

AASCU Leadership Briefing

Perspectives on New Business Models for Public Higher Education

Ideas from a Symposium
of AASCU Leaders

With generous support from Strada Education Network, formerly USA Funds



The changing landscape for financial support of public higher education suggests that public colleges and universities need new ideas to inform, shape and hone their business models and practices. To explore this critical challenge, a group of presidents and senior leaders from AASCU member colleges and universities met for a two-day symposium in late February, 2017, in Washington, D.C. Through presentations from national and campus-based experts, participants investigated a wide range of questions about the public university business model and explored a number of tools and strategies with which some public institutions are experimenting and finding success.

This brief paper captures the essence of what participants discussed at the symposium. Our intent here is not to detail every nuance of the discussions, but rather to summarize key ideas and offer guidelines for further conversation. Our hope is that the essential questions raised here will help spark and guide campus discussions of these vital issues.

Some Dynamics Affecting the Future of Public Higher Education

- ◆ Articulating the Nuances of Shifting Finances for Public Higher Education
- ◆ Student Borrowing: Should Institutions Have More “Skin in the Game”?
- ◆ Optimizing the Way We Use Student Analytics
- ◆ Non-Academic Barriers to Student Success
- ◆ Connecting College to Career: Innovative Alternatives
- ◆ Enrollment Management in Public Institutions
- ◆ New Insights About Post-Enrollment Student Outcomes
- ◆ International Recruitment: Challenges and Pitfalls
- ◆ Performance-Based Funding and Institutional Policies

In Conclusion: Inventing New Futures

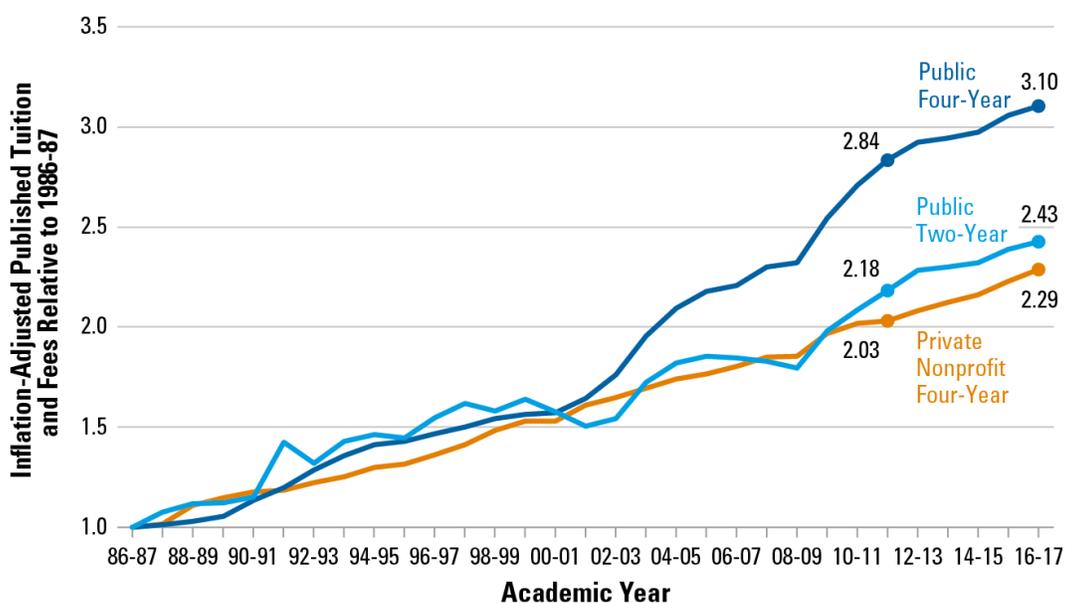
Articulating The Nuances Of Shifting Finances For Public Higher Education

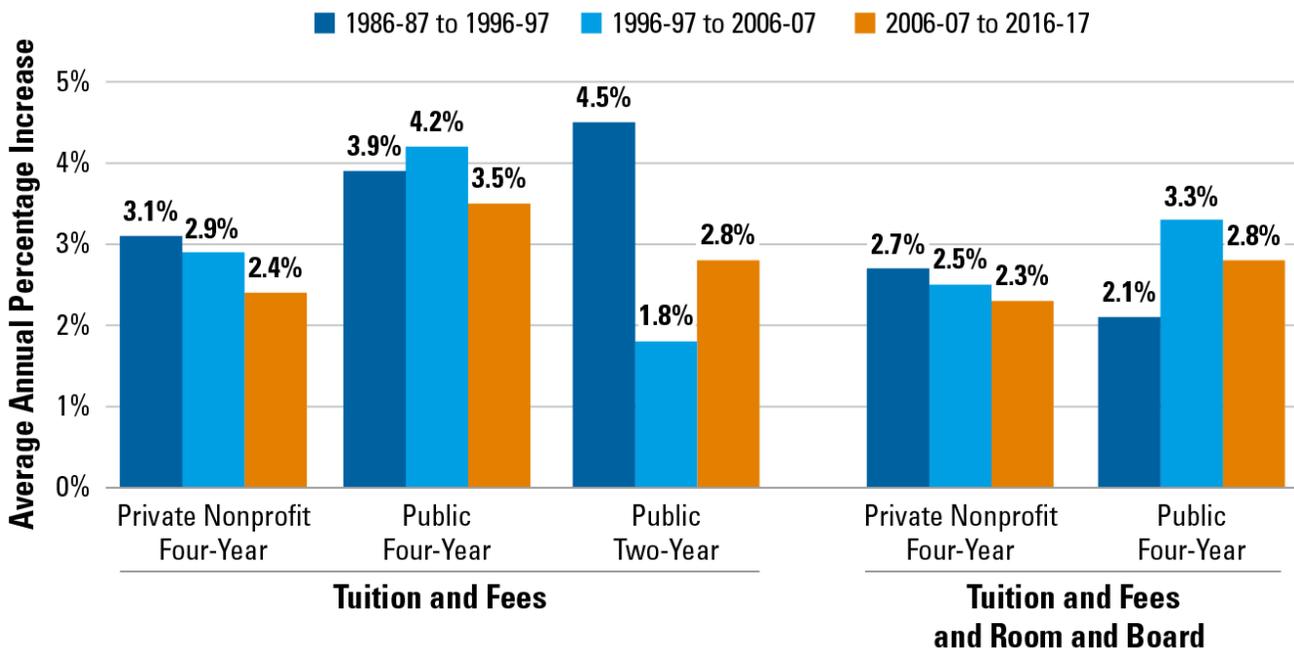
- ◆ State funding for public higher education has not kept up with increasing enrollments, straining the capacity of public colleges and universities to carry out their missions.
- ◆ The public higher education sector has undergone a 30-year cycle of gradual privatization by the states.
- ◆ What lessons can be drawn from a deep look inside the data around public university enrollments, tuition, prices, revenues and spending? Would messaging about public funding for public higher education be more effective if it were more granular and nuanced?

Sandy Baum, a senior fellow at the Urban Institute and a prominent economist of higher education finance, presented a contextual backdrop regarding the financing of public higher education. Baum said that discussions about higher

education funding are too often polarized and not sufficiently grounded in facts. She argued for a deeper and more nuanced understanding of the relevant information.

In 2016-17, tuition and fees for public 4-year universities were 3.1 times as high as they were in 1986-87, after adjusting for inflation, compared to 2.29 times for private nonprofit four-year institutions, Baum said, citing College Board data. Reflected in those numbers—but not plainly evident for the public to see—is the reality that declines in state appropriations for higher education during the recent Great Recession forced public universities to increase their tuition. Also reflected but not directly reported in those numbers is the cyclical nature of the *rate* of tuition increases, which tend to rise after recessions, then fall back when economies recover. Such distinctions are very difficult to articulate with in a manner the average consumer can grasp at a glance.





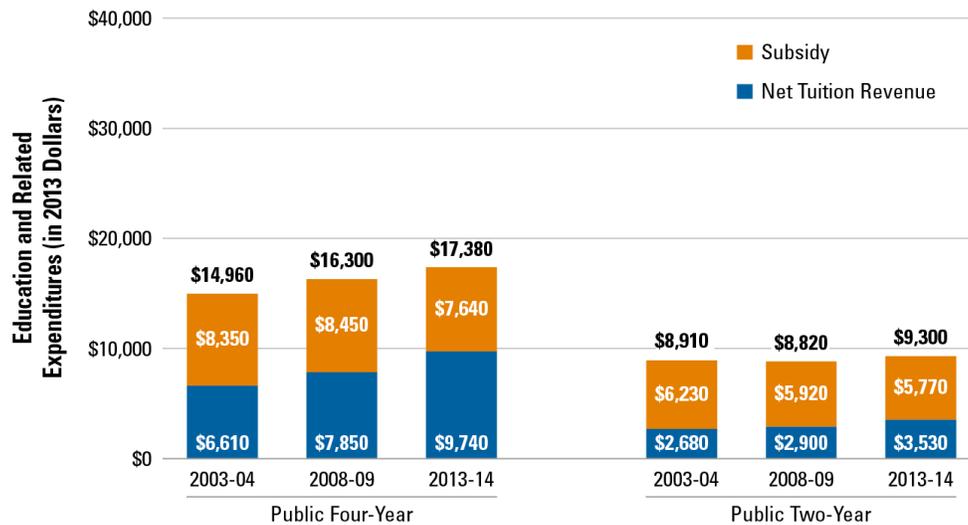
A similar point could be made regarding average annual increases in the published prices of colleges and universities, Baum said. For public 4-year institutions, published fees increased by 3.9 percent and 4.2 percent, respectively, over the decades that started in 1986 and 1996, but then rose at a lesser percentage (3.5 percent) in the decade that started in 2006. Accordingly, Baum posited, public perceptions that rates of price increases are just going up and up are simply wrong. The challenge in communicating that, however, is twofold: First, people tend to think in terms of dollars, not percentages. Second, because the baseline of tuition and fees keeps increasing, the average annual increase in dollars continues to grow regardless of what the percentages say. Again, those are nuances that are difficult to articulate in ways that the average consumer can quickly grasp. “If you asked people,” Baum said,

“they would think that the increases just keep getting bigger and bigger and worse and worse.”

Baum suggested that public colleges and universities need to do more to help students and parents fully weigh the benefits of higher education against the debt that many students take on in order to enroll in college. “Student debt is a severe problem for some students, but saying that it is a national crisis is really destructive,” Baum said. While the media tends to focus on individual cases of exorbitant student debt, she believes it is up to colleges and universities to tell a more balanced story—that students can complete college with manageable levels of debt that they can pay back a little at a time while also reaping the career benefits and social mobility that a college education provides.

Public colleges and universities may be able to make a positive case for themselves by talking about their investment in educating students. Baum presented data that show that educational spending at public four-year institutions increased 16 percent per FTE student between 2003-04 and 2013-14, after adjusting for inflation. Baum suggested that a reason why public college prices are going up is that tuition has to cover a higher percentage of expenditures given that public appropriations are shrinking.

To make their case, she suggested, public universities need to do more to educate the public about the predictable cyclical relationship between appropriations and tuition—that when one goes down the other increases, and vice versa. Universities can do more to educate the public about tuition discounting, and how students may pay less out of pocket than an institution’s published price. More broadly, public university leaders have a key role to play in a national conversation about what constitutes an appropriate division of responsibility for paying for college between state and federal governments and students.



“The job of institutions is to make clear statements, but the problem is making clear and simple statements that are accurate,” Baum said. “It’s very complicated, and that complexity is not going to go away. We have to be able to understand it and both explain how it works, but also explain why it makes sense.”

Questions to Consider

- ◆ *In the context of national aggregated data about tuition and fees in public higher education, what talking points can your institution develop that specifically address the opportunities that your university offers for an affordable education?*
- ◆ *How can your institution do a better job of helping students and parents understand the nuances of borrowing for college?*
- ◆ *Could your institution develop succinct and uncomplicated messaging to help students, parents, legislators and other stakeholders better understand the sources of your institution’s revenues, and how that money is spent? Would simple infographics, for example, show at a glance how the institution spends money in support of students?*

- ◆ *How can your institution improve the way it explains institutional grant aid and the difference between published prices and what students pay?*

Relevant Resources

- ◆ Financing Public Higher Education (website). Urban Institute. <http://webapp.urban.org/higher-education/#about>
- ◆ Trends in College Pricing (website). College Board. <https://trends.collegeboard.org/college-pricing>
- ◆ *Student Debt: Rhetoric and Realities of Higher Education Financing*, by Sandy Baum. Palgrave Pivot (publisher), 2016.
- ◆ “What the Working Class Wants,” by Rick Seltzer. [Discussion of recent focus group of working class and middle-income voters, with perceptions on student debt.] Inside Higher Education, March 14, 2017. www.insidehighered.com/news/2017/03/14/speakers-discuss-economic-demands-placed-higher-education?

Student Borrowing: Should Institutions Have More “Skin In The Game”?

- ◆ The reduction of state subsidies has resulted in significant increases in borrowing by students at public institutions.
- ◆ Some federal policy makers have called for colleges and universities to have more direct responsibility for ensuring that their graduates repay federal loans for higher education. But policy analysts have very different approaches to this question.

In August 2016, *Inside Higher Education* reported that bipartisan consensus was emerging in Congress that colleges should be required to share the burden of students borrowing for higher education. Essentially the argument is that colleges and universities should have “skin in the game,” helping ensure that their students repay federal loans for college. Part of the rationale is that mandating that kind of responsibility would incent universities to contain their spending and moderate the prices they charge for tuition. Such plans are also touted as encouraging universities to enroll and support more low-income students.

Perceived consensus aside—and not withstanding the sea change in the federal political landscape following the fall 2016 election—policy makers and analysts have differing perspectives on how that goal might best be achieved.

Beth Akers, a senior fellow at the Manhattan Institute who focuses on higher education, told symposium participants that she believes proposals for shared responsibility link to questions about the affordability of higher education and to what is often framed as the “student debt crisis.” She suggested, though, that focusing on tuition is really focusing on the wrong problem.

Testifying recently before the U.S. House of Representatives Committee on Education and the Workforce, Akers couched her thinking as saying that while tuition inflation

is “a concerning trend,” college has distinct value despite its large price tag. Akers told the committee that the Federal Reserve Bank of New York had recently estimated the rate of return on college degrees at approximately 15 percent—meaning, she said, that “students will get back far more, through higher future wages, than they will spend upfront.”

Akers argues that while the investment in college pays dividends for many students, for some taking on college debt is tantamount to a financial gamble that does not pay off. As she told the committee, Akers believes that policy needs to recognize that “it’s not the high price of higher education that’s a problem. Rather, it’s that some students will pay that price but never see a return.”

The current federal student loan program has a system of safety nets that protects borrowers from unaffordable student loans—such as options to reduce payments when a borrower’s income dips too low or the possibility of loan forgiveness at some point in the future. Akers would like to see some fundamental changes in the system. She advocates, for example, for an income-driven repayment plan that would be the default repayment options for all borrowers. Loan repayment might be collected through income withholdings. With that, she would do away with loan forgiveness provisions in current law. Alleviation of student loan obligations would require a student to declare bankruptcy. She would also greatly simplify federal loan programs overall, doing away with subsidies for higher education in the tax code and packing all federal student aid dollars into one loan program. She would eliminate the Parent Plus Loan program and the Public Service Loan Forgiveness program. “Rather than using public resources to make college less expensive across the board, funds should be targeted to provide relief to those who made a losing gamble on college,” Akers told the Congressional committee.

Ben Miller, the senior director for postsecondary education at the Center for American Progress (CAP), advocates a rather different approach. Conversations about risk sharing are driven by two separate factors, Miller told the symposium: student loan performance overall and the problem that “the default problem seems to be mostly concentrated on folks who drop out.” That’s a factor, he said, even if a student who did not complete college carries a relatively small loan balance—lacking their degree, their prospects for employment and paying back their loans may not be as robust as that of college graduates. On the other hand, students who have completed a degree or credential may have a more direct channel to enter the workforce, leaving them positioned to pay off their student loans even if their loan balance is significant.

CAP believes that while institutions should share responsibility for student borrowing, they should do so in a way that specifically rewards schools that successfully serve vulnerable students. Miller also says more emphasis has to be paid to students who actually default on their loans. CAP’s proposal would essentially put institutions on the hook for a portion of the debt balances that their students incur. If an institution had a 15 percent default rate among its dropouts, it would pay back 15 percent of their loans. Payments would be based on whether a borrower completed college or dropped out—specifically as a way of drawing greater attention to the connection between finishing college and loan repayment success. Further, CAP advocates for bonuses that would be awarded to institutions where more students repay their loans than expected. Miller hopes that Congressional decisions about “skin in the game” refrain from eliminating federal loan programs.

Many related proposals for addressing student loan risk have been proposed. AASCU public policy staff members Barmak Nassirian and Thomas L. Harnisch, for example, authored a paper that calls for “identifying and separating the social policy costs of student lending—like promoting access and opportunity—from costs that are reasonably attributable to program quality.” Arguing for pairing any risk retention policy with a positive incentive for enhancing institutional quality, such as a bonus system for better-than-expected outcomes, Nassirian and Harnisch advocate for allocating policy costs to the federal government, while assigning a portion of quality costs—as measured by repayment

patterns—to the institutions themselves. Their proposal would provide an allowance for institutions that enroll large proportions of low-income students.

Questions to Consider

- ◆ *Does your institution have ample understanding of the debate about whether, and how, institutions should have responsibility for student loan borrowing? If not, what additional campus conversations are needed?*
- ◆ *Are leaders of your institution or stakeholders such as board members in a position to work to influence federal policy about “skin in the game” regarding student loans? What kind of messaging in that regard would your institution seek to advance?*

Relevant Resources

- ◆ “Challenges and Opportunity in Higher Education.” Testimony of Beth Akers, U.S. House of Representatives Committee on Education and the Workforce, February 7, 2017. edworkforce.house.gov/uploadedfiles/akers_written_testimony.pdf
- ◆ *A Flexible Risk Retention Model for Federal Student Loans* [paper], by Barmak Nassirian and Thomas L. Harnisch. American Association of State Colleges and Universities, 2016. www.aascu.org/policy/publications/aascu-special-reports/riskretention.pdf
- ◆ *Game of Loans: The Rhetoric and Reality of Student Debt*. Beth Akers and Matthew M. Chingos. Princeton University Press, 2016. <http://press.princeton.edu/titles/10810.html>
- ◆ *Risk-Sharing: An Efficient Mechanism for Funding Student Loan Safety Nets* [report], by Beth Akers. Brookings Institution, Monday, December 19, 2016. www.brookings.edu/research/risk-sharing-an-efficient-mechanism-for-funding-student-loan-safety-nets/
- ◆ “Risks of Risk Sharing,” by Andrew Kreighbaum. *Inside Higher Education*, August 5, 2016. www.insidehighered.com/news/2016/08/05/leaders-both-parties-want-colleges-have-more-skin-game-student-outcomes
- ◆ *Sharing the Risk* (report), by Ben Miller and CJ Libassi. Center for American Progress, December 19, 2016. www.americanprogress.org/issues/education/reports/2016/12/19/295187/sharing-the-risk/

Optimizing The Ways We Use Student Analytics

- ◆ Public colleges and universities are increasingly turning to data analytics to make evidence-based decisions and target resources optimally.
- ◆ How can institutions best use evidence from data analytics to inform their decision-making?

The University of Maryland University College (UMUC) serves approximately 85,000 students, mostly online. Tracking that number of students demands a robust capacity to collect and analyze data about student progress. UMUC provost and senior vice president for academic affairs Marie A. Cini shared some insights at the symposium about UMUC's experiences with data analytics.

UMUC recognizes that data analytics is a way to address uncertainty—it can tell us at a microeconomics level what institutions should be doing to support student success and can provide data that can drive solutions to problems. According to a recent case study about UMUC experiences with data, leaders at the school were intrigued by the potential for advanced analytics to “better understand student risk, the variables that contribute most to student success, and, most importantly, how to make such insights actionable to improve student outcomes.”

Designated by the state as Maryland's open access institution, UMUC is required by charter to accept every student who applies. “But that's not how we view it,” Cini said. “We view it as that we are the “next chance” for students — not the final chance, but the next-chance institution.” Data analytics has helped UMUC know, with an 85 percent success rate, what students are likely to succeed. “We know the day before the course starts which students are highly unlikely to succeed,” Cini told the Chronicle of Higher Education

Cini is quick to suggest that data analytics is no panacea. She believes that success with data analytics hinges on all relevant stakeholders in a university being fully engaged and

committed to the effort. Moreover, she suggests, universities have to be intentional about how they intend to use analytics. “You have to have a viewpoint, and think about how you're going to do the hard work,” she said. “There's nothing easy about this.”

Cini said while some institutions have the capacity to develop and hone a robust data analytics capacity in-house, others find that working with outside vendors helps them ramp up that capacity and develop staff skills. Potential downsides are that vendors can be expensive and not always fully engaged in an institution's mission.

Reflecting on UMUC's experiences, Cini suggested that leadership and interest from top administrators was key in its success with data analytics. Potential challenges to monitor include the cost, which can be significant. It's also imperative to ensure the privacy of student data and to communicate how data are used in policies that students can understand.

Questions to Consider

- ◆ *How comprehensive and strategic are your institution's efforts to collect and analyze data to help advance student success?*
- ◆ *Has your institution developed and articulated a vision for its goals in data analytics?*
- ◆ *If your efforts in data analytics are just starting, how might you and your colleagues push that work forward to reap the optimal benefits? If your institution is well under way in using data analytics, how might those efforts now be honed and polished for even further gains?*

Relevant Resources

- ◆ “As Big Data Comes to College, Officials Wrestle to Set New Ethical Norms,” by Goldie Blumenstyk. Chronicle of Higher Education, June 28, 2016. <http://www.chronicle.com/article/As-Big-Data-Comes-to-College/236934/>

Several public universities are pioneering data analytics in support of student success:

- ◆ Georgia State University analyzed 140,000 student records and identified 800 factors that affect student success. GSU then developed a system that tracks those factors every night, triggering alerts for at-risk students who get help from an advisor within 48 hours. One result is that the university's six-year graduation rate rose 22 percentage points, with the fastest increases among African-American, Hispanic and low-income students. Average time to degree was reduced by almost a full semester.
- ◆ Purdue University developed Course Signals, a software program that combines student data in ways that enable instructors to monitor student performance and predict students' success in a course—and, when necessary, step in to help students improve their performance.
- ◆ Seeking new ways to stem underperformance in student success, graduation rates, and overall achievement, California State University, Fullerton piloted a dashboard that pulls student data from various databases. After investing time and energy in developing internal processes and organizing people to make data actionable, CSUF pushed its graduation rate from 52 percent to 62 percent and lowered its achievement gap, which had hovered near 12 percent, down to 9 percent.
- ◆ A Case Study on Using Predictive Analytics to Impact Student Outcomes [focus on UMUC). Civitas. www.civitaslearningspace.com/case_study_university_of_maryland_university_college/
- ◆ “Logging Off, Dropping Out” [“Hard data...can help colleges intervene to boost retention rates], by Paul Fain. Inside Higher Education, June 13, 2016. www.insidehighered.com/news/2016/06/13/data-student-engagement-lms-key-predicting-retention
- ◆ “The Metrics System: Seven Smart Choices about Data,” by Stephen G. Pelletier. The Presidency magazine, American Council on Education, September 26, 2016. <http://www.acenet.edu/the-presidency/columns-and-features/Pages/The-Metrics-System.aspx>
- ◆ Predictive Analytics in Higher Education: Five Guiding Practices for Ethical Use [report], by Manuela Ekowo and Iris Palmer. New America, March 6, 2017. www.newamerica.org/education-policy/policy-papers/predictive-analytics-higher-education/#
- ◆ Serving the Adult Student at University of Maryland University College [case study], by Jessie Brown and Deanna Marcum. Ithaka S+R, June 9, 2016. <https://doi.org/10.18665/sr.282666>

Non-Academic Barriers To Student Success

- ◆ In the course of their journey through higher education, college students can encounter many significant obstacles, including some not directly related to academics. Financing college is one such barrier, as are student concerns about career choices.
- ◆ Helping students overcome these hurdles can improve institutional retention and graduation rates.

Federal data show that, on average, 58 percent of students at public 4-year colleges and universities graduate within six years. The overall retention rate for college students (i.e., the percentage of students returning the following fall) stands at 81 percent for all public 4-year institutions, but drops to 62 percent for public institutions with open admissions. Many factors contribute to such trends, of course. In 2016, the *Wall Street Journal* reported that “more than 40 percent of student loan borrowers are either in default, delinquency or have postponed repaying their student loans.” Symposium speaker George Covino, vice president for default prevention at Student Connections, one of the companies in the Strada Education Network, helped unpack these trends.

To better understand what factors other than academics hinder or help student progress, Student Connections convened a group of advisees consisting of students from public and private institutions. They also consulted experts and asked participants at national meetings. Through those conversations, seven key areas came into focus. The first three concerns tend to appear either pre-college or early in a student’s college career.

- ◆ **Choosing a pathway.** Students intuitively know that picking the right career pathway is vitally important, but many say they are unsure which educational path to take to get to their goals. The *2016 National Freshman Motivation to Complete College Report* from Ruffalo Noel Levitz shows that 69 percent of freshmen report that they would like some help in selecting an educational path. Thirty-six percent said they have not made a firm decision about an occupation and so don’t know how to plan their educational pathway, and 20 percent are very confused about choosing a career. No fewer than 65 percent of student polled indicated they would like to talk to somebody about their options.

Institutional strategy: “Bridge to Success.”

Located in Appalachian Ohio, Shawnee State University serves a population that is not necessarily oriented to attend college and may lack the skills needed to succeed once enrolled. To encourage more local students to elect to pursue higher education, and to address challenges around student retention, persistence, and graduation rates, the university partnered with a local community college and a regional career and technical center to pilot a “bridge to success” program. The program is designed to help students determine the best path to reaching their goals — whether that is through a college degree from Shawnee State or an alternate path with one of its education partners. Over six weeks in the summer, incoming freshmen who are at-risk academically, or who are identified as needing support based on their SAT or ACT scores, can complete any required developmental courses. They also receive intensive intervention services (tutoring, advising, small study groups) and learn study skills and time management. Students pay only a \$50 registration fee. After a successful pilot in 2016, the university plans to expand the program in 2017 and 2018.

Institutional strategy: Deferred admission.

Certain freshmen applicants who are denied admission to Salem State University in Massachusetts may be offered the opportunity to participate in a deferred admission reverse transfer (DART) program with participating Massachusetts public community colleges. Students are guaranteed admission to Salem State at a later date provided they meet program requirements.

Institutional strategy: Elementary school pathway to college programs.

To foster long-term educational and career success for students in East Los Angeles, an area where college is often not on the radar of students and parents, California State University, Los Angeles created the program “GO East LA: A Pathway for College and Career Success.” Outreach to students starts in kindergarten and includes a mini-graduation around third or fourth grade where the university’s president hands diplomas to students, telling them, “If you finish all the requirements for postsecondary education, you are guaranteed admission to our university.” A local healthcare company has donated \$50,000 for scholarships through the program.

Institutional strategy: Money-management education.

To help students take control of their finances, Murray State University in Kentucky offers financial literacy training through a program called Financial Responsibility Empowers Everyone (FREE). The program’s success is credited as one factor in a recent jump in retention rates at the university that has been valued at \$1 million in revenues.

- ◆ **Funding college.** College students may be more concerned about paying for college than is readily apparent. The Ruffalo Noel Levitz survey found that 50 percent of first-year college students want help in applying for financial aid. But simply completing the FAFSA can be a barrier: The national FAFSA completion rate for high school seniors is just 39.6 percent. A 2015 report from the Gates Foundation found that of the approximately 2 million Pell Grant eligible students who did not file a FAFSA, 1.3 million would have received a full grant in 2011-12.

“Anything you can do to force FAFSA completion is going to be of benefit to your students and ultimately to your institution,” Covino told the symposium. “Anything you are doing in this regard, such as financial aid nights in local high schools, and FAFSA completion days—we have to try to bring more students into those experiences.” To encourage retention, Covino also urged colleges to do more to track FAFSA completion for returning as well as new students. Peer counseling can augment a university’s capacity to advise students about the FAFSA; one AASCU institution has had success sending student employees into the high schools that they graduated from to counsel their peers there about college and financial aid opportunities.

- ◆ **Applying for college.** The process of applying for college can be daunting for some students, especially as more first generation students seek to enroll. There is a growing movement on the part of colleges and universities to reach out to students in high school and even elementary school to help them understand pathways to colleges, including the process of choosing the right institutions and finding financial help to make college possible

Other barriers to student success typically become apparent during college.

- ◆ **Managing personal finances.** Students want to be financially independent, but often feel they lack the requisite financial skills. Moreover, financial issues can be a significant barrier to college success. A recent study found that 50 percent of incoming freshmen do not have the financial resources needed to finish college, and 62 percent thought financial program problems would interfere with their ability to complete their academic program. Nearly a third of students (30 percent) characterized their financial problems as very distracting.
- ◆ **Boosting productivity.** Ruffalo Noel Levitz data show that 41 percent of students report that they do not have a solid system of self-discipline to keep up with their schoolwork, 35 percent report that they do not take good notes, and 33 say their study habits are irregular and incomplete. Even high achieving students can benefit from strategies to boost their productivity. “We have to get back to the notion that we have to teach students how to be students,” Covino said. “You probably all have resources to help students with that, but how are you connecting students with those resources?”

Additional barriers to college success occur after a student has completed a degree or credential.

- ◆ **Getting hired.** Whether a student is studying the liberal arts or a more vocationally-centered academic program, a large part of college is preparing students for success in the workplace. Yet many college students do not feel fully prepared for the process of getting hired. The Gallup-Purdue Index Report 2016 (subtitled “Great Jobs, Great Lives”) explored the value of career services, experiential experiences, and mentors for college graduates. It found that about half of college graduates (52 percent) visited the career services office during their undergraduate experience. Just 17 percent of 2010 to 2016 graduates reported that their career services office was very helpful. The same survey showed that first-generation students are less likely to avail themselves of career services.

“Should institutions be doing more to steer college students to career services?” Covino asked. “Our advisory board told us that needs to start from day one, and continue through a student’s educational program and on through applying for a job, preparing for an interview, and weighing job offers and compensation packages.”

- ◆ **Repaying education loans.** By one measure, students aren’t considered successful until they are able to pay off their college loans. Yet data from the federal College Scorecard show that the repayment rate for low-income borrowers is 38 percent, 54 percent for middle-income borrowers, and 64 percent for high-income borrowers. Research has found that students who have completed their degrees or credentials are more successful in paying their student loans than students who drop out. Covino said work to retain students and help them graduate is the most important thing an institution can do to prevent loan default.

In addition to looking at some of these issues specifically from the standpoint of student success, Covino suggested that institutions do more to look at them in the context of an institution’s fiscal health. Noting, for example, that many student success or retention programs on campus cluster around first-year and incoming students, a similar focus on returning students throughout their academic careers might be an untapped way of helping an institution retain tuition revenues from returning students.

Covino cited Ruffalo Noel Levitz data, which says that the cost of recruiting students at a four-year public institution is \$578. He suggested, however, that while institutions may be well aware of that expense, they may be less aware of the cost of attrition. He suggested that institutions use available formulas for calculating attrition costs and redirect resources to do more to help retain students. Still another reason to be concerned about student success from a fiscal standpoint, he said, is that it is increasingly being linked to performance funding at the state level.

Institutional strategies:

One institution at the symposium reported that it embeds curricular modules about career services in first-year experience courses, enabling faculty to help educate students about career services modules. That university also offers open office hours for career services at different sites across campus—in essence taking those services into the field. Another institution actively engages its alumni in helping students understand different career pathways.

Urging universities to develop comprehensive enrollment management plans, default prevention plans, and completion strategies—and to link those plans strategically with each other and with academic goals—Covino said “look for opportunities to connect the dots. I don’t think you need to reinvent the wheel, but go back and think about the seven barriers. What are we doing now that works, and how can we expand those programs to reach more students?”

Questions to Consider

- ◆ *How can stakeholders at your institution think about barriers to student success that may be less apparent than the usual barriers that we typically think about? How can those stakeholders be spurred to find creative new solutions to address those hurdles?*
- ◆ *Does your institution have comprehensive plans for enrollment management, default prevention and student completion, and are those plans linked strategically to the institution’s academic goals? How might such planning be brought into better alignment across institutional silos?*

Relevant Resources

- ◆ *Better for Students: Simplifying the Federal Financial Aid Process* [report] Bill & Melinda Gates Foundation, 2015. postsecondary.gatesfoundation.org/wp-content/uploads/2015/10/FAFSA-Approach_FINAL_7_7_15.pdf
- ◆ Gallup-Purdue Index Report 2016 (“Great Jobs, Great Lives: The Value of Career Services, Inclusive Experiences and Mentorship for College Graduates”). www.gallup.com/reports/199229/gallup-purdue-index-report-2016.aspx
- ◆ “More Than 40 percent of Student Borrowers Aren’t Making Payments,” by Josh Mitchell. *Wall Street Journal*, April 7, 2016. www.wsj.com/articles/more-than-40-of-student-borrowers-arent-making-payments-1459971348
- ◆ 2016 National Freshman Motivation to Complete College Report. Ruffalo Noel Levitz. www.ruffalonl.com/papers-research-higher-education-fundraising/2016/2016-national-freshman-motivation-to-complete-college-report

Connecting College To Career: Innovative Alternatives

- ◆ Making the connection for students between college and career does not always emerge from campus career services offices.
- ◆ How might universities use innovative approaches to help students explore which careers best align with their interests, aptitudes, and priorities?

Universities increasingly recognize that they need to focus more attention on helping students make the critical jump from college to their careers. Participants at the symposium learned about two innovative alternatives that guide students on that pathway.

- ◆ **Education at Work** is a provider of contact center and staffing service. Its mission is to help students graduate with little to no debt and gain skills they need to secure great jobs after college. The Education at Work model is to place call centers for client corporations on college campuses—the centers provide income, tuition assistance and job training for the many students who are hired to staff them. The Education at Work model also creates a pipeline and training ground for future employees of the companies that sponsor the call centers.

As one example, earlier this year Fidelity Investments recently expanded its partnership with Education at Work in support of an on-campus contact center at Northern Kentucky University (NKU). To date, student employees working part-time on-site for Fidelity have earned \$550,000 in tuition assistance and \$1,020,000 in wages. Since its inception, the partnership between Fidelity and NKU has seen a 74 percent post-graduation full-time job placement rate of Education at Work student employees.

- ◆ **Roadtrip Nation**, perhaps best recognized as the focus of a public television series, creates content, products and experiences to help individuals pursue fulfilling careers. To fulfill its mission, Roadtrip

Nation talks with professionals in countless fields to explore their struggles and successes. Lessons learned from those conversations inform a range of career exploration products, including an educational curriculum, personalized online tools, video content, bestselling books and live events. The ultimate goal is to help young people broaden their understanding of career pathways and possibilities.

Frostburg State University in Maryland has found Roadtrip Nation materials to be valuable in helping students, about 46 percent of whom come from underrepresented groups and many of whom are relatively unsophisticated about their career options. Frostburg State embeds content from Roadtrip Nation's insights about career pathways into its first-year course. In addition, students at Frostburg State have traveled under the Roadtrip Nation umbrella to interview alumni about their career pathways. Tom Bowling, Frostburg's vice president of student affairs, says it is important to get students engaged in reflection about what is meaningful to them—in other words, to get them to focus on where their passions are versus solely on “where the jobs are.” He says that the Roadtrip Nation approach and materials provide a safe channel for students to explore what might make the most difference in their lives in terms of career choices. One of the outcomes, he says, is that students gain invaluable personal lessons when they see how people grow in their careers and how they have overcome obstacles and fears. “It increases their sense of what is possible,” he says. “They see that there are multiple career paths open to them, and it makes them more comfortable with uncertainty.”

The key lesson from these two alternative options may be that universities need to explore more such opportunities. As the examples cited here show, universities that have been willing to go beyond “the way things have always been done” and find new tools have discovered inspiring, sometimes more cost-effective, ways to help students explore career options.

Questions to Consider

- ◆ *How knowledgeable is your institution about emerging alternatives for helping students explore potential pathways?*
- ◆ *How could your institution adopt and adapt new and alternative channels to helping students explore career pathways?*

Relevant Resources

- ◆ Education at Work: <http://educationatwork.org/>
- ◆ Roadtrip Nation: <http://roadtripnation.com/>

Enrollment Management In Public Institutions

- ◆ Strategic enrollment management has historically been associated with recruitment and revenue strategies at private institutions, but is increasingly a significant tool for public institutions.
- ◆ How can public institutions develop and implement optimal enrollment management strategies?

Given today's volume of applicants, shifting student demographics, and evolving migration patterns, some experts predict a reshaping of the admissions landscape in the decade ahead. David Bousquet, vice president for enrollment management at East Stroudsburg University in Pennsylvania, shared some perspectives at the symposium based on his long career and service at several institutions.

In a world in which nearly every institution of higher learning has to compete more aggressively to meet targets for enrolling students, enrollment management at public institutions is starting to look increasingly like that at private institutions. Compared to some private institutions and flagship public universities, though, AASCU members typically are limited in terms of brand recognition, ability to award institutional aid, and financial resources and reserves. Those factors play a role in the degree of an institution's success in enrollment management.

Projected changes in the numbers of high school graduates over the coming years have been well-documented. Generally speaking, states in the Southwest and West will see projected growth, while states in the Midwest and the Northeast will see declines in potential college students of traditional age. Many institutions will need to broaden their recruitment activities, including expansion beyond state lines. Given that the pool of potential future students includes more students from low-income and traditional minority families, as well as more first generation students, institutions may have to plan on providing more financial aid and advising, among other additional services.

In this challenging market, Bousquet suggested, public institutions must undertake a sophisticated analysis of their strengths and relative market positions. They need to understand not just where their students will come from but what inspires them to enroll in one institution versus another. Further, every institution should assess its enrollment management goals, vision, structure and operations to determine whether and where new efficiencies are needed. Many institutions may need to invest more resources in their enrollment management enterprise. Some may need to be more strategic about integrating their goals for, and practices around, enrollment management with the institution's other strategic goals.

Looking ahead, Bousquet expects that public institutions will expand their enrollment management tools that public institutions have started to adopt with more frequency in recent years, such as continuing and online education. He thinks it is likely that we will see more mergers of public institutions.

"The future success of AASCU institutions is inextricably bound up in the need to attract, enroll and continue to graduate a student body that reflects our nation's diversity," Bousquet said. Paradoxically, though, he said, legislators and taxpayers who would like to see a more homogenous society may not be inclined to support that mission. At the same time, too, public support overall for higher education is eroding, and we may be pivoting from an era in which college was viewed as a public good to one in which it is seen more as a private good that should be funded by those who benefit directly from it.

Also likely in the current political landscape are subtle turns in federal policy that affect higher education—case in point, the recent ban on international travel from certain countries. Nonetheless, public institutions will continue to have ongoing interest in recruiting international students. Countervailing pressures, however, come from countries like Great Britain and Australia, which are actively recruiting international students. Meanwhile, China—a traditional source of students for many public universities in the United States—is building new universities at a rapid pace in order to accommodate its internal demand for higher education.

That complex cascade of factors makes the job of enrollment management all the more challenging. Given that the future success of AASCU institutions depends heavily on their success in enrollment management, Bousquet underscored that it is incumbent on every institution, and every institution's leadership, to ensure that the enrollment management function has the resources and tools it needs to fully support the institution's enrollment goals.

Questions to Consider

- ◆ *Has your institution invested adequately in ensuring success in enrollment management?*
- ◆ *Is your institution's enrollment management function structured strategically and consolidated under one umbrella in which disparate campus functions collaborate effectively? Or, as may be the case of many institutions, has your enrollment management operation grown haphazardly based on factors like historical practice, political expediency, or perhaps the whims of a new campus leadership team?*
- ◆ *Is your enrollment management function led by astute professionals with a vision for delivering on enrollment goals and a toolbox that includes the latest strategies for meeting those goals?*
- ◆ *Does your enrollment management function report directly to the institution's president and does it have a seat at the table for the most important institutional conversations, including those at the cabinet level?*

Relevant Resources

- ◆ *ACT Resources for Postsecondary Professionals* [website]. www.act.org/content/act/en/postsecondary-professionals.html
- ◆ *Knocking at the College Door* (projections of high school graduates). Western Interstate Commission for Higher Education (WICHE), 2016. <http://knocking.wiche.edu/>
- ◆ “When College Was a Public Good,” by Scott Carlson. *The Chronicle of Higher Education*, November 27, 2016. <http://www.chronicle.com/article/When-College-Was-a-Public-Good/238501>

New Insights About Post-Enrollment Student Outcomes

- ◆ The Education Consumer Pulse by Gallup and Strada Education Network, established in 2016, is the first-ever daily poll on the consumer voice in higher education. Analysis of this landmark dataset provides rich insights into consumer perceptions about how their experiences and engagement in higher education relate to their success in their careers.

Carol D’Amico, executive vice president for mission advancement and philanthropy at Strada Education Network—and a nationally recognized expert in designing and leading strategy related to higher education, workforce development, and business-led involvement in education reform—presented a select sampling of results from the Education Consumer Pulse.

With a mission in higher education that D’Amico said was focused on “completion with a purpose,” Strada was struck by data that 40 percent of students who start college do not finish, and that 50 percent of those who actually do manage to finish can find themselves unemployed or underemployed or wish they could change the nature of their job. Also of interest was a fundamental disconnect that Gallup research showed between universities and employers. That research showed that nearly all (99 percent) of university provosts and those of similar rank thought their institution was doing a good job in preparing graduates for the workforce, while only 11 percent of employers agreed that was the case. Strada wondered what was causing those gaps, and what role it could play in bridging those disconnects.

A survey of college alumni that Gallup conducts in association with Purdue University influenced Strada’s thinking. The Gallup-Purdue Index revealed four critical factors that affected an individual’s perception of the effectiveness of his or her college experience:

- ◆ Did you have a mentor who cared about you?
- ◆ Did you have an internship related to your field of study?

- ◆ Did you have a professor who took an interest in you as a person?
- ◆ Did you work on a project with other people related to your career aspirations?

“If you had those sets of things,” D’Amico said, “you felt that higher education prepared you well for your career.” But Gallup data showed that overall, not even a third of alumni reported having those experiences.

To better understand the connection consumers have with their educational experiences, Strada embarked with Gallup on the nation’s first survey of American adults, ages 18 to 64, about their perceptions and experiences with higher education.

Very preliminary results suggest a number of insights. One is that higher education lags other industries, such as the hospitality industry and healthcare, in listening to consumers about their experiences in ways that inform policies and practices. Accreditation of hospitals, for example, depends heavily on consumer surveys. Might there be an analog for accreditation of higher education?

Some institutions of higher education do survey their graduates, but too often surveys focus on the relatively narrow needs of alumni relations. Typical questions are not “How did our institution prepare you for life,” but have to do with things like, “Are you coming to homecoming,” or “Would you like to purchase tickets to a basketball game?” Higher education should do more surveying along the lines of “how did we do overall?”

Having now completed approximately 60,000 individual surveys, Gallup and Strada are finding that about a third of people who have completed college wish they could change something about that experience, and about half of all Americans wish they could change something about the career path they took, their major, the degree they pursued, or the institution they attended.

Given that higher education is such a huge investment, and that it is relatively difficult to change the course of one's education once one has embarked on it suggests several salient questions: How do we mitigate the dissatisfaction with college that consumers seem to express? We know that if students engage in higher education later in life, say when they are in their 30s, they are less likely to regret their decisions about directions in college. That has significant implications for work and life experiences. But if we are focused on traditional-age college students, how do we help 18-year-olds develop the skills they need to make better determinations and decisions about their future? How do we help college students get to know themselves better? How do we help people make better choices about their career paths while they are in college?

In short, the new surveys are raising a lot of questions about how universities can encourage students—their consumers—to have a more fulfilling experience while they are in college. The first major report from The Education Consumer Pulse was *released in June 2017*.

Questions to Consider

- ◆ *How can colleges learn to better hear the voice of the consumer and get insights from that information?*
- ◆ *How can institutions do a better job of aligning faculty interests and activities in support of helping students make the right choices about majors and career pathways?*
- ◆ *How can institutions of higher learning bridge the persistent disconnect between what employers say they want employees to know and what our universities teach?*
- ◆ *How might data from a survey such as the Education Consumer Pulse be useful to institutions? How might those data provide constructive insights that help institutions achieve their goals?*

Relevant Resources

- ◆ The Education Consumer Pulse by Gallup and Strada Education Network. <http://www.gallup.com/206798/education-consumer-pulse-work.aspx>.

International Recruitment: Challenges And Pitfalls

- ◆ In its ideal form, international recruitment promotes cultural diversity, improves academics, and generates revenues all at once. (In 2014-15, international students provided \$30.5 billion for the U.S. economy.) But realizing those benefits requires international expertise and significant due diligence to avoid pitfalls that can tarnish an institution's reputation at home and abroad.

In part as a way of diversifying institutions and in part as a lever for attracting new tuition revenue, recruiting international students continues to grow as an enrollment strategy of strategic interest for public colleges and universities. While it is unclear how the flow of international students may be affected by new policies enacted by the Trump administration, public universities will continue to recruit international students. That process, however, requires considerable savvy and is rife with potential pitfalls. Dale Gough, director of Foreign Credentials Service of America, helped participants at the symposium walk through some of these challenges.

- ◆ **Use of agents.** Several public universities have run into trouble by perhaps relying too heavily on agents to help them recruit international students. One public university that turned to foreign agents to help it recruit international students found that while the agents guaranteed that they would fill sections of classes, an audit conducted after problems with the recruited students arose showed that no student applications, student records, or student test scores had been presented for the international students who had enrolled. Among other challenges, this led to additional scrutiny from the university's accrediting agency. One eventual result was that the school had to rescind 510 academic degrees that

it had awarded after it was determined that students had been received those credentials had not fulfilled all degree requirements.

Another public university relied on agents to recruit international students but later discovered that no one was reviewing student credentials, even though students had been admitted to computer science programs at the graduate level. It was soon discovered that the students in question had Bachelor of Science degrees based on just three years of study and were not prepared for graduate-level study in the United States. Ultimately, the university had to ask those students to leave.

A common factor in these examples, Gough said, was that the agents were essentially representing themselves and not the institutions that hired them. Universities that are tempted to use agents need to do due diligence before they hire such representatives.

- ◆ **Diploma mills.** Another threat to the efficacy of international recruitment are international diploma mills. A notable example in Liberia was at one point producing some \$2 million in revenues producing fake credentials for universities around the world that had no connection to any academic work at those institutions.
- ◆ **Fraudulent credentials.** A challenge related to diploma mills are entities that produce fraudulent credentials — in some cases, university diplomas that look genuine, but in fact do not represent completion of study at a legitimate university. Instances where colleges and universities have been fooled by such credentials are more common than one might think, and Gough urged that universities carefully scrutinize credentials that are presented by students and even faculty and administrators.

Another pitfall, Gough said, is relying too heavily on recruitment of international students from a single country. In the United States, 4.8 percent of all students today are international students, a percentage that has been climbing steadily. But of those students, 31.2 percent are from China and 16.3 percent are from India. The history of international student recruitment, for example, shows that at different points in recent history, Canada, India, Hong Kong, Taiwan, China, Japan and India all held the top spot in terms of exporting students to the United States. Often, countries will top the list in one year, and fall off the charts in the next year due to unforeseen political circumstances. Given that changes in the political or economic landscape in any one country can jeopardize the ability of U.S. institutions to recruit students from that country, colleges and universities here would do well to diversify the countries from which they recruit.

Colleges and universities in the United States face considerable competition for the recruitment of international students from other countries. In June of this year, Canada, for example, recently announced that international students attending Canadian universities will now be able to establish a pathway to citizenship. Australia and the United Kingdom also recruit international students aggressively. And in 2017, Russia increased its quota of international students by 30 percent, to 200,000, of which at least 10 percent will be funded by the Russian government.

Given that most public colleges and universities have limited funding for international recruitment, Gough urged that institutions interested in this channel have a strategic recruitment plan. One first step, he said, was to make sure that application materials and websites targeted to international students can be clearly understood by students who may not have a good understanding of the American system of higher education or even, perhaps, a good command of English. Institutions should target students from many countries, not just one or two. An institution should rely on the expertise of their international offices — rather than, say, admissions offices — to conduct international recruiting. Training for an international admissions staff may be needed. Outside experts may be more skilled than in-house staff in evaluating credentials of international students. An institution's own international graduates may be effective ambassadors for its international recruitment efforts.

In short, Gough said, institutions that are serious about wanting to recruit international students need to invest the resources that are needed to ensure success, including having well-trained staff who have the expertise needed to deal with pitfalls like fraudulent credentials and diploma mills. Further, he said, institutions should invest in international recruiting with a long view for measuring success, rather than just focusing on how many students are needed to meet this year's enrollment goals.

Questions to Consider

- ◆ *How might changes in the current political landscape in the United States affect your institution's ability to recruit students from abroad? Are changes in your recruitment strategy needed?*
- ◆ *How comprehensive is your institution's approach to international recruiting? Has your institution committed the necessary resources, both financial and human, to ensure success? Does your institution have a strategic plan for success in international recruitment over time?*

Relevant Resources

- ◆ *Education USA* (website sponsored by U.S. State Department. <https://educationusa.state.gov/>)
- ◆ *Open Doors*. Comprehensive data and information resource sponsored by the Institute of International Education. www.iie.org/en/Research-and-Publications/Open-Doors#.WMqfXKLasg

Performance-Based Funding And Institutional Policies

- ◆ Diminishing state support for public higher education has led to efforts to increase efficiency. As public colleges are expected to do more with less, policymakers are radically changing the traditional methods for funding state colleges and universities.
- ◆ The emergence of performance-based funding has significantly altered incentives, as well as academic and enrollment practices in the public sector. Accordingly, how should colleges and universities best position their policies and practices to meet this emerging change in legislative priorities?

As more states move toward funding models linked to performance, colleges and universities may need to adjust certain policies and practices so that they can both comply with new expectations and perhaps position themselves to capitalize on new legislative directions in appropriations. Two experts at the symposium provided insights about the design of performance-based funding models that might in turn suggest ideas for colleges and universities to align their practices for producing quality student outcomes with expectations of performance-based policy.

Nicholas W. Hillman, an assistant professor at the University of Wisconsin-Madison, has studied performance-based evaluation extensively. In terms of the design of performance-based systems, Hillman said research shows that the incentives that are baked into such models work best when goals are clearly measured and measurable, tasks are straightforward, and when organizations have the capacity to perform to those measures. One such example is the ability of universities to track student performance. Also important is that “routines for learning” be built into organizations. Hillman noted that higher education institutions are not always structured to meet performance-based funding goals. Incentive structures in colleges and universities, for example, are often linked to factors like research productivity rather than to student performance.

Hillman said to date research has shown relatively little difference in outcomes in states that have performance-based funding versus those that do not. However, he was quick to note that as more states adopt performance-based systems and as they hone the way the systems work, researchers are beginning to see a divergence in the data that suggests that performance-based funding is starting to have a measurable effect in improving student outcomes in universities. While the trend lines are not yet irrefutable, Hillman said “there is something going on” in the way the data are trending.

Russ Deaton, the deputy executive director of the Tennessee Higher Education Commission, shared perspectives on the design of a performance-based model in his state. For years, he said, Tennessee had an appropriations model that was based primarily on enrollment, with an additional 5 percent based on performance. As state policies for education shifted from an emphasis on access to one on completion, the state saw that 5 percent for performance-based funding was not enough to spark the kind of results in student completion outcomes that Tennessee wanted. For that reason, the state scrapped its enrollment model in 2010 in favor of an outcomes-based model. One specific intent of the new system is to link state funding more directly to Tennessee’s goal of moving the number of its residents who have a postsecondary credential from just shy of 40 percent now to 55 percent of the state’s adults.

Today, rather than looking just at enrollment FTEs, the state starts anew every year by looking only at outcomes data for its higher education institutions. The new system has weights that account for differences in institutional mission and the populations that given institutions serve. Deaton said there are some very aggressive incentives for institutions to graduate more adults, low income students, and academically underprepared students. “It is not large-scale performance funding in the sense that you have targets handed down to you from the state capital and that you have to meet that target or else,” he said. Instead, in the way that Tennessee used to count enrollment statistics, it now tallies what institutions produce in terms of such measures as retention

and graduation. There are no specific targets or goals for individual institutions. The performance-based funding model is designed so that money will gravitate to where success for students is occurring.

Deaton said there was concern initially that the model might favor large, wealthy institutions, but that has not been the case. The two public institutions within the state that have received the most additional money under the new program include a community college and Austin Peay State University, a relatively small master's degree institution. There were also fears that the new funding models would limit access to college and perhaps lead to deterioration in the quality of institutional programs, but he said they haven't seen any evidence of that.

Yet another concern is the potential for what Deaton calls the “negative ratchet effect,” which holds that if an institution performed worse than its peers it would lose money, making it harder to invest in ways that would ensure better performance in the future. To mitigate that, the state has initiated some small programs that provide targeted funds to help specific lagging schools improve their outcomes. Tennessee is also trying to encourage institutions to do more to collaborate around ideas for improving student outcomes, including promoting reverse articulation programs.

What specifically might institutions of higher learning do to better align themselves with the realities of performance-based funding models? For one, institutions have an obligation to engage in dialogue with state officials so that all stakeholders understand what their respective goals are, and where those goals might align. Deaton said that campus officials in Tennessee have been invaluable in helping that state shape and hone its approach to performance-based funding.

“All of this has prompted a re-examination of how our campuses are acting, which is a good thing to see,” Deaton said, noting that better alignment between the state government's hopes for what education might achieve with what colleges and universities are actually accomplishing.

For states that may be considering deeper adoption of performance-based principles in the appropriations process, Deaton had this counsel for university leaders: “I would be asking state officials to simulate what would have happened under these proposals in the past, and show me how changes

in future productivity might affect allocations in the future. How is the model engineered to behave? I would be asking officials to not simply demonstrate the moving parts, but to show me how the mechanism works. Has it worked in the past, and how will it respond in the future?”

Questions to Consider

- ◆ *How might your institution engage with state officials to shape the direction of performance-based funding?*
- ◆ *What can your institution do to better educate state officials about the impact of such a model on your institution? Conversely, how can stakeholders on campus better understand the motivations of state officials to advance performance-based modeling?*

Relevant Resources

- ◆ “Performance Management Routines That Work? An Early Assessment of the GPRA Modernization Act,” by Donald P. Moynihan and Alexander Kroll. *Public Administration Review*, 76(2), August 2015
- ◆ *Toward Next-Generation Performance Budgeting: Lessons from the Experiences of Seven Reforming Countries*. Donald P. Moynihan and Ivor Beazley. World Bank, Directions in Development—Public Sector Governance, 2016. <https://openknowledge.worldbank.org/handle/10986/25297> License: [CC BY 3.0 IGO](https://creativecommons.org/licenses/by/3.0/).
- ◆ “Using Post-College Labor Market Outcomes: Policy Challenges and Choice,” by Anna Cielinski. Center for Postsecondary and Economic Success, October 2015. www.clasp.org/resources-and.../Using-Post-College-Labor-Market-Outcomes.pdf



In Conclusion: Inventing New Futures

The complicated business of managing a public college or university seems to get more complex with every passing day. We see no evidence that such trends will abate. Indeed, the pace of change for public higher education is likely only to accelerate.

Steeped in tradition and accustomed to measured, deliberative approaches to reform, universities are not necessarily well-positioned to meet tomorrow's challenges. The operating principles and standard practices that have stood public higher education in good stead for the past century and a half are almost certainly not the tools that will carry public colleges and universities forward over the next century. Complacency and satisfaction with the status quo will not be sufficient. New tools, new perspectives and new mindsets are all requisite for future success. Moving forward, more agility, more creativity, and the capacity to effect change more rapidly will all be vital.

It is therefore incumbent on the leaders of public colleges and universities and their colleagues to both recognize the need for change and to be leaders of that change on their own campuses. As never before, public higher education needs champions who have the vision to define new futures for their institution, and the drive to see that significant change is implemented successfully. We hope that the ideas and perspectives framed in this short paper will provide some food for thought for campus discussions around the essential challenge of creating new ways of working—and, indeed, shaping new business models—that will help public higher education achieve success in the days ahead.