

ALL IN

Increasing Degree Completion through
Campus-Wide Engagement



AN ANALYSIS OF
PUBLIC UNIVERSITY STRATEGIES
TO INCREASE RETENTION
& GRADUATION RATES



ASSOCIATION OF
PUBLIC &
LAND-GRANT
UNIVERSITIES

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Introduction

The Association of Public & Land-grant Universities' (APLU) created the Project Degree Completion Award with three primary objectives: (1) reward and bolster the current efforts of public universities that are successfully improving the retention and graduation of students; (2) collect, synthesize, and disseminate effective campus-based models from successful public universities for other institutions to use to increase student retention and graduation; and, (3) mobilize all colleges and universities to prioritize improving student retention and graduation outcomes.

More than 50 institutions from across the U.S. applied for the Project Degree Completion (PDC) Award in 2015 and 2016. Together these applications have provided evidence-supported innovative and promising practices that have demonstrably increased degree completion. Moreover, many of the initiatives submitted through this program have addressed complex retention and completion issues, which required equally complex suites of activities to achieve true change.

The initial success of this program has revealed its potential to expand our understanding of the strategies that APLU-member institutions are using to increase student success on their campuses, the opportunities and challenges institutional leaders encounter in implementing these strategies, and evidence that suggests what works to increase student success. This report provides a synthesis of an analysis conducted on all PDC Award submissions received in 2015 and 2016. The findings of this synthesis are presented in this report to inform institutional leaders and researchers seeking new ideas for how to increase degree completion on their campuses. These conclusions support a set of specific strategies that institutions may consider implementing and provide insight into the institutional conditions that participating institutions found essential for increasing student success and degree completion.



BACKGROUND

The Wider Project Degree Completion Initiative



PHOTO COURTESY OF MONTCLAIR STATE UNIVERSITY

The U.S. no longer leads the world in the percentage of young adults with a college degree. This will become an increasing problem in a global economy in which the better paying jobs migrate to the appropriately educated workforces. Many organizations—in higher education and in the public and private sectors—have taken up the call to address the many barriers to student success in attaining a postsecondary degree.

The majority of students for whom we wish to increase degree completion are now from groups that have been underrepresented and underserved in traditional education: low-income, racial and ethnic minorities, working adults, and first-generation students. Completion rates for these groups are significantly lower than for more “traditional” college students.

In 2012, APLU and the American Association of State Colleges & Universities (AASCU) jointly established Project Degree Completion—an initiative that serves as the four-year public university contribution to the national goal of having 60 percent of working age adults in the U.S. possess a college degree by 2025. Between the two associations’ membership, the presidents of nearly 500 institutions committed to collectively award 3.8 million more bachelor’s degrees by that time. Hallmarks of the initiative include a commitment by participating institutions to “constrain per-student educational expenditures while pursuing enhanced educational quality,” to support student access and diversity, and to undertake efforts to reduce average time to degree. As a part of PDC, these collective institutions will increase the number of college degrees they award from an estimated 14.6 million to 18.4 million between 2012 and 2025.

Seeking to promote institutional support for and understanding of strategies to increase degree completion, APLU created two awards in 2013—the Most Visible Progress (MVP) Trailblazer Award and the MVP Opportunity Award. The MVP Trailblazer award was awarded to institutions that made exceptional progress in increasing overall student retention towards degree completion while the MVP Opportunity Award was awarded to institutions that made exceptional progress in increasing retention towards degree completion for a particular subgroup of students. In 2014, APLU released, *High Tech, High Touch: Campus-Based Strategies for Student Success*, a report based upon the submissions received from the 2013 MVP Awards. The report highlighted emerging promising

practices for increasing student success and a common methodology undertaken for implementation which focused on the use of data. The two MVP awards were combined in 2015 and renamed as the Project Degree Completion Award. This report focuses on the lessons learned since the combination of the two MVP awards into the PDC Award during the two years (2015–2016) when the Lumina Foundation funded the project.

PHOTO COURTESY OF OKLAHOMA STATE UNIVERSITY



FINDINGS



PHOTO COURTESY OF THE UNIVERSITY OF TEXAS AT ARLINGTON

Institutions that applied for the PDC Award in 2015 and 2016 prepared a submission where they reported on the key elements of their completion initiative or program. They provided APLU with a description of their current completion challenge(s) as well as an overview of the strategies used to address the challenge(s). Institutions were also asked to discuss the implementation process, including how institutional buy-in was achieved. Finally, PDC Award submissions included information on the results or impact of the initiative/program, a description of the initiative/program's sustainability, and lessons learned.

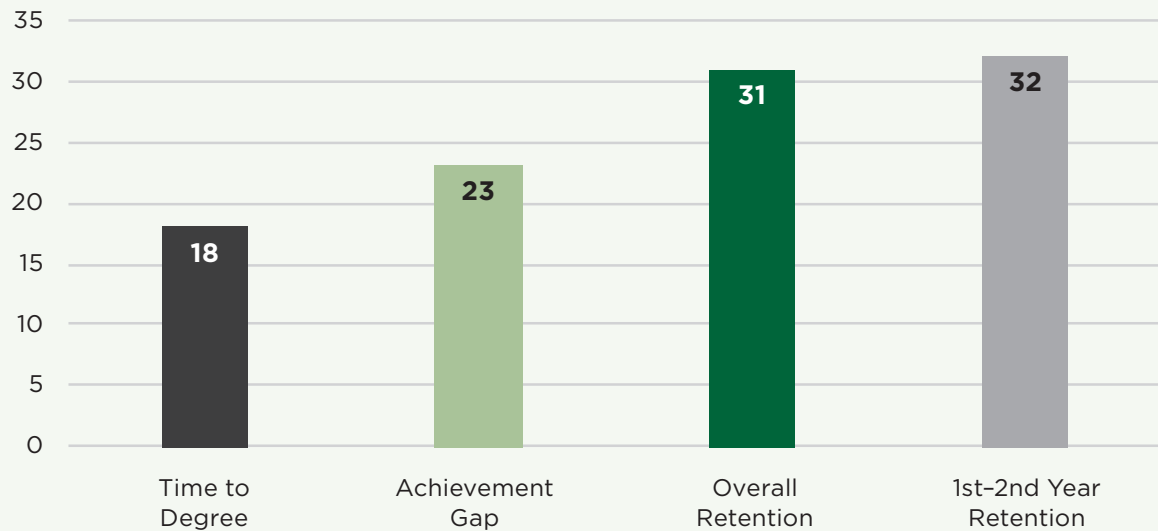
The findings outlined in this section draw from these submissions to broadly discuss trends and themes around (1) the completion challenge that PDC Award institutions were seeking to address and the target student population of their initiative/program; (2) the strategies institutions used to address their completion challenge and the evidence presented to evaluate their results; and (3), the institutional conditions that facilitated the success of the program or initiative.

The Challenges and Targeted Groups

PDC Award applicants represented a broad range of institutional size, mission, selectivity, and geographic area, among other characteristics. Taken together, these factors shaped the completion challenge that the institution needed to address, as well as the population that their initiative or program would target.

Figure 1 identifies the most common challenges that institutions hoped to solve. Most institutions were focused on retention, either overall retention (n=31) or specifically first year to second year retention (n=32). The focus of the majority of applicants on increasing student success in their first-year is indicative of a wider trend within higher education to reduce attrition during the beginning of students' pathway where it is the highest. Economically, these efforts may be seen by institutions as the wisest investment for increased services. Many institutions also focused on narrowing the achievement gap between a specific student subpopulation (e.g., first-generation or underrepresented minority students) and majority students (n=23). Another significant proportion of institutions sought to reduce the time to degree (n=18).

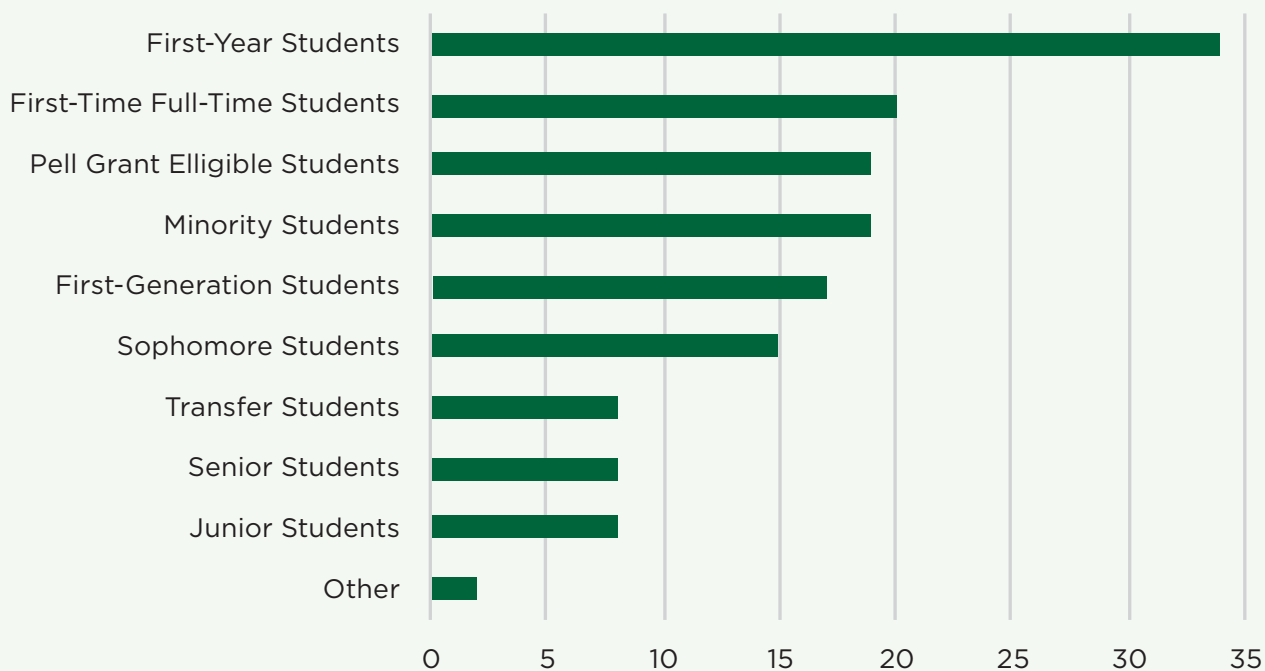
FIGURE 1. Frequency of Challenges Addressed by Submission
Most Common Challenges Addressed



Note: Submissions with multiple targeted audiences were counted in multiple categories.

As previously discussed, completion outcomes are often uneven between students of different backgrounds and identity characteristics. Recognizing this challenge, many PDC Award institutions targeted a specific student population for their completion efforts. Most institutions (n=34) targeted first-year students, and many (n=20) identified that first-time, full-time (FTFT) students would be the aim of their efforts (Figure 2). A significant cluster of institutions also focused the completion programs on student groups traditionally underrepresented or underserved in higher education, including Pell-eligible students, minority students, and first-generation college goers. Fewer institutions focused completion efforts on transfers, seniors, or juniors specifically. These foci are likely related to two mutually reinforcing realities: First, federal data reporting standards—to which many institutions' funding is tied—continue to focus on FTFT students despite the fact that the majority of students enrolled in American higher education are left out of these figures. Second, the bulk of extant educational research on evidence-based strategies to increase degree completion focus on strategies for first-year students.

FIGURE 2. **Frequency of Targeted Populations by PDC Award Applicants**



Note: Submissions with multiple targeted audiences were counted in multiple categories.

Strategies Employed

This section will focus on an analysis of the types of strategies that institutions employed and the results they provided regarding those strategies. To address their completion challenges, PDC Award applicants employed a range of strategies, often in combination with one another. Table 1 provides an overview of the strategies that institutions used, as well as a description of the elements commonly associated with the strategy. The strategies had various impacts on student outcome measures such as improving first to second year retention, narrowing the achievement gap, and increasing overall retention. Institutions also used multiple techniques to discuss their results and determine the results of their efforts.

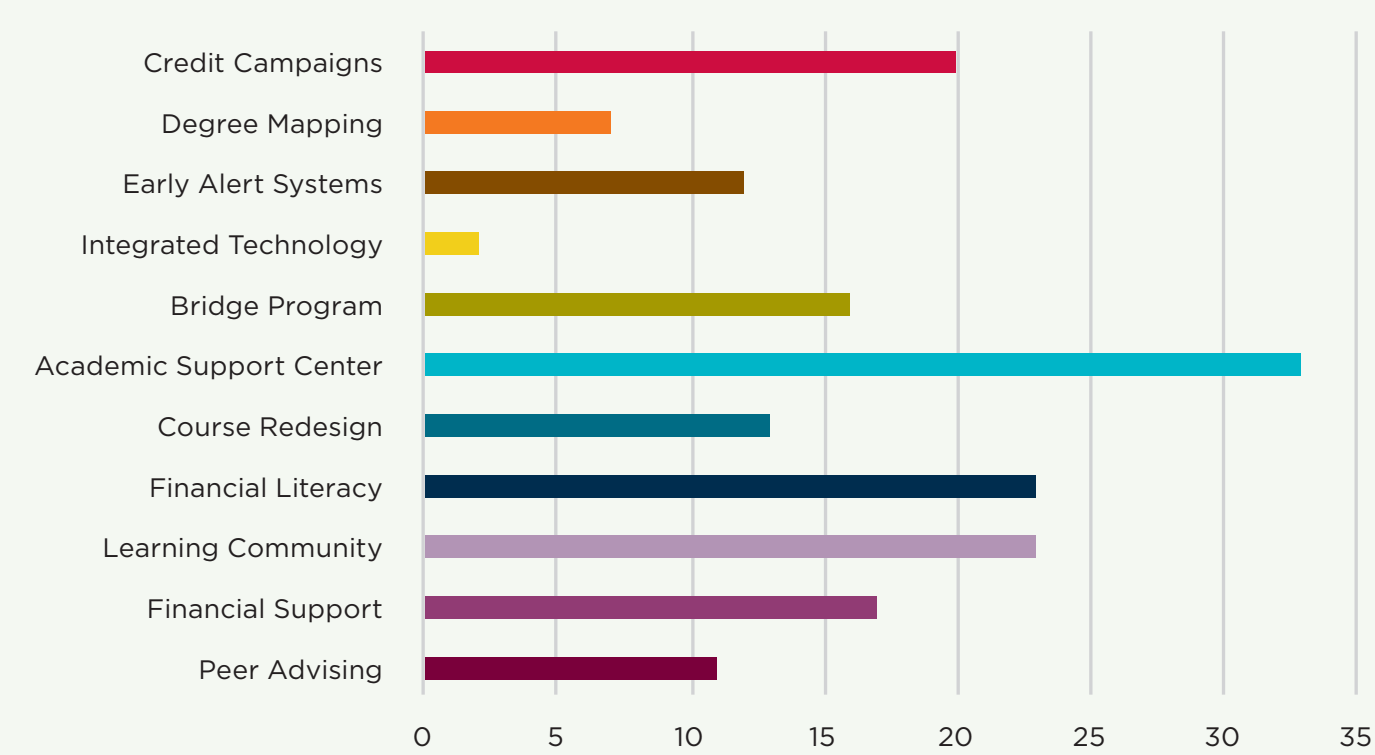
TABLE 1. Strategies Utilized by PDC Award Applicants to Increase Student Completion

STRATEGY	DESCRIPTION
Credit Campaign	Designed to encourage students to maximize their course load with successful management with the goal of 30 credits/year to decrease time to degree. (e.g., Finish in Four; Freshman 15, etc.).
Degree Maps	Used by academic advisors to outline a personalized set of courses required for a particular degree, including suggested sequence and information on when courses are available.
Early Alert Indicators	Use data systems that indicate when a student may be encountering an impediment to their progress either by the use of assigned flags, predictive analytics, or a combination of those elements.
Integrated Technology System	Allows for linked student data to decrease friction within their pathway to degree. This may be tied to an early alert system, but specifically links data from multiple sources for better decision-making and transparency.
Bridge Programs	Assist students between formal transition points in their pathway (e.g., summer bridge programs, transfer bridge programs, disciplinary-specific major bridge programs).
Academic Support Centers	Provide students with a myriad of services that usually include tutoring, life skills, test preparation, writing enhancement, etc.
Course Redesign	Focus on retooling a specific course or set of courses, usually with high DFWI rates, to include pedagogical strategies and academic support structures to increase student success.
Financial Literacy	Institution provided training—online or in-person—covering a range of topics (e.g., student loans, budgeting in and after college, or developing a savings/investment plan).
Learning Communities	Often utilize cohort-style courses (where students take courses together) and often have co-curricular engagements. Sometimes LCs include a residential component (i.e., Living Learning Communities).
Financial Support	Institution-provided additional financial support for students at various points in time. Most commonly these strategies are utilized for students with unmet financial need (e.g., completion grants).
Peer Mentoring	The use of other students to provide valuable mentoring or information sharing with peer (or near peers).
Proactive Advising	Advising from a more student-centered approach with higher-touch practices that proactively reach out to students to provide coaching and advising services.

As can be seen in Figure 3, the majority of applicants (n=33) developed or increased the capacity of their academic support centers in an effort to increase degree completion. This strategy was almost always undertaken in tandem with at least one other strategy. Based on the submissions, support centers typically provided students with access to a variety of services, including tutoring, life skills development, and writing support. Other frequent institutional strategies included creating early alert and integrated technology systems (n=23, respectively), which seek to provide the institution with more insight into when a student may be encountering an impediment to the success. Several institutions also used peer advising (n=20) and degree mapping/course sequencing efforts (n=20) to enhance student completion.

A correlation analysis between the types of challenges addressed by institutional programs and the types of strategies employed suggest that there is a significant ($p = 0.05$; $p = 0.01$) positive relationships for two challenge areas: programs aimed at decreasing achievement gaps were likely to employ *Bridge Programs* ($r = .366^{**}$), *Academic*

FIGURE 3. Frequency of Strategies by PDC Award Applicants



Note: Submissions with strategies were counted in multiple categories.

Support Centers ($r = .340^*$), *Learning Communities* ($r = .325^*$), and *Proactive Advising* ($r = .402^{**}$); and, programs aimed at increasing overall retention for students positive correlated with *Peer Advising* ($r = .320^*$).

Further analysis of the strategies used revealed that two sets of strategies were often used in tandem: *Bridge Programs* and *Learning Communities* ($r = .374^{**}$); and, *Degree Mapping* and *Early Alert Systems* ($r = .362^{**}$). These pairing are unsurprising given their overlapping nature; for example, many early alert systems utilize a degree mapping component. Similarly, many bridge programs employed a suite of mutually reinforcing activities such as academic support, learning communities, and proactive advising. It is unsurprising to see the high correlation between this set of strategies and programs aimed at decreasing achievement gaps. We also examined whether institutions that employed higher numbers of strategies were more likely to have reported outcomes with higher levels of evidence, but found there was no correlation between the number of strategies employed and the level of evidence provided.

Institutions reported a wide range of outcomes data in their PDC Award submissions. For example, some institutions provided retention or graduation rates from before and after the intervention was applied. Others compared the results of the target population (e.g., first-generation students) to another population of students—often, but not always, a comparison group. Still others reported historical trends in retention or graduation rates at the institution over time. Table 2 summarizes the strategies that PDC Award applicants reported to be effective for improving retention and/or graduation rates, based on the level of evidence provided in their application for the award.

For significant level of evidence, we identified strategies where a demonstrated, empirical impact was shown; that is, institutions provided some evidence that the positive outcomes were a result of the strategy used. Examples of significant evidence include: comparison of program participants to non-participants (through statistical matching or a general comparison); large sample sizes; and/or substantial increases in outcome measures such as one-year retention, four-year graduation, or six-year graduation rates over a specified time period.

Sixteen PDC Award institution utilized evidence-based evaluation to report their results. Of those that did, eleven institutions found that academic support centers were linked to increased retention and/or graduation rates for undergraduates. Ten institutions deployed technology-based strategies, such as web applications or linking data systems, to enhance retention and graduation rates. Eight institutions increased the amount of advising available to students, and six institutions used early alert strategies. Five institutions reported creating bridge programs, course redesign, and/or increased financial aid as part of their completion efforts.

Strategies described in the “some level of evidence” column had less robust evidence for their effectiveness. Examples of some level of evidence include: small sample sizes, moderate increases in outcome measures such as one-year retention, four-year graduation, or six-year graduation rates. Of the PDC Award submission, twelve institutions reported results using procedures with some level of evidence.

Strategies described in the “little to no evidence” column had limited evidence, including no sample size reported or little improvement to outcome measures. Most PDC Award submissions were classified in this category primarily because institutions were either in the early stages of implementation or because they had limited data collection on which to base their analysis.

TABLE 2. Degree Completion Strategies Used by PDC Award Applicants by Levels of Evidence

STRATEGY	SIGNIFICANT LEVEL OF EVIDENCE (N=16)	SOME LEVEL OF EVIDENCE (N=12)	LITTLE OR NO EVIDENCE (N=27)
Credit Campaign	3	2	6
Degree Maps	4	5	8
Early Alert Indicators	6	6	12
Integrated Technology System	10	3	13
Bridge Programs	5	1	7
Academic Support Centers	11	8	14
Course Redesign	5	6	5
Financial Literacy	1	0	1
Learning Communities	3	3	6
Financial Support	5	1	6
Peer Mentoring	0	2	5
Proactive Advising	8	4	9

Note: Levels of evidence are applied by researchers given the outcome data provided by the applicants and may not represent the efficacy of the strategy or suite of strategies employed; n=number of applications; and, submissions that listed multiple with strategies were counted in multiple categories.



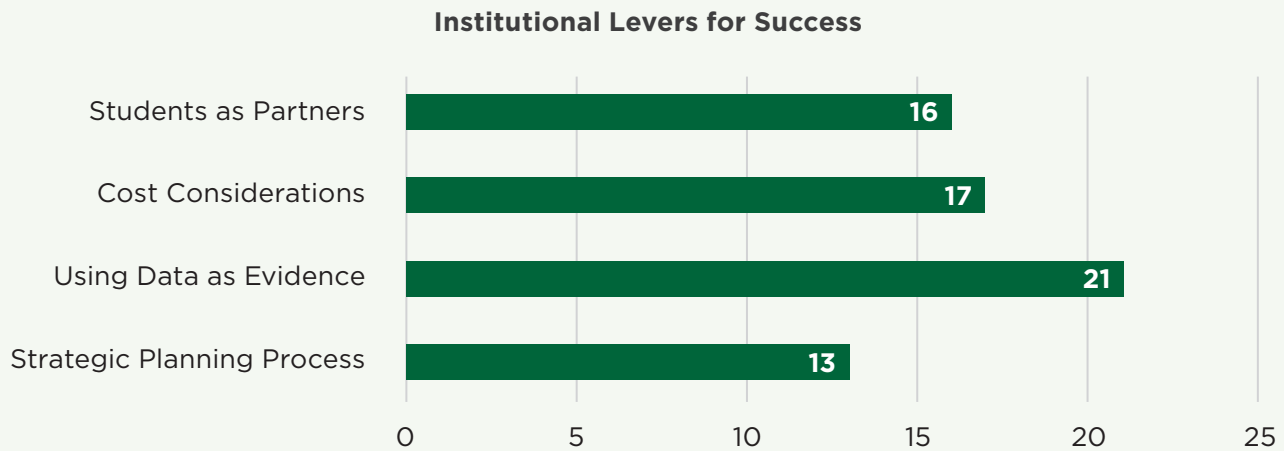
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Institutional Levers for Successful Implementation

While not specifically asked about institutional conditions, four concepts emerged from the data as levers helpful to catalyzing the institutional change or transformation required for student success: *Students as Partners*, *Cost Considerations*, *Using Data as Evidence*, and *Strategic Planning Process*.

The two most common levers, *Using Data as Evidence* (n=21) and *Cost Consideration* (n=17), were often described in tandem by applicants. Applicants that described *Using Data as Evidence* as a lever to affect institutional change emphasized how important it was to gather data about their students' pathways to better understand the structural barriers that were impeding academic progress. Additionally, these institutions discussed how data-informed evidence was essential to debunking myths that different institutional constituents held about students. For example one institution discussed how analysis of transfer student success was used to debunk stereotypes many faculty held about these students' under-preparedness. Similarly, many institutions discussed using *Cost Considerations*, and specifically return on investment data, to motivate investment in

FIGURE 4. **Frequency of Institutional Levers Utilized in PDC Award Applications**



student success initiatives. Typically, this lever was discussed as essential for garnering support from senior institutional leaders who must make difficult decisions about where to invest a finite pool of resources to have the largest effect. Being able to demonstrate short and long-term gains related to initial costs for student success initiatives was described as essential to many initiatives. One institution garnered success by calculating the amount of increased revenue generated by every 1 percentage point increase in their student graduation rate.

The third most common lever discussed, *Students as Partners* (n=16), described the importance of including students in the process of understanding the barriers they face and/ in the process for addressing those barriers. For some institutions, this meant including students as members of advisory boards. For others, this meant conducting focus groups and pilot projects to garner student input. The final lever that emerged from the data was the inclusion of a degree completion objective within an institution's *Strategic Planning Process* (n=13). Such inclusion was discussed as providing the entire campus community a clear signal of the priority of this objective and a specific process whereby degree completion goals and timeline could be worked out.



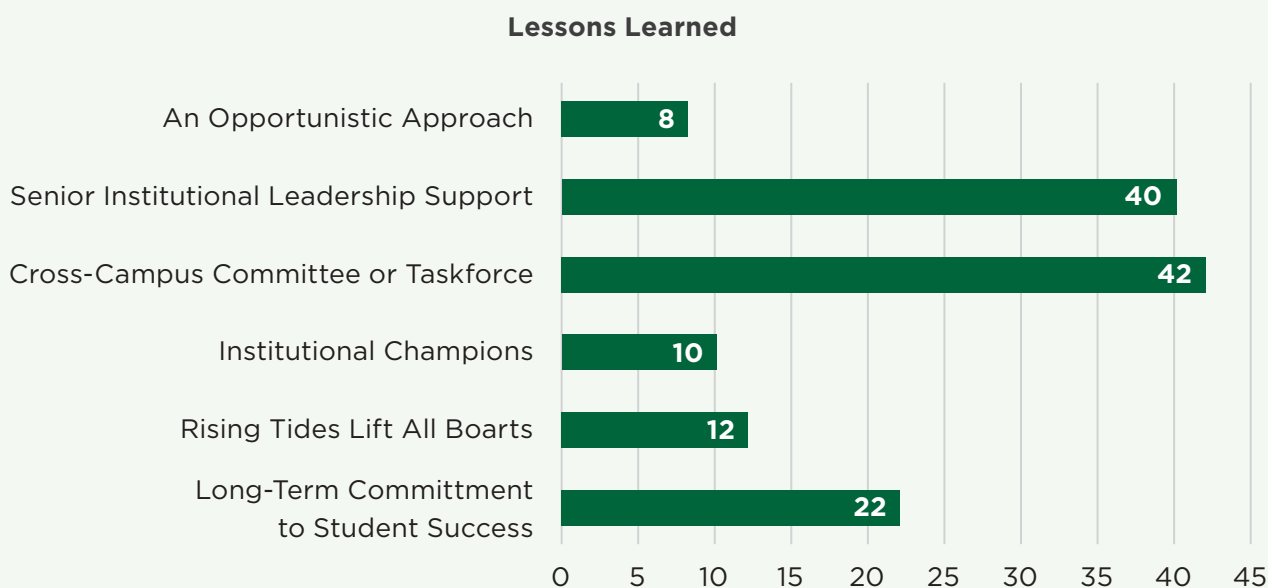
LESSONS LEARNED BY APPLICANTS



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When describing the lessons learned from their efforts to increase degree completion, applicants discussed many varied items related to their individual institutional context. A deeper analysis, however, revealed six emergent themes (Figure 5). The first theme was *An Opportunistic Approach* (n=8) whereby institutional leaders charged with student success efforts sought to deviate from a given plan or approach when an opportunity for institutional change became available. For example, one applicant discussed an opportunity to embark on a degree mapping initiative that arose when their institution was migrating its digital courseware platform. Consistent with the bulk of literature on instructional change, the second theme that emerged was *Senior Institutional Leadership Support* (n=40). The second most prevalent theme, applicants clearly articulated that having deep support and backing from senior institutional leaders, specifically presidents and provosts, were essential to the implementation of student success strategies.

FIGURE 5. **Frequency of Lessons Learned Themes Emerging from PDC Award Applicants**



The most common lesson learned from applicants was the importance of creating a *Cross-Campus Committee or Task Force* (n=42) to address student success. Approximately 82 percent of applicants shared that through their process they learned the vital importance of having representatives across multiple offices to address the complexity of these issues. The committees or taskforces most often included the following offices: Academic Advising, Academic Affairs, Financial Aid, Institutional Research, Information Technology, Faculty Assembly, Registrar, Student Affairs, and Student Leadership. A handful of institutions also described learning about the power of having an *Institutional Champion* (n=10)—usually outside of an office charged with increasing student success—to advocate for cultural change amongst other institutional stakeholders.

Interestingly, the final two themes that emerged from the data regarding lessons learned were more prevalent in applications that were chosen as finalists for the award. *Rising Tides Lift All Boats* (n=12) describes an unintended lesson whereby the implementation of institutions' success strategies resulted in an increase in overall student success, even when the strategy was targeted toward a specific underrepresented group. These institutions often mentioned that being able to describe these results via data was useful in gaining buy-in and support from a variety of stakeholders. The sixth theme, *Long Term Commitment to Student Success* (n=22), describes a reality that many learn while working to increase degree completion—that there is no magic bullet. Increasing student success is a complex problem and requires a long-term commitment to addressing that complexity, especially these strategies must continuously be adapted to meet changes in student characteristics and technological advances.

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SUMMARY & RECOMMENDATIONS



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It is overwhelmingly clear from the Project Degree Completion Award process that many institutions are engaging in serious efforts to increase the retention and degree completion of their students. Moreover, many are doing so with a focus on the most complex problems facing historically underserved groups of students with an eye toward the potential and promise these students hold to address the growing shortfall of a highly educated workforce. As public universities, APLU's membership confirm through these actions their unique missions to serve the public good. As such, these institutional efforts offer wisdom and recommendations for all institutions seeking to increase their students' success.

While the findings of this report provide insight regarding the strategies that a subset of APLU member institutions have engaged to increase student success, the findings also provide a handful of recommendations we encourage leaders to consider regarding the process of institutional change. First it is clear that the majority of institutions that were successful in increasing retention and/or degree completion rates did so by having a strategic plan, specifically for increasing student success. Moreover, the successful creation and implementation of these plans for increasing student success require sustained commitment from senior institutional leaders and collaboration from cross-campus individuals. Each of these three recommendations are inherently supported by the each other.

Finally, the final recommendation explores the areas of institutional capacity building that seem to be foundational to these activities. Many applicants discussed a variety of offices on campus with which they worked that were essential to successfully understand, address, and implement programs that support students on their pathway towards degree completion. However, three areas seemed to form a structural foundation for success: Institutional Research, Information Technologies, and Business Offices. We hypothesize that there are two reasons for this: First, these offices represent three capacities essential for making these programs work. The collaboration of leaders from these offices is necessary for practical reasons (i.e., funding, collecting, storing, and analyzing the data necessary to understand complex issues as well as monitor the effects of implemented strategies). Second, each of these functional areas have subcultures which provide a unique lens to explore complex issues and that taken together provide senior leaders with a power framework to meaningful decisions that are people-oriented and data-driven.



ABOUT THIS STUDY

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The findings and analysis of this report were prepared by a team of researchers at the Association of Public & Land-grant Universities. The analysis was conducted after both award cycles were complete and thus the applications constitute second-hand data. A narrative analysis method was used along with a coding structure to extract types of information from various portions of the applications (Bogden & Biklen, 2007). An *a priori* codebook was constructed by the Principal Investigator (Dr. York), which was then updated and added to throughout the coding process in consultation with the research team.

The research team met to discuss the coding structure prior to beginning the process to increase clarity and consistency of coding and the team independently coded a common application to construct an inter-rater reliability (IRR) score. Krippendorff's (1980) alpha score was chosen for its more conservative interpretation suggesting that definite conclusions should be made for α values above 0.80. The common coding exercise resulted in very high IRR score ($\alpha = 0.91$). Given this very high internal reliability, the research team proceeded in coding the remaining applications independently while regularly consulting with the P.I. when questions arose. Given the emergent nature of the lessons learned and the institutional levers for success, a more common narrative analysis was conducted by the P.I. that included a two-tiered coding structure (open and axial) to identify key concepts.

Participating Institutions

Ball State University†	University at Buffalo*
California State University, Fresno*†	University of California, Irvine*
California State University, Fullerton*†	University of California, Riverside†
Cleveland State University*†	University of Cincinnati*
Delaware State University*	University of Houston†
Indiana University-Purdue University Indianapolis*	University of Maryland†
Kent State University*	University of Maryland Eastern Shore*
Lincoln University*	University of Maryland University College*
Louisiana State University*	University of Massachusetts, Boston*
Michigan State University*†	University of Massachusetts, Lowell*
Middle Tennessee State University*†	University of Memphis†
Missouri University of Science & Technology*	University of Mississippi†
Montana State University*†	University of Northern Texas*
Montclair State University*†	University of South Carolina*
Morgan State University*	University of South Florida*
New Jersey Institute of Technology†	University of Texas at El Paso*
North Carolina A&T State University*†	University of Virginia*
Northern Arizona University*	University of Wyoming†
Purdue University†	Virginia Commonwealth University†
Temple University*	Wayne State University†
The Pennsylvania State University†	West Virginia University†
	Western Michigan University†

*2015 Applicant; †2016 Applicant

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