 education area (Dziesinski & Hillman, 2024; Levin et al., 2022; Ward et al., 2020), where the concepts took rise in the 1990s during a series of litigation to determine adequate funding models in K-12 education (Romano & Palmer, 2023).

The focus now for many institutional leaders, policymakers, and researchers is to find effective tools to determine funding models that lead to higher education institutions having the necessary financial resources to meet their institutional goals and to address any inequalities towards specific priority populations (Hillman et al., 2024; Hu & Fernandez, 2024). However, a major obstacle in achieving this focus is in determining what adequate- and equitable-based funding could look like. This is difficult, taking into consideration the variation in college mission and goals, as well as the local geographic region contexts (Hillman et al., 2024; Richmond et al. 2024; Ward et al., 2020).

While prior research has indicated increased funding to higher education has resulted in positive outcomes related to enrollment, retention and graduation rates, and degree and certificate completions (Cummings et al., 2021), there is more to learn about disparities in funding to institutions and target student populations. With this aim, the State Higher Education Executive Officers Association (SHEEO), with support from the Joyce Foundation, commissioned a series of papers to address this gap in higher education research. Authors used a variety of research questions, methodologies, data sources, and focus populations and topics with the common goal of helping state leaders work toward eliminating disparities within their states' funding model. Below, we provide a brief overview of each paper, identify key themes across findings, and conclude with policy implications and recommendations.

OVERVIEW OF PAPERS

There are six papers in this series that help inform discussions on what equitable and adequate funding could look like at institutions of higher education. There are four quantitative research papers in the series. Taylor and Cantwell (2025) used several regression models to explore the relationship between variation in the share of educational expenditures covered by tuition, student retention and completion, and institutional equality using fiscal and social measures. They developed the Student Share Difference (SSD) as a measure to quantitatively assess institutional inequality within a state. This metric allows users to measure institutions' tuition reliance by determining the gap between the share of education revenues contributed by students at a given institution (Institutional Student Share) and the share of revenues coming from students at the state level (State Student Share). The authors aimed to examine whether the SSD measure is associated with measures of student success, including retention and completion rates. Fernandez and Hu (2025) used an ordinary least squares (OLS) regression model with state and year fixed effects, to examine the differences in state funding for public community colleges as they relate to the racial demographics of the counties in which they are located. Their study introduced a new measure in the form of an equity index that measures racialized disparities within states while drawing more attention to how state funding adequacy can promote greater racial equity.

Snyder and colleagues (2025) sought to uncover the primary drivers of instructional cost variation within academic disciplines and how these cost drivers differ. They focused on program-level instructional cost and productivity data to provide a better understanding of how program- and institution-level characteristics can drive within-discipline instructional costs at four-year, public, and private, not-for-profit institutions. The authors used an OLS regression model, as well as 12 separate models for each of the academic disciplines of interest to explore cost variation across disciplines within a single institution as well as within-discipline cost variation across numerous institutions. In the final quantitative research paper, Soliz and Rubin (2025) used a difference-in-differences design to examine the relationship between funding, spending, and student outcomes at Minority-Serving Institutions (MSI) community colleges. The researchers aimed to estimate the effects on spending and student outcomes following public two-year MSIs having received MSI-targeted federal funding.

Orphan and colleagues (2025) used qualitative methods, specifically critical emancipatory policy frameworks, to conduct a content and policy discourse analysis of state higher education funding models. They developed a scorecard measure to evaluate how funding models across states in the Western Interstate Commission for Higher Education (WICHE) region adequately account for the student-centeredness, regional service, and college access missions of Broad Access Institutions (BAIs). Their research study is driven by their questions pertaining to how state funding models account for BAIs' mission statements and how these funding models maintain university systems where there are unique institution mission types. Finally, Kirksey and colleagues (2025) used a mixed methods approach to provide evidence on how states can more effectively allocate resources to promote college attainment and transfer opportunities for students with disabilities. Their study used a combination of OLS regression and logistic regressions models, and semi-structured interviews with 10 disability service coordinators from five community colleges in Texas. The authors examined the association between the proportion of students receiving disability services and instructional and student services expenditures and urban and rural community colleges, the association between receiving disability services and postsecondary outcomes, and the perceptions from disability service coordinators on the factors and structures necessary to provide disability services at their colleges.

KEY THEMES AND FINDINGS

Uncovering disparities and inadequacies in state funding to higher education is complex, and as evidenced by the wide range of inquiries and outcomes examined in the papers in this series, can be investigated and understood in a variety of contexts. **One theme that resonates across several papers is the need for funding models to account for student populations of interest and the institutions that serve them.** Kirksey and colleagues (2025) found that students receiving necessary disability accommodations improves retention and completion. However, their findings suggest disparities across institutions, including by urbanicity, with rural institutions facing greater budgetary constraints, limiting the degree to which these community colleges can respond to student needs compared to urban institutions that were able to invest more funding per a student with a disability. Fernandez and Hu (2025) also looked at the proportion of a student population of interest and provided evidence for how racialized funding disparities among community colleges can affect student outcomes. They found that when more adequate state appropriations were allocated to community colleges in disproportionately whiter counties, this negatively influenced Black and Hispanic completion. Conversely, adequate funding to community colleges with more potential Hispanic students was associated with increases in college completion among Black, Hispanic, and white college students. Soliz and Rubin (2025) also focused in on community colleges with an MSI status (enrollment proportion threshold of a specific racial identity group). They found that two-year MSIs received similar amounts of public funding as non-MSI community colleges, yet they enrolled more low-income students, suggesting these institutions might have fewer resources to support the students who need the most financial resources.

Although Orphan and colleagues (2025) did not focus on a specific student proportion, they did call for state funding models to acknowledge barriers that various student populations of interest face; specifically, how adequately funding institutions can better equip them to address the needs of the student populations they serve. The authors revealed that many funding models tended to narrow the BAI mission to focus more on the workforce and economic development component rather than service, which has implications for how these institutions can continue serving various communities of interest. Similarly, Taylor and Cantwell (2025) focused on institutional inequality based on financial and social factors. The authors leveraged their SSD measure to better understand the ratio between the proportion of expenses covered by student tuition (ISS) and the state level (SSS). They found that when interacting with admissions selectivity, a higher SSD – meaning greater state investment and lower tuition dependence – was positively associated with graduation rates, especially at less selective and highly selective institutions. Moreover, when less selective institutions, which are often less well-resourced and mission-focused, had an extremely high SSD, graduation rates were near those of middle and highly selective institutions. Narrowing down to the academic program level, Snyder and colleagues (2025) found that there are three cost drivers that consistently predict the cost per SCH (the annual direct instructional expenditures per annual student credit hour). These include 1) the percentage of tenured/tenure-track faculty in the program, 2) average faculty salary, and 3) the number of full-time equivalent (FTE) students per FTE faculty in the program. Their findings highlighted significant associations between the number of students in proportion to the number of faculty, and how this factor might be one of the most important cost drivers for instructional costs, regardless of the academic discipline. Taken together, findings from the papers in the series suggest the need to recognize the various student populations of interest that institutions serve and the resources necessary to continue providing support and promoting student success.

Authors of these papers suggest that disparities in state investment across institutions with different selectivity statuses, mission, and type also matter. **The importance of understanding the context of an institution for state funding models is another common theme that resonates across the papers in the series.** Several of the papers in the series focus on the community college context. For example, Fernandez and Hu (2025) provided evidence for existing racialized disparities in higher education funding among community colleges. They found that community colleges in counties with larger Black and Hispanic populations were inadequately funded relative to community colleges in whiter counties. Similarly, Kirksey and colleagues (2025) focused on community colleges, but specifically in the state of Texas, and distinguished between rural and urban community colleges. They demonstrated that urban community colleges spent more on instructional and student support expenditures per semester when there was an increase in the percentage of students with a learning disability or a health impairment compared to rural community colleges. Also, within the context of community colleges, Soliz and Rubin (2025) showed that community college MSIs spent more on student services, instruction, and academics in the year directly after receiving the federal funds in comparison to non-MSI community colleges. They also found that the increase in spending could lead to increases in credential completion, however their findings on completion outcomes were inconclusive.

Taylor and Cantwell (2025) examined financial institutional inequality by comparing public four-year institutions within a state to one another, and they also consider how the context of less-, middle-, and more selective institutions affects student outcomes. Following the analyses from their study, they suggest that greater state investment in less selective institutions would be a promising approach to boost student success and have campuses become less tuition dependent relative to the state average. BAIs are often among those that are less selective in admissions and less well-resourced, which Orphan and colleagues (2025) highlighted in their paper. The authors focused on how state funding models acknowledge BAIs' mission statements and found inadequate procedures in place that tended to disregard BAIs' missions. They reveal that unequal per-student funding for BAIs relative to non-BAIs, which then further promotes evidence of a status hierarchy in the state funding process. Lastly, Snyder and colleagues (2025) looked at a mix of public and private universities with various types of institutional missions. A couple of their findings were that an institution's control context (public vs. private) and an institution's status as a research university were not significant predictors of cost per SCH across programs. Through their findings, they emphasized that each discipline has its own set of factors that explain the variation in its instructional costs, and that it is important to consider each academic program's unique purposes and characteristics when assessing this variation in instructional costs. In summary, the papers in this series emphasize the importance of acknowledging how the variation in institutional context matters when addressing state higher education funding approaches.

CONCLUSION

Through their findings, the authors of these papers offer several ideas for state higher education leaders and policymakers to consider. The papers in this series add to the conversation on what adequate- and equitable-based funding could look like, and they provide important considerations to the discussion. Taylor and Cantwell (2025) provided a tool, through the SSD measure, for state policymakers to identify areas of institutional finance disparities while also being able to compare universities to one another to better inform policy decision making. Fernandez and Hu (2025) also developed a measure, through their Funding Equity Index, and invite policymakers to consider their index when deciding on definitions and operationalizing funding adequacy strategies in their states. Fernandez and Hu (2025), along with Kirksey and colleagues (2025), recommend that the needs of student populations of interest be included in allocating state funding resources. Kirksey and colleagues (2025) suggest that funding models should address resource disparities in disability service accommodations to promote student success and overall meet state economic goals. Similarly, Soliz and Rubin (2025) recommend that states invest greater funding into MSIs to provide greater support for the student communities that these colleges serve. Orphan and colleagues (2025) developed a scorecard to investigate funding strategies, and they invite further research to create definitions and metrics to advance funding adequacy work. They also invite future research to dive into funding transparency measures to better understand how states communicate their budget models to the public. Additionally, Orphan and colleagues (2025) and Snyder and colleagues (2025) make note that funding models should explore more of the variation that exists in various institutional types, control, and missions. Finally, Snyder and colleagues (2025) suggest that failing to account for institutional differences could result in inequitable funding for institutions. The papers in this series provide greater opportunities for institutional leaders, policymakers, and researchers to engage in conversation about adequate and equitable state funding approaches. Findings also suggest that determining adequate funding and identifying disparities in funding models is highly dependent on the institutional context, as well as knowing more about the student population makeup that universities serve on their campuses.

REFERENCES

- Cummings, K., Laderman, S., Lee, J., Tandberg, D., & Weeden, D. (2021). *Investigating the impact of state higher education appropriations and financial aid*. State Higher Education Executive Officers Association. https://sheeo.org/wp-content/uploads/2021/05/SHEEO_ImpactAppropriationsFinancialAid.pdf
- Dziesinski, A., & Hillman, N. (2024). *Adequacy and equity in education finance: How can K-12 contexts inform higher education?* Student Success Through Applied Research (SSTAR) Lab, University of Wisconsin-Madison. <https://sstar.wisc.edu/documents/adequacy-an-equity-in-education-finance-how-can-k-12-contexts-inform-higher-education/>
- Fernandez, F., Hu, X. (2025). *All politics is local: Introducing a relative measure of how adequately states fund community colleges based on county-level demographics*. State Higher Education Executive Officers Association. <https://sheeo.org/wp-content/uploads/2025/07/Fernandez-Hu.pdf>
- Fernandez, F., Hu, X., & Capaldi, M. (2023). *Exploring equitable public higher education funding models in Illinois: Toward adequately funding universities and supporting students*. Partnership for College Completion. https://partnershipfcc.org/wp-content/uploads/2023/05/PCC_ExploringEquitableReport_Final.pdf
- Hillman, N., Dziesinski, A., & You, E. (2024). *Designing higher education funding models to promote student success: An introduction to “capacity building” and “equity-based” funding principles*. SSTAR Lab. <https://sstar.wisc.edu/wp-content/uploads/2024/01/EquityFundReport.pdf>
- Hu, X., & Fernandez, F. (2024). *Advancing adequacy-based funding for community colleges in Illinois*. Partnership for College Completion. https://partnershipfcc.org/wp-content/uploads/2024/08/PCC_ExploringEquitableReport_v5.pdf
- Kirksey, J.J., Reed, B., & Freeman, J.A. (2025). *Navigating the transition: Disability services, funding, and student outcomes in Texas community colleges*. State Higher Education Executive Officers Association. <https://sheeo.org/wp-content/uploads/2025/07/Kirksey-et-al.pdf>
- Layzell, D. T. (2007). State higher education funding models: An assessment of current and emerging approaches. *Journal of Education Finance*, 1-19.
- Levin, J., Baker, B., Lee, J., Atchison, D., & Kelchen, R. (2022). *An examination of the costs of Texas community colleges* (L 2023-142; p. 19). Institute of Education Sciences Regional Educational Laboratory Southwest at the American Institutes for Research. <https://files.eric.ed.gov/fulltext/ED623284.pdf>
- Orphan, C.M., Kleinhesselink, K., & Njie, E. (2025). *How adequately do states acknowledge the broad access institution mission? A content and discourse analysis of state funding models*. State Higher Education Executive Officers Association. <https://sheeo.org/wp-content/uploads/2025/07/Orphan-et-al.pdf>
- Richmond, M., Hahnel, C., Harding, L., & Lee, N. (2024). *Strengthening state higher education funding: Lessons learned from K-12*. Bellwether. <https://files.eric.ed.gov/fulltext/ED656101.pdf>

Romano, R. M., & Palmer, J. C. (2023). Funding adequacy and the community college. *New Directions for Community Colleges*, 2023(203), 165–172. <https://doi.org/10.1002/cc.20595>

Snyder, J.L., Preston, M.L., & Dunckel, A. (2025). *Understanding within-discipline variance in higher education instructional costs to enhance funding conversations*. State Higher Education Executive Officers Association. <https://sheeo.org/wp-content/uploads/2025/07/Snyder-et-al.pdf>

Soliz, A., & Rubin, B. (2025). *The relationship between funding and student outcomes at public, two-year minority serving institutions*. State Higher Education Executive Officers Association. <https://sheeo.org/wp-content/uploads/2025/07/Soliz-Rubin.pdf>

Taylor, B.J., & Cantwell, B. (2025). *Student share difference: An approach for understanding inequality within a state system*. State Higher Education Executive Officers Association. <https://sheeo.org/wp-content/uploads/2025/07/Taylor-Cantwell.pdf>

Ward, J., Pisacreta, E., Weintraut, B., & Kurzweil, M. (2020). *An Overview of State Higher Education Funding Approaches*. Ithaka S+R. <https://sr.ithaka.org/wp-content/uploads/2020/12/SR-Issue-Brief-Overview-of-State-Higher-Education-Funding-Approaches-121020.pdf>