BALANCING ACCESS & SUCCESS:

A Case Study of How Land-Grant Institutions Serve Low- and Middle-Income Students

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The Postsecondary Education Research Center (PERC) is based in the Department of Educational Leadership and Policy Studies in the College of Education, Health & Human Sciences at the University of Tennessee, Knoxville.

The mission of the Postsecondary Education Research Center (PERC) is to identify, conduct, and coordinate research on initiatives and ideas designed to enhance higher education at the institution, state, and national levels to enhance policy and practice.

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Executive Summary

Land-grant colleges and universities have a long tradition of serving low- and middle-income students and since 1974 the Pell grant program has also served those students. This research briefly traces recent changes in both of those federally funded higher-education initiatives. Much of the public discourse and policy has shifted to a focus on college completion. But, as data presented in this study clearly shows, there is an inverse relationship between percentage of Pell-eligible students served and college completion.

The research question is as follows: how are land-grant institutions serving low-income students? In-depth interviews were conducted with seven leaders at three intuitions representing different points on a trend line define by graduation rates and percentage of Pell-eligible students.

Four key themes emerged from the data. First is the focus on access which was found at all of these land-grant intuitions. Second, is an exploration of the way that Pell grant eligibility was embedded in larger discussions of diversity. Third, is a brief exploration of the ways that federal, state, and institutional policy pressures have influenced the balance of focusing on access and success. Finally, the key challenges are summed up in three areas: academics, finances, and personal/family challenges.

The study includes a “What Works” section that focuses on academic support, financial support, and holistic approaches. Recommendations are offered for achieving both self-knowledge and balance in managing access and success missions of land-grant institutions.
# Table of Contents

**BALANCING ACCESS & SUCCESS:** ................................................................................................................... i

**Executive Summary** ................................................................................................................................. iii

**List of Tables** ............................................................................................................................................. v

**List of Figures** ............................................................................................................................................... v

**I. INTRODUCTION** ...................................................................................................................................... 6

**II. METHOD** ................................................................................................................................................ 8

**III. CORE THEMES** .................................................................................................................................... 8

Access ............................................................................................................................................................ 8

Defining Diversity ......................................................................................................................................... 9

Policy Pressures ............................................................................................................................................ 10

Challenges ..................................................................................................................................................... 11

**IV. WHAT WORKS** .................................................................................................................................. 12

Academic Support ......................................................................................................................................... 12

Financial Support ......................................................................................................................................... 13

Holistic Approaches ................................................................................................................................... 13

**V. RECOMMENDATIONS** ......................................................................................................................... 15

**REFERENCES** ............................................................................................................................................. 16
List of Tables

Table 1. Summary of Participants 8

List of Figures

Figure 1. Pell percentage and graduation rate 7
I. INTRODUCTION

Since 1974, the Pell grant program has provided federally funded grants to low- and middle-income families with a goal of increasing post-secondary degree completion. Pell grants are awarded solely based on financial need and as of academic year 2015-16, Pell provided more than $28.5 billion to support 7.7 million students and more than 95% of those students were from households with family incomes below $60,000. Pell recipients are more likely than the general college-going population to be the first in their family to attend college, be a member of an under-represented race/ethnicity, and work full time (Protopsaltis & Parrott, 2017; Tinto, 2006).

Land-grant colleges and universities, which were designated by Morrill Acts beginning in 1862, were initially designed to serve working-class families by providing their children with an education that was both practical and infused with elements of classical higher education which had long been available only to wealthy families. Each state and the District of Columbia has at least one land-grant institution. Some states, particularly in the southeast and in the western plains states have multiple land-grant intuitions because of the expansions of the Morrill Act in 1890 and 1994 to extend land-grant status to serve black and tribal populations (APLU, 2019).

Over time, the mission and impact of both of these federally funded higher-education initiatives has shifted. The Pell Grant program which once covered almost 80% of the cost of attending a public university now covers less than 30% of the average cost of attendance (Protopsaltis & Parrott, 2017). And land-grant institutions now offer a very broad-based educational experience that no longer focuses primarily on the working class (APLU, 2019). Furthermore, the cost of attendance at all public higher-educational institutions has been rising steadily as state investment in colleges and universities has been on a steady decline in the 21st century (Protopsaltis & Parrott, 2017).

In recent years, significant pressure has been put on Pell recipients to achieve satisfactory academic progress based on grades and hours earned (Schudde & Scott-Clayton, 2016). Institutions have also been pressured to improve retention and graduation rates (Itzkowitz, 2017). Scholars have shown that need-based grant funding beyond the Pell can increase the odds of bachelor’s degree attainment for low-income students who attend public universities (Goldrick-Rab, Kelchen, Harris, & Benson, 2016). But, as Tinto (2006) has documented, there is a gap between low-income and well-to-do students in terms of degree completion. He notes that some of this gap can be attributed to poor quality education in the K-12 schools that low-income students are most likely to attend. As four-year schools seek to improve retention and graduation outcomes, they have often increased admissions requirements for academic performance in high school thus making college less attainable for low-income students.

The logic behind increasing admissions standards is solid – students who have a better educational preparation for attending college are more likely to be retained and to graduate. By graduating more of their students, institutions of higher education can contribute more to the development of a well-educated public. But, if the attention of these institutions becomes too sharply focused on retention and graduation outcomes, they are likely to further restrict access to low-income students. Figure 1, based on six-year graduation rates for land-grant colleges and universities reported in the Integrated Postsecondary
Education Data System (IPEDS), illustrates a trend of increases in graduation rate as the percentage of Pell-eligible students decreases.

Tinto (2006) noted that many studies have explored both causes of disparity in outcomes and potential approaches to improving those outcomes. But most fail to focus specifically on the issue of financial need and, instead, co-mingle other risk factors such as race/ethnicity and first-generation status. He notes that much of the research on students of color, for instance, is research on low-income students. But by focusing primarily on race and ethnicity it uncovers different opportunities and challenges than research focused on access to financial resources.

![Pell Grant vs. Overall Graduation Rate](https://nces.ed.gov/ipeds/about-ipeds)

**Figure 1.** Pell percentage and graduation rate (Source [https://nces.ed.gov/ipeds/about-ipeds](https://nces.ed.gov/ipeds/about-ipeds))

This study seeks to fill a gap in the literature by conducting in-depth interviews with three land-grant institutions which represent different “points” on the trend line in Figure 1. One (High-Serving) is above average in terms of the number of Pell students served and graduation rates are also above the trend line. The second (In-Line) is very close the national average for graduation rates and falls almost directly on the trend line. The third (Low-Serving) is slightly above the national average for graduation rates but falls below the trend line. The key question driving the study is: how are these institutions serving low-income students?
II. METHOD

In 2018, IPEDS data on land-grant institutions was downloaded. The institutions that were identified for analysis are summarized in Table 1.

Table 1. Summary of Participants

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Approximate undergrad #</th>
<th>% Pell recipients</th>
<th>Overall 6-year graduation</th>
<th>Pell 6-year graduation</th>
<th>Participants</th>
</tr>
</thead>
</table>
| High-Serving  | 18,600                  | 56%               | 73%                       | 73%                    | • Director of student success  
• Director of undergraduate admissions  
• Director of financial aid |
| In-Line       | 17,400                  | 32%               | 60%                       | 45%                    | • Provost  
• Director of student success |
| Low-Serving   | 19,900                  | 23%               | 63%                       | 50%                    | • Vice president for student life  
• Director of student success |

In 2018-2019 seven interviews were conducted by telephone or video call. Calls ranged in length from 25-59 minutes and all participants gave permission to have their call recorded. Recordings were transcribed resulting in 58 single-spaced pages. The researcher then used a process of analytic induction to read, re-read, and code the interview transcripts (Goetz & LeCompte, 1984). The emphasis of the analysis was on identifying broad themes. The focus was more on commonalities in how land-grant institutions approach their mission to serve low-income students rather than on what one might do better or worse than another.

III. CORE THEMES

This section focuses on four key themes that emerged from the data. First is the focus on access which was found at all of these land-grant intuitions. Second, is an exploration of the way that Pell grant eligibility was embedded in larger discussions of diversity. Third, is a brief exploration of the ways that federal, state, and institutional policy pressures have influenced the balance of focusing on access and success. Finally, the key challenges are summed up in three areas: academics, finances, and personal/family challenges.

Access

All of the participants, without prompting, mentioned their land-grant mission to serve low- and middle-income families. They talked about the importance of access to higher education for the citizens
of their state and the importance of education as a driver for upward mobility. In quotes below, and throughout the rest of this white paper, references to university names are replaced by the pseudonyms introduced in Table 1.

[In-Line] University says it is the people's university in keeping with the land-grant mission. And as I look at all the Pell-eligible undergraduate student, I can't help but think that [In-Line] University is both talking the talk and walking the walk. – Provost, In-Line University

We’re a land-grant institution. And as such, we had the mission of serving all the populace. And we, we really do believe in opportunity. – Director of student success, Low-Serving University

I would say, the majority of the [low-income] students have had some crazy, crazy, awful experience in high school that they have overcome, whether it be, you know, on the, on the income stratosphere, whether it be socially, a variety of different things, and to be able to provide an opportunity for, for a student like that to come to [High-Serving] University and then provide that social mobility for them is, is it's rewarding, but it's also, I think it's an imperative of land-grant intuitions. – Director of undergraduate admissions, High-Serving University

**Defining Diversity**

Despite commitment to access, all of these intuitions said that they have not set goals for percentage of Pell-grant students and did not specifically consider income during admissions. Furthermore, other than financial aid packaging, none of them had any programs that specifically targeted students who had financial need. By contrast, they did have programs that were designed to serve first-generation, transfer, and non-traditional students. And even though many race-based programs have been eliminated, these schools do have some programs (such as minority mentoring) that focus on race and ethnicity. The vice president for student life at Low-Serving University noted that they had identified African American males as a particular high-risk group and that there was a great deal of overlap between race, gender, and socioeconomic status among their most at-risk populations.

Many of the participants noted that their schools used some sort of formula for calculating a “risk score” for students and then placed them into programs that were designed to help them succeed. Family income and expected family contribution were often part of those formulas. Other factors such as high school academic achievement, race/ethnicity, and first-generation status also played into those formulas. Transfer students were also consistently identified as an at-risk group as were undecided students.

Geographic diversity was also identified as a way to segment students. For example, the provost at In-Line University noted:

We have students from every county in the state, every state in the nation and from 70 to 80 countries around the world and it is great for students to have
opportunities to get to know students who have grown up in other parts of the state, nation, and world. I would say that our interpretation of diversity is really very far reaching.

But the director of student success at High-Serving University challenged the notion of geography as a marker of diversity: “That [geographic diversity] is a very interesting way, you know, to frame diversity. Made me chuckle because of the environment that I work in, you know, diversity for us is socioeconomic status and ethnicity and gender and all of that.”

**Policy Pressures**

At least one representative from each institution indicated that state and/or federal policies and/or court decisions had influenced the ways that they defined diversity and also have impacted the ways that they consider funding low- and middle-income students.

For example, the director of student success at High-Serving University noted that the summer bridge program run out of their office had been designed specifically to serve low-income and underrepresented minority students. However, after state legislation forbade them to consider affirmative action, they changed the criteria to focus more on high school academic performance. The program population hasn’t changed much, but the selection criteria have.

At Low-Serving University, the director of student success indicated that state requirements set the bar for ACT scores as well as high school course completion. However, the school still has some flexibility in doing a more holistic review of about 10% of the incoming class. They use that flexibility for, among other things, trying to serve more low-income students who attended high schools that did not prepare them well for the ACT. High-Serving University has also seen that an increase in selectivity of their incoming class has resulted in a lowering of their percentage of Pell-eligible population, so they are moving to a more holistic review as a way of ensuring that they continue to serve low-income students. However, the director of undergraduate admissions at High-Serving University noted that this change has come with a great deal of public conversation the impact this decision is likely to be on retention and graduation. As their selectivity has gone up, their retention and graduation numbers have also improved. They are now preparing to potentially see retention and graduation numbers drop.

At times, the pressure to change the balance between improving retention/graduation numbers and serving low-income students was caused by internal policies or challenges. For example, the director of student success at In-Line University noted that all of their retention efforts began in earnest when they had a financial crisis caused by low retention numbers.

Internal pressures as well as external policies also often influence decisions that are made about how to balance need vs. merit scholarships. For example, the vice president for student life at Low-Serving University said that they were trying to improve their Pell population percentage by increasing need-based aid and decreasing merit-based aid. But making the change is slow because of how much of their aid money has already been committed to merit. That commitment has helped them improve graduation numbers – but at the cost of not being able to serve as many Pell-eligible students.
Challenges

All respondents identified challenges Pell-eligible students face at their institutions. There were three common themes. The first was issues of academic success. The director of student success at High-Serving University sees a: “gap between where their high school left off and where the university is picking up as far as the rigor of coursework.” In particular, the number of students who were underprepared in math but hoping to pursue math-intensive majors was a recurring theme. The director of student success at In-Line University noted:

If a student is unprepared in math, they would have to take a noncredit intermediate algebra first, and then college algebra, then trigonometry. We try to explain to them you have a long math road before you're even taking the classes that are really going to count and sometimes that message gets in but most of the time it does not.

The second challenge-oriented theme related to finances. Several noted that the combination of decreased state funding followed by increased tuition and the relatively minimal change to levels of Pell funding has resulted in a “squeeze” for low-income families. While the university might be able to come close to covering the cost of tuition and fees, they can rarely cover the full cost of attendance. Only High-Serving University has been able to broadly address the issue of cost of attendance and they do it through a series of state and university “Robin-Hood-style” initiatives that transfer aid from paying students to those who cannot pay. The director of financial aid said:

When a student comes to [High-Serving University], they're looking at a financial aid package that is going to cover tuition and fees, room and board, personal expenses, transportation, all expenses, and then books and supplies. That's the core of the cost of attendance.

The vice president for student life said that Low-Serving University is trying to start covering a greater portion of the total bill with donations. But it is often difficult to educate donors about the importance of shifting their dollars away from merit-based scholarship to fund need. Several respondents also commented on the link between debt-aversion among low-income populations and the fact that many Pell recipients take on heavy workloads which, in turn, has a negative impact on academic performance.

Finally, respondents consistently indicated that low-income students face a host of personal challenges that make it difficult for them to succeed in college. This was sometimes framed in terms of sense of belong or imposter syndrome. For example, the director of student success at High-Serving University said:

And so, kind of a little bit of that imposter syndrome starts coming in, and they don't want to come into our area [student success center]. So, for us, we've done a lot of different initiatives and programming to take away the, the, the stigma attached to asking for help.
Respondents frequently addressed personal challenges in the context of the fact that many low-income students are also the first in their family to enter college. This affects every stage of their college-going experience from learning how to complete all the application paperwork to understanding degree requirements. According to both the director of undergraduate admissions and the director of student success at High-Serving University, many of their students have family responsibilities in addition to their studies. These range from caring for younger siblings to working off-campus to help pay household bills. The director of financial aid for High-Serving University noted that educating first-generation families is an important part of helping students and their families navigate the financial aid process.

**IV. WHAT WORKS**

The core themes of access, diversity, policy, and challenges serve as the backdrop for the discussion section of this study. While the three institutions represent different points on the trendline identified in Figure 1, all were consciously working on improving outcomes for low- and middle-income students. While there was some awareness of the fact that increasing access is highly likely to decrease graduation rates, they all had made the commitment to focus on success as demonstrated by the creation of student success centers at all of the institutions. Directors of those success centers were all interviewed. And they, as well as their colleagues, offered a fairly consistent set of insights into how to recruit, retain, and graduate students from low- to middle-income families. Their observations about “what works” focus on the core concepts that emerged from the challenges theme: academic support, financial support, and the need to address the whole person.

**Academic Support**

Student success programs are often largely built around the need to address academic challenges. They include programmatic elements such as tutoring and supplemental instruction. Evaluating the scope of these kinds of core academic support programs is beyond the scope of the current paper, but it important to note that all three schools have these kinds of programs. Several also mentioned other innovative programs such as summer bridge opportunities and early math interventions for students who under-perform in high school.

But beyond these core programs, participants also focused heavily on mentoring as an important element of success for students – particularly when they are the first in their family to attend college. Mentoring might be provided by professional academic coaches, by trained peer mentors, and/or by faculty. But, as the vice president for student life at Low-Serving University noted it is important to coordinate mentoring programs because: “a lot of well-meaning programs assign mentors and some kids end up with six mentors – that’s unmanageable.” But targeted mentoring programs do work, as noted by the director of student success for High-Serving University:

> So in our program that works with STEM students who have tested into Intermediate Algebra workshop, we pair students with a peer educator who came in with the same requirement and can help them with, you know, techniques to be
successful in their math courses, how to successfully move through their first year of their math series.

Financial Support

Because the Pell-eligible population, by definition, has high financial need it is not surprising that financial support programs frequently emerged as being critical to success. The director of student success at Low-Serving University said: “I think as we looked at the total Pell population, looked at the grant and scholarship assistance they're already receiving, we're needing about $3 million to fill the gap of covering their tuition.” The director of financial aid at High-Serving institution provided a fair amount of detail about how financial aid professionals package financial aid and said “the only color I see is green.” Meaning they are not trying to directly address diversity, access, or success. They are just trying to make sure that all students get the financial assistance they need. Again, the details of successful financial aid packaging are beyond the scope of this project, but packages typically include federal and state grants, work-study, secured loans, and a “self-help expectation” that is based on expected family contribution and the student’s ability to work.

Financial aid packaging is usually not enough. Participants from all three schools noted relatively high poverty levels in their states and report that they have started to develop additional programs to address hunger and homelessness. The provost at In-Line University, who had recently moved from a university in another state that was not a land-grant, said:

I feel the poverty. [Her current and previous states] are very much alike. The states’ employment level is similar. The median income for a family of four is similar, but I feel the poverty more in [current state than in previous state]. Therefore I am more concerned about the financial being of the state.

Financial challenges are not unique to Pell-eligible students. The vice president for student life at Low-Serving University said: “I think you’ll find in the United States that middle income family are being squeezed out of being able to afford college.” Several respondents indicated that they have expanded their scholarship programs to provide more assistance to those middle-income families whose students are also somewhat more likely to graduate from college. As state funding becomes scarcer, schools report that they have become more focused on net tuition revenue. A fact that makes it harder to meet the financial needs of low- and middle-income students.

Holistic Approaches

Finally, respondents consistently indicated that students who receive Pell grants are likely to be resilient and resourceful. And they further noted that programs that can address the WHOLE student are most likely to be successful. This begins by knowing the students and the institution. The director of student success at High-Serving University said that institutions need to know their students, understand what works for their population, and stop trying to be like competitors.

We have a totally different student population than those campuses. And so the things that work on those campuses may not necessarily work on ours for our
students. I think once the leadership kind of took a step back and looked they understood that we have high you know, a high Pell-eligible population and a high population of students of color. I think that then gives you the framework of kind of what you need to do, the types of program you need to initiate and implement and even the types of people you need to hire

Several participants indicted that they are using data tools to help them get a better understanding of who those students are. When asked what the biggest challenges are to serving the Pell-receiving population, the vice president for student life at Low-Serving University said:

That's a very interesting question. A variety of issues. Cost is one. Climate, expectations, supporting, being intentional and those last couple costs money. It's staffing, it's being at the right place the right time, being listeners. It's labor intensive, intentional, and you have to have a data collection to make sure the right hand knows what the left hand is doing

Several participants also noted that it is important to coordinate across the many “silos” in the university to make sure that the data are telling the whole story. For example, financial aid systems track satisfactory academic process based on federal Pell grant requirements while advising offices track academic probation based on academic policies set by the faculty of the institution. It is completely possible for a student to receive computer-generated messages from one office telling them they are in “good standing” while another office generates a message telling them they are “on probation.”

Interestingly, several respondents noted that varsity athletes are sometimes the ones who receive the most holistic attention to meeting their financial, academic, and personal well-being needs. They often have highly individualized programs of study and support that enable them to progress academically despite the fact that many begin college with severe academic deficits. However, that kind of individualized attention is costly and not affordable for the majority of students at these land-grant institutions.
V. RECOMMENDATIONS

After reviewing all of the data, one word seems to summarize the findings: balance. These representatives of land-grant institutions would love to find a way to increase both access and success. But as Figure 1 illustrates, it is very hard to maximize both. As access for Pell-eligible students goes up, graduation rates go down.

The schools examined for this case study illustrate the importance of self-knowledge in getting the balance right. Land-grant universities must pay close attention to trends in the percentage of low-income students who are being served. If they don’t they are likely to be rocked by the internal and external pressures to improve success outcomes by creating admissions standards that systematically reduce access for students with financial need. Land grants must also understand the unique nature of the students who attend those universities. If they don’t it is easy to tilt toward developing programs and services that may be “best practices” at elite institutions but that don’t address the unique needs of low-income students. Finally, even though none of these schools indicated that they set specific goals for socioeconomic diversity it is important for land grants to recognize the importance of access to financial resources as a key component of diversity separate from race/ethnicity, gender, and first-generation status. If they don’t directly address this element of diversity they risk losing site of their founding mission.

Land-grant schools are trying to serve their students more holistically by listening to their stories and using data to pinpoint needs. However, one of the best ways to achieve balance is to have more than one anchor point. If schools are teeter-tottering between admissions standards and their access missions, they are likely to fall flat. But if they can place the plank of student success on multiple foundations (e.g., a strong leadership vision, academics, student life, and financial aid) they are more likely to create a balanced pathway that supports a broad range of students from admission to graduation.
REFERENCES


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