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BEATING
THE
ODDS

Post-Secondary Success

for Adult, First-Generation and Lower-Income Students

BEATING THE ODDS

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Utah Foundation's mission is to produce objective, thorough and well-reasoned research and analysis that promotes the effective use of public resources, a thriving economy, a well-prepared workforce and a high quality of life for Utahns. Utah Foundation seeks to help decision-makers and citizens understand and address complex issues. Utah Foundation also offers constructive guidance to improve governmental policies, programs and structures.

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INTRODUCTION

The benefits of receiving a post-secondary education are well-attested. These benefits accrue not only to individuals through improved economic prospects, but also to the children of those individuals and the society at large. Successfully engaging high school graduates and getting them to the finish line on certificates and degrees depends in part to tailoring educational strategies to meet their needs.

This report was sparked in response to expected changes to Utah's population and student demographics, as well as the social and economic importance of boosting post-secondary attainment levels. It explores various means of promoting both student retention and completion of certificates and degrees, focusing on subsets of students who have been less likely to attain higher levels of education. These groups include:

- **First-generation students** (those students whose parents do not have colleges degrees), including an increasing population of Hispanic/Latino students who fit that profile.
- **Lower-income students** who might find it more difficult to pay for their education or face other related challenges.
- **Adult students** commencing or participating in education after high school beyond the “traditional” age range who might experience challenges when it comes to retention and completion.

This report looks little at post-secondary enrollment – which will be discussed at length in a subsequent report. Rather, it focuses on retention and completion as intertwined goals that lead to job placement and household wage improvements. Reaching those goals might include stackable credentials, wraparound services, student data analytics and “high-impact practices,” as well as myriad other programs and practices discussed hereafter. The purpose is to inform policymakers, the post-secondary education community and citizens on the range of helpful interventions that are in effect or that may be implemented. This report provides a survey of such interventions, not an endorsement of them.

Utah Foundation performed an extensive literature review and held in-depth interviews with 19 staff, leaders and researchers from 11 public and private institutions in the state, as well as representatives from the Utah System of Higher Education and the former Utah System of Technical Colleges.

BACKGROUND

Utah's population is expanding, and part of the state's success will likely depend on an increasing proportion of residents who obtain certificates and degrees after high school. Educational success can provide the workforce with skilled employees sought by employers.¹ Completion opens up families to higher paying jobs, potentially lowers the likelihood of incarceration, and reduces individuals' and families' reliance on the social safety net.²

Alongside Utah's expansion comes changing demographics.³ But with these changes come the need to provide responsive approaches to access and completion in post-secondary education. This is similar to the national picture, where over the past 20 years, the growth in

The benefits of receiving a post-secondary education are well-attested. These benefits accrue not only to individuals through improved economic prospects, but also to the children of those individuals and the society at large.



KEY FINDINGS OF THIS REPORT

- Utah's population is changing. If the state's post-secondary educational institutions do not respond to those changes, tens of thousands of Utahns may miss out on educational advancement in the coming decades.
- Engaging and re-engaging with adult learners requires a specific set of strategies, such as offering robust child-care services, offering a wider range of online opportunities and providing class credit that is based upon pre-existing experience and course competencies.
- First-generation students – those whose parents have not completed college themselves – can struggle with some of the post-secondary familial advantages that many take for granted. UVU's "I am First" and USU's Aggie First Scholars programs are examples of support-programs that provide a useful bridge for this population.
- In Utah, the state's contribution to need-based financial aid had been virtually nonexistent; that changed to a certain extent with the Utah Promise Scholarship in 2019 – though funding is limited. Based on SLCC and Weber State programs, the state scholarship provides lower-income student with the financial supports they might need, with remaining financial gaps being filled with the help of small emergency grants, and the U of U's novel approach of using income-share agreements.
- Utah's open-enrollment institutions have a particular focus on ensuring that students are prepared for college-level courses. This can include new approaches to engaging and assisting students who need to take remedial courses, but doing so in a way that encourages forward progress. Preparation can also take the form of "Higher Ed 101" courses that are designed to help underprepared students succeed. For example, Dixie State's Trailblazer Connections course is essentially Higher Ed 101 for all new freshman, and the university has a Study Skills and Student Success class that combines Trailblazer support with study skills for students who are enrolled in remedial courses.
- Prior learning assessments that draw on students' experiences and competency-based educational options can make completing education after high school seem more tenable.
- Guidance on particular paths toward post-secondary education completion can help students narrow their focus in a way that keeps them from taking credits that increase the overall cost and lengthen time to completing their degrees.
- Wraparound services ranging from child-care programs to mental health services can be costly, but can often make the difference for continuing and completing education.
- Institutions are working to improve their advising. One newer approach is to more carefully track students, approaching them when institutions believe that the students might need help, instead of expecting the students to reach out with their needs.
- Student data analytics support all of the services described in this report. Examining the return on investment for post-secondary programs can help to ensure that governmental support and tuition is used in the best way possible to meet students' educational goals.

undergraduate students is from the increasing likelihood that students from lower-income families are enrolling.⁴

While the potential for more certificates and degrees is almost certainly a positive thing for individuals, communities and Utah as a whole, there are clear achievement gaps in Utah. For instance, the Utah System of Higher Education (USHE) has estimated that Utah "missed the opportunity for approximately 36,000 additional degrees and awards in its minority population" between 2010 and 2019.⁵ If post-secondary educational institutions fail to attract, enroll and graduate a greater pool of lower-income students, students from certain underrepresented racial and ethnic groups, adult learners, and first-generation students, USHE projects that between 2020 and 2065 about 290,000 Utahns will miss out on degrees and awards.⁶

In order to meet educational needs, many states have specific goals set out for their higher education systems. An important metric that over 40 states are tracking is post-secondary educational attainment. Nationally, attainment rates have gone up by about 5.1 percentage points, but it is difficult to tie that increase to state programs or other factors.⁷

There is evidence to suggest that many states will have trouble meeting their goals.⁸

The Utah Legislature’s Education Interim Committee chairs have developed statewide goals and metrics for all levels of education in the state, aiming to increase “education achievement and attainment for every learner at each level of the education system.”⁹ The goals for education after high school are divided between those for individuals and those for the state as a whole. These goals are matched with indicators, metrics and the institution in charge of measuring progress toward each goal.¹⁰ The goals were created in order to serve the mission set forth by the committee, which is: “Utah invests in long-term prosperity for our residents by enriching the life experiences, civic engagement, and career opportunities for all by providing a robust and innovative quality education from early childhood through adulthood.”¹¹

WHICH STUDENTS ARE THE FOCUS OF THIS REPORT?

Generally, the public may perceive the following profile for post-secondary students: They enroll in college within one year of completing high school; they are not parents; they are attending college full-time; and they are financially dependent on their parents (thus not having to work at all or working very little).¹² Further, it is often assumed that their parents are generally middle-income or above.

This does not match reality for many college students or other post-secondary students, such as those seeking certificates. Approximately 31% of college students are below the federal poverty line, 37% are over 25 years of age, and 64% are also employed.¹³ Between 1996 and 2016, the national percentage of dependent students (those who are dependent upon their parents’ incomes) in poverty increased from 12% to 20% and the percentage of independent students in poverty increased from 29% to 42%.¹⁴ Further, over the same period, the national percentage of undergraduate students from underrepresented races and ethnicities increased by 19% at community colleges and public four-year colleges, and 10% at private nonprofit four-year colleges.¹⁵

Utah is expected to see upwards of 43,000 additional students in the next 10 years, or an increase of about one-third the student population.¹⁶ The median age is expected to continue to rise, and the school-age and college populations will also increase, but become a smaller share of the total population and more ethnically diverse.¹⁷

ADULT LEARNERS

Adult learners, in the case of post-secondary education, are often classified as being over 24 years of age. This means that they either did not start their post-secondary education directly after high school, or they have taken more than the four-to-six years that most students need to complete their degrees.



UTAH INSTITUTIONS

This report provides an inventory and analysis of programs and practices which focus on the following Utah institutions.

Utah System of Higher Education:

- Community colleges
 - Salt Lake Community College (SLCC)
 - Snow College
- Regional universities
 - Dixie State University
 - Southern Utah University (SUU)
 - Utah Valley University (UVU)
 - Weber State University
- Research universities
 - Utah State University (USU)
 - University of Utah (U of U)
- Technical colleges
 - Bridgerland Technical College
 - Davis Technical College
 - Dixie Technical College
 - Mountainland Technical College
 - Ogden-Weber Technical College
 - Southwest Technical College
 - Tooele Technical College
 - Uintah Basin Technical College

Utah nonprofit institutions:

- Brigham Young University (BYU)
- Ensign College (formerly LDS Business College)
- Western Governors University (WGU)
- Westminster College



RACIAL AND ETHNIC GAPS

There are significant gaps in post-secondary enrollment and completion among Utah’s racial and ethnic groups.¹⁸ As a result, thousands of students are forgoing their education each year, and this is expected to increase in number and in the proportion of Utah’s students as the population continues to transform.

This gap is due to a variety of challenges that might not be shared by the student population at large. While challenges specific to racial and ethnic students as subgroups exist, this report does not examine the issue directly, but does so more indirectly. For example, there is some correlation between poverty and race and ethnicity. In fact, Utahns of all races and ethnicities, except non-Hispanic white Utahns, are over-represented for those under 200% of the federal poverty line. (See Figure 1.)

There is some research that suggests that poverty has a much stronger role to play in K-12 performance than race and ethnicity, which then carries over past high school.¹⁹ This report focuses more attention to interventions related to poverty directly.

Many institutions have targeted programs to benefit specific racial or ethnic populations, particularly in that they benefit populations that are more likely to have lower incomes and larger proportions of students who are first generation. For instance, UVU launched an initiative to engage a racially and ethnic diverse set of students and their families – and the results are promising. In 2010, UVU’s proportion of Hispanic/Latino students was only about two-thirds’ of the counties’ proportion, but by 2018, its proportion mirrored the county.

A non-white Utahn is more likely to fall into the lower-income category.

Figure 1: Race and Ethnicity of Population Under and Over 200% of Poverty, Utah

	Under 200%	Over 200%
Race		
White	80%	88%
Black/African American	2%	1%
American Indian	2%	1%
Asian or Pacific Islander	3%	3%
Other	9%	4%
More than one major race	4%	3%
Ethnicity		
Not Hispanic/Latino	78%	89%
Hispanic/Latino	23%	11%

Source: IPUMS USA, University of Minnesota, www.ipums.org.

Adult learners often hold other obligations in their lives, such as family. This is particularly the case in Utah, as Utahns enrolled in undergraduate programs are far more likely to be married than their counterparts nationwide. (See Figure 2.) Research has shown that being married can make it harder to adjust to the demands of higher education.²⁰

Some adult learners have more than their own education to worry about. Nationally, there are about 5 million people who work double-duty as both students and parents.²¹ Utah students are slightly more likely than their national peers to have children.²² (See Figure 3.) Some colleges are providing support for these students, though it is not necessarily the norm, and nationally the percentage of community colleges providing these services – such as child care – has decreased.²³ In 2019, child-care expenses in Utah were \$6,797 per year per child.²⁴ This is an extra strain on post-secondary students and their families; family finances cause more than half of student-parents to drop out within six years.²⁵ Post-secondary education would be even more trying for single parents. These parents are also often in poverty – particularly single mothers.²⁶

Utah students are far more likely to be married than are their peers nationwide.

Figure 2: Marital Status of Student Enrolled in Undergraduate Education, 2018

	Utah	US
Married	35%	21%
Widowed	0%	1%
Divorced	3%	4%
Separated	0%	1%
Never married and/or under 15 years old	61%	74%

Source: U.S. Census Bureau, American Community Survey, PUMS. Utah Foundation calculations.

Furthermore, older students are more likely to have jobs. Their work, with the other obligations they may be juggling, often push them to attend school

part time, making them more likely to leave college.²⁷ This is in large part a matter of duration; the longer it takes to work toward a degree, the lower the chance of completion.²⁸

Adult Learner Interventions

Institutions can help reduce the barriers to completion faced by adult learners with increased schedule flexibility, alternative course methods, off-campus resources, child-care assistance, targeted scholarships and resources to meet prerequisite knowledge.²⁹

Dixie State, USU and UVU are participating in the Degrees When Due campaign, which aims to “re-engage with adult learners”³⁰ by targeting students who have some college experience but did not complete their degrees. The U of U and UVU also have programs for students who are not currently attending but have less than a year to finish their bachelor’s degrees.³¹ In addition, UVU reached out to students with some college but no degree through a peer-to-peer program. With the focus on how to get former students back to school, UVU extends support, including some scholarships. It has re-enrolled more than 2,000 students since 2017, more than 400 of which have completed so far.

One of the ways Salt Lake Community College has been addressing concerns from its adult students is by creating ways to support parents as students. SLCC has implemented child-care programs at its two largest campuses. It provides expanded child-care services from 7 a.m. till 10 p.m. to accommodate class schedules. While it does not have child-care facilities at all 10 campus locations, it offers a voucher program that can provide financial assistance to parents at approved child-care locations. While parents still have to pay some portion of the child-care expenses, SLCC is able to charge child-care rates on a sliding scale based on family size and income.³² This program does have some strict provisions, such as being eligible for federal support and having the child currently enrolled at a licensed care facility, but it can provide up to \$700 a month to ease the cost for student parents.³³ Many other institutions offer child-care services as well. For instance, UVU offers robust child-care services through its Wee Care Center.

Online education can provide the flexibility that many adult learners might need. UVU finds that a mix of face-to-face and online learning is often better for adults than strictly one or the other. However, by expanding online undergraduate programs, the university hopes to increase the number of students completing their degrees.³⁴ In addition, as part of UVU’s Vision 2030 plan, a task force is developing strategies for engaging and serving students over 25.

Davis Tech’s average age is 26. The school focuses on removing barriers for this population. One such barrier is the academic one. Davis Tech has employed curricula adjustments meant to retain students; the cyber security and nursing programs have academic pre-requisite requirements to begin, but Davis Tech integrates these into the programs as a way of lowering entry barriers. For instance, math is integrated into the program to help retain students that might otherwise find a typical math class unsurmountable – particularly for students who may not have taken math classes since high school.

In addition, prior learning assessments that draw on adults’ experiences and competency-based educational options that can provide any needed flexibility (see the related section later in this report) are important for many groups of students, but may be of particular interest and use to adult learners.

Utah students are more likely to have children than are their peers nationwide.

Figure 3: Parental Status of Student Enrolled in Undergraduate Education, 2018

	Utah	US
With related children under 5 years only	8%	6%
With related children 5 to 17 years only	8%	8%
No related children	84%	86%

Source: U.S. Census Bureau, American Community Survey, PUMS. Utah Foundation calculations.

FIRST-GENERATION STUDENTS

Though the definition of a first-generation student is flexible, it generally signifies students who are the first in their immediate family to attend a higher education institution. Nationally, the student population who could be defined as “first generation” could range from 22% (counted when neither parent has attended any form of higher education) to 77% (counted unless both parents have a bachelor’s degree).³⁵ USHE and numerous Utah institutions define first-generation as any student whose parents did not complete a four-year degree.

While definitions and family scenarios vary, the effects of being first generation manifest themselves in many ways regardless of which definition is used. First-generation students are 16-20% less likely to take the SAT or ACT, 13-19% less likely apply to college, and 19-24% less likely to enroll in college.³⁶ In addition, first generation students are 8.5 times more likely to drop out than students with a college-graduate parent.³⁷ These differences may be due to within-family cultural expectations around post-secondary education, along with other factors.³⁸

This could indicate that parental involvement in the college application process is important to lowering barriers. However, parents may not know what questions to ask about schooling or relationships on campus, and may feel like they are unable to support their children.

First-Generation Student Interventions

First-generation students are often in an environment with few resources to help them prepare for their post-secondary education. Solutions orient around encouraging parental involvement, special transition courses or boot-camps, mentor programs, clear informational programs and targeted financial assistance.

While “traditional” college students are, categorically, seen as dependent on their families but living on their own, first-generation students often have, and would like to maintain, a strong connection with their family unit. While it may only be the student attending the courses, “it’s a family event.”³⁹ One suggestion aims to get students and parents in alignment with students’ education plans. They construct a plan together, including moving to campus, setting class schedules, and more, to help both students and parents feel prepared.⁴⁰

Though having parental support is important for students, there is much for which the parents of first-generation students cannot prepare their children. In these cases, neither parents nor students have necessarily had the experience writing a 10-page paper or studying for difficult exams, so it is difficult for students to know what to expect. Further, students may simply not have the exposure to the terminology to make the step toward post-secondary education. The University of Georgia produced a handbook “using simple and clear English” which it mails to incoming first-generation freshmen, which is also available in a variety of languages. This, in addition to a glossary of terms and acronyms, aims to help students and parents to better understand and navigate the college process and financial aid. Once a student is accepted, the Academic Success Program in the Dallas-Fort Worth area runs a week-long boot camp that holds small group discussions and one-on-one meetings to help students navigate their transition to college.⁴¹ They discuss more than just academics, ranging through topics like dealing with homesickness, finding cheap textbooks, and locating resources for when they are struggling. Other colleges, such as Menlo College in Atherton, California, have involved faculty members in the process, having each full-time professor mentor a small group of freshmen.⁴²

Much work is being done to help engage first-generation students in Utah. USHE created a pilot program called StepUP Ambassadors which offered \$1,000 scholarship to 20 students, 70% of whom are first-generation students.⁴³ The ambassadors are in Utah County and the Granite, Salt Lake, Nebo and Ogden school districts serving as near-peer mentors in high schools.

UVU has started a robust program for first-generation students called “I Am First.” This program offers support services, mentorship, networking opportunities, and more. The program is currently working to get more faculty engagement and normalize first-generation students connecting with faculty outside of the classroom.⁴⁴

USU has developed a program called Aggie First Scholars that has a mentorship component with leadership opportunities for first-generation students.⁴⁵ The program aims to

“to foster belonging, give access and create strong communities.”⁴⁶ It has grown from 22 mentees to 330 mentees, and from 10 mentors to 86, in addition to paid staff.⁴⁷ This program does not offer a direct scholarship, but instead provides students with informational support, including helping students find and apply for scholarships.

At Dixie State, nearly half of incoming students are first generation. It and other institutions are working to build cohorts devoted to creating communities that cater to students beyond those who are first generation. The idea is to give them the opportunity to move together through their freshman year and beyond to help provide the collective experience that can foster academic retention.



MIGUEL'S STORY: A FIRST-HAND, FIRST-GEN ACCOUNT

“From the very beginning, my undergraduate experience required me to take a piecemeal approach at acquiring the information that I would ultimately need to make sense of the system of higher education. I was unsure what my next step would be after high school apart from getting a full-time job, since no one in my family had received a college education. For me, going to college was not an eventual next step like it seemed to be for many of my peers. My family and I didn't discuss plans for me to attend, or what was needed to get accepted or be successful in college. The only direction I received from my high school guidance counselor was him asking me if I planned on going to college and him handing me an application to a community college in my town. At the time, I didn't know what I didn't know, and I wasn't sure of the questions to ask. As monolingual Spanish speakers, my parents would get a translation of informational material from me, and we were often left knowing what the words said but not understanding what they meant. We had no context for terminology and the processes of higher education, like admissions, the application process, and financial aid.

By a stroke of luck and timing, my mother met a college student that was working part-time as an interpreter at a rehab clinic she was attending. When my mother told her that I would be graduating high school soon, with no plans of attending college, she mentioned a contact she knew at an educational opportunity center where they could assist me. After meeting the staff at the education center, the staff helped me fill out school applications and FAFSA (The Free Application for Federal Student Aid), but didn't explain how all the pieces fit together, since it was their priority to get me into a school but not necessarily to explain to me the nuts and bolts of it all. Initially, I didn't know how FASFA or the universal scholarship application at the university would impact me, I just knew it was something that I needed to complete. The university orientation I received focused on the college life and what to expect socially and academically, but little information on how FASFA or scholarship funds would be used to directly pay for tuition or books. Initially, my concept of paying for school involved paying for an application to apply, but I was unaware that there were semester tuition bills that would come due. I was also unaware that the books that we would use would have to be bought or rented. My only reference to education was public K-12, so I believed that college would be additional school based on the same system.

There was a degree of isolation I felt because I noticed that no one else was asking questions like the ones I had. My personal network did not have many people that had attended college, which made reaching out to people around me for assistance difficult. There was the intimidation of not knowing basic information, like the way tuition is based off credit hours, the fees associated with attendance, and how parts of the award package could be accepted or declined. The university had offices where these questions could have been asked, but it was difficult for me to establish trust with the college staff. I felt it was difficult to approach staff and explain to them that I didn't know what most people knew about the process, and I might need additional explanation. After the first semester, I was able to pick up a lot of the information that I needed from different friends and reading available resources.

Every so often, I come across students in my community thinking of going to college that have many of the same questions that I had as a first-generation college student. Some are unaware of the options to go out of state, programs of study or financial assistance available. The people I have talked to often share the same reluctance to approach university staff with questions or concerns due to the perception of school administration being impersonal and not being willing to spend the time needed to explain the process at their level, and meet students where they are at. What I would have benefited from greatly would have been someone telling me that I would be dealing with a different system that neither I nor anyone in my family had dealt with before and that there would be a lot for me to digest. It would have been useful to have someone acknowledge that my confusion was normal and part of the process.”

- Miguel is a former Utah Foundation intern.

LOWER-INCOME STUDENTS

Nationally, lower-income students are less likely to enroll in college, even if they have the same standardized scores as higher-income students. Moreover, higher-income students with below-average math scores are more likely to complete college degrees than the lower-income students with above-average math scores.⁴⁸ This may be true in Utah as well.

Lower-income Utahns are far less likely to have a bachelor's or graduate degree.

Figure 4: Educational Attainment, Age 25 and Over, Utah

	Under 200%	Over 200%
High school graduate or less schooling	52%	34%
Some college or associate degree	27%	27%
Bachelor's degree	16%	25%
Graduate degree	6%	14%

Source: IPUMS USA, University of Minnesota, www.ipums.org.

While upfront tuition expenses can pose a significant hurdle, lower-income students struggle with other financial barriers such as fees, other charges and housing costs.⁴⁹ Many students do not know they are eligible for assistance or do not know how to access it. One study found that while 18% of students meet the eligibility requirements for food assistance (SNAP), only 3% actually make use of these services, leaving many needs unmet.⁵⁰ Other students may struggle with time pressures because they cannot afford a college meal plan or a car, forcing them to invest more time in transit, biking or walking. The inability to overcome these obstacles may inhibit their social mobility, promoting intergenerational poverty. Educational attainment tends to correlate closely with income. (See Figure 4.)

There are additional obstacles facing many of the 35 million Americans with some college but no degree; Utah nearly tops the states with the proportion of its population with some college but no degree.⁵¹ Many students – and prospective students looking to re-enter post-secondary education – find that they cannot register for classes due to money owed for previous classes, fees or otherwise.

Lower-Income Student Interventions

Interventions for lower-income students are primarily focused on finding ways to ease financial burdens. These interventions primarily focus on improving the federal student aid application process, making loans, grants and scholarships more comparable, creating income share agreements and providing funds to cover gaps outside of tuition. This aid helps lower a significant barrier for some students. Furthermore, financial aid has been shown to decrease the overall working time of students during their college careers, resulting in better educational outcomes.⁵²

Federal Aid. Students who are from lower-income households are often in need of funding for their post-secondary education. The federal government helps provide that support in the form of grants, loans and work study jobs. The Free Application for Federal Student Aid (FAFSA), the most ubiquitous financial aid assessment program, is often a gateway to receiving those funds. Lower-income students need to fill out the FAFSA application to be eligible for the Pell Grant, the Federal Supplemental Educational Opportunity Grants, Stafford Loans and other financial aid. Yet many students do not complete the application.

Nationally, half of high school seniors do not complete the FAFSA, forgoing approximately \$24 billion in potential financial aid in 2018-2019.⁵³ Utah ranked second-to-last in terms of the percentage of high school graduates that completed the FAFSA.⁵⁴ For the 2018-19 academic year, Utah students left more than \$55 million unclaimed – with only 36% of Utah's high school seniors completing the FAFSA.⁵⁵

Of those who do apply for federal aid, about one-third are required to undergo a verification process and submit additional documentation before they can receive their aid. If they do not complete these extra steps, they will not receive their financial aid; and failure to complete verification blocks as many as 20% from receiving Pell Grants.⁵⁶ This affects lower-income students disproportionately – about half of those who apply. In response, some organizations are working on explaining and promoting the process to students and families.⁵⁷ At the state policy level, meanwhile, Texas has decided to mandate that grad-



FEDERAL AID

Federal post-secondary need-based aid comes in the form of grants, loans and work study funding. The key programs are as follows:

Pell Grant: These are need-based grants for students with the greatest financial need as determined by the FAFSA. These do not need to be repaid unless a student withdraws from school before the end of a semester. The maximum award amount varies per year; during the 2020-2021 year the maximum award is \$6,345.

Federal Supplemental Educational Opportunity Grant: These grants are available to undergraduate students with exceptional financial need. Students receive up to \$4,000 based on their determined need.

Stafford Loan Program: This program provides federally subsidized loans to students with financial need. These are low-interest loans with a 10-year maximum repayment period. The subsidized loan is one where the federal government pays the students' interest until graduation. Perkins loans fall under a similar program, but are not based on need, and students are provided funds from the institutions themselves instead of the federal government.

The Federal Work Study Program: This program provides jobs to students who are eligible for financial aid. Students work part-time on campus – or off campus – under this program. Their employers pay a portion of their wages and program funds pay the remaining amount.

uating high school seniors apply for the FAFSA.⁵⁸ Louisiana and Illinois also require the FAFSA for graduation; states provide some waivers to their mandates, such as for students and their families who are undocumented.

Some find that the FAFSA does not capture an accurate picture of students' financial situations and does not reflect the need for a financial safety net when challenges arise.⁵⁹ Bunker Hill Community College in Boston ran a needs analysis on its student population, finding that unmet financial needs totaled roughly \$5,000 per student.⁶⁰ It suggested tying the Federal Pell Grant award amounts to inflation and also factoring in basic needs.⁶¹

Another issue with grants and loans can be the financial aid letters themselves. There is no standardization in aid letters, so when students are presented with multiple aid letters from multiple universities, it can be difficult to compare options.⁶² Further, these letters are often confusing, with jargon and numbers that may not make sense to recipients. Moreover, many schools do not provide a bottom line on how much it will cost to attend the school, only what the student was offered for aid, lumping all of the aid together, including loans, work study and other options.⁶³ This can make the benefit package appear quite desirable, when really it might be mostly loans or only a fraction of the price of attendance. One study showed that colleges referred to loans in 136 different ways in their financial aid letters. Some colleges did not even use the word "loan," instead referring to loans as "Fed Dir Unsub" or just plain "Unsubsidized."⁶⁴ These factors make it almost impossible for many parents and students to understand what they need to pay and what their best options are to pay it.⁶⁵

State Scholarships and Tuition Waivers. Utahns have the lowest student debt in the nation,⁶⁶ and enjoy low tuition and fees.⁶⁷ However, for lower-income students, tuition and fees may still be too high, and federal aid may not be enough to make post-secondary education affordable. To help cover the gaps, there are state options available.

In Utah, the state's contribution to need-based financial aid used to be nearly nonexistent, at just \$11 per student in 2017-18).⁶⁸ That changed to some extent with the Utah Promise Scholarship.⁶⁹ It is available to recent high school graduates and adult learners at Utah's public colleges and universities, as well as Utah's public technical colleges. The Utah Promise Scholarship can cover tuition and fees for up to two years, though the program has a limited amount of funding. The scholarship is patterned after Dream Weber⁷⁰ and SLCC Promise⁷¹ in accordance with HB 260, Access Utah Promise Scholarship, passed in 2019.⁷²

The Dream Weber program at Weber State and the SLCC Promise program combine federal aid with state tuition waivers. These programs have supported thousands of students. Since the fall 2016, SLCC has provided \$3 million to 2,500 students. The program is



UTAH SCHOLARSHIP PROGRAMS

Utah now offers five scholarship opportunities, two of which are targeted toward students based upon their financial needs and one focuses on first-generation students.

The Utah Promise Scholarship

- Eligible students must meet the following criteria:
 - Have a high school diploma or equivalent.
 - Not have previously earned an associate degree or higher postsecondary degree.
 - Be a resident of the State of Utah .
 - Demonstrate financial need.
 - Maintain academic good standing as defined by the institution at which they attend.
- Scholarship Duration: Which ever condition is met first from the following:
 - Two years after the initial award.
 - A recipient uses the scholarship for four semesters.
 - A recipient meets the academic qualifications for an associate degree; or
 - For USHE institutions that do not offer an associate degree, a recipient earns a cumulative total of 60 credits.
- Institutions are required to have their own methods of processing applications and determining financial eligibility.

Career and Technical Education Scholarship Program*

- Scholarship criteria:
 - An eligible institution may award a scholarship to an individual who is enrolled in, or intends to enroll in, a high demand program.
 - An eligible institution may award a scholarship for an amount of money up to the total cost of tuition, fees, and required textbooks for the high demand program in which the scholarship recipient is enrolled or intends to enroll.
 - An eligible institution may award a scholarship to a scholarship recipient for up to two academic years.
 - An eligible institution may cancel a scholarship if the scholarship recipient does not: maintain enrollment in the eligible institution on at least a half time basis, as determined by the eligible institution; or make satisfactory progress toward the completion of a certificate.

Regent's Scholarship

- Academic Requirements:
 - Take the required classes in grades 9-12 (see pages 4-8).
 - Earn at least a 3.3 cumulative high school GPA.
 - Earn at least a composite score of 22 on the ACT.
 - Graduate from a Utah high school.
 - Meet college enrollment or deferment requirements.
- Non-Academic Requirements:
 - Fill out the FAFSA (Free Application for Federal Student Aid).
 - Meet all deadlines.
 - Be a US citizen or a non-citizen eligible for federal financial aid.
- Scholarship Duration:
 - The Regents' Scholarship can be used at an eligible Utah College or University for up to 4 semesters (or two years at an approved technical college) and must be used within 5 years from the date of high school graduation. Scholarship funds can be used towards tuition and fees.

(CONTINUED ON NEXT PAGE.)

UTAH SCHOLARSHIP PROGRAMS CONTINUED

New Century Scholarship

- Academic Requirements:
 - Graduate from a Utah high school with a minimum 3.5 cumulative GPA.
 - Earn a 3.0 cumulative college grade point average.
 - Home-schooled students and students who complete high school through an online school must take the ACT exam by June 15 of the year their peer group graduates from high school and earn a minimum composite score of 26.
 - Enroll in and successfully complete 12 credit hours the fall semester after high school graduation at an eligible college or university, maintaining a 3.3 semester GPA or obtain an approved deferment.
 - Complete either Associate Degree Track or Math and Science Curriculum Track.
- Non-Academic Requirements:
 - Fill out the FAFSA (Free Application for Federal Student Aid).
 - Be a United States citizen.
- Scholarship Duration:
 - The New Century Scholarship can be used at an eligible Utah College or University for up to 4 semesters. Scholarship funds can be used towards tuition and fees.

T. H. Bell Education Scholarship

- Intended for those seeking a teaching profession in Utah. Aims to recruit first-generation students into teaching.
- Requirements:
 - Undergraduate and graduate students who meet required academic standards, are enrolled in at least six credits, intend to apply to and complete an approved program, and intend to work in a Utah public school are eligible to apply.
 - Scholarship priority: (1) first-generation students who intend to work in any teaching field or licensure area; (2) students who are not first-generation, but intend to work in a teaching field or licensure area where there is high need; (3) other students who meet the requirements of the scholarship.
- Scholarship Duration:
 - T.H. Bell Scholarships may be for up to the cost of resident tuition, fees, and books, and may be received for up to four consecutive year.

* Available at SLCC, USU Eastern and Snow College.

Sources:

- Dave Buhler, *Adoption of Policy R620, Access Utah Promise Scholarship Memorandum, May 8, 2019*, https://ushe.edu/wp-content/uploads/pdf/agendas/20190517/TABA_2019-05-17.pdf.
- H.B. 260 *Access Utah Promise Scholarship Program*, <https://le.utah.gov/~2019/bills/static/HB0260.html>.
- Utah System of Higher Education. *R622, Career and Technical Education Scholarship Program*, <https://ushe.edu/ushe-policies/r622-career-and-technical-education-scholarship-program/>.
- Utah System of Higher Education. *Regents' Scholarship Rules and Requirements for 2021 Graduates*, <https://ushe.edu/state-scholarships-aid/regents-scholarship/regents-future-applicants/>.
- Utah System of Higher Education, *New Century Scholarship 2021 Rules and Requirements*, <https://ushe.edu/state-scholarships-aid/new-century-scholarship-landing/new-century-future-applicants/>.
- Utah System of Higher Education, *State Aid Programs*, <https://ushe.edu/initiatives/state-aid-programs/>.

currently available only for full-time students. However, SLCC has gotten feedback that 12 hours is not possible for some students – particularly adult learners. In response, SLCC changed the program beginning the 2020-2021 school year to roll the minimum for eligibility down to 9 hours.

Similarly, UVU is currently reformatting and rebranding its Promise-type program. The new version will not only provide Pell Grant gap support, but also assist students who need preparation support for first-year English and math. Additionally, UVU provides some form of grant/scholarship aid to 46% of its students. The aid often covers more than just tuition, helping with books and housing.

Further, all 16 Utah System of Higher Education institutions, except the U of U, offer the state’s Career and Technical Education Scholarship Program awards.⁷³ The awards range from \$500 per semester to full tuition for technical education programs.⁷⁴

However, there is no system-wide approach to assisting lower-income students. For instance, while each institution may waive up to 10% of student tuition, the state does not provide guidance on what proportion of these tuition waivers should be need-based.

BYU provides need-based Alumni Replenishment Grants. To receive the grant, students that demonstrate a financial need apply with an essay – though no FAFSA application is required. Once recipients graduate and are able, they are encouraged to replenish the fund through donations.

Micro and Emergency Grants. Another option to cover school-related expenses is using micro-grants, which allow up to \$2,000 for students who are at least three-quarters of the way through their degrees. Congress has permitted students to use micro-grants without jeopardizing their future state or federal aid eligibility.⁷⁵

While Utah has relatively low tuition and many students receive financial aid, Dixie State representatives suggest that financial aid certainly does not cover all college expenses. Students are often only a few hundred dollars short of their needs. Dixie State has a small emergency assistance fund that offers one-time amounts for extraordinary needs, such as fixing a car or paying rent. The fund is currently only large enough to cover about 50 grants averaging \$400 per year, but it keeps students in school when they face a pinch.

As part of UVU’s Care Initiative, the university administered a survey that showed a large number of students did not have enough to eat and “couch-surfed” because they could not afford rent. In response, UVU now has a food pantry and emergency grants. The grants often amount to between \$200 to \$500, which the university says can make a real difference for students hitting a rough patch.

Income Share Agreements. Finally, one of the most recent interventions for students who cannot afford tuition and do not want to take out loans is the Income Share Agreement. The basics of the agreement function like a scholarship: Students must uphold a certain academic standard to maintain their coverage. But, unlike a scholarship, Income Share Agreements come with a cost later in life. While this cost is potentially less than loans, it is significant. Students who sign up for this program will pay a certain percentage of their future income back to their university for a set period of time.⁷⁶ These payments can be paused for similar reasons that loans can, such as when students pursue graduate degrees or join the Peace Corps. However, unlike loans, Income Share Agreements are paused if students are earning less than a set amount, roughly \$20,000, but are still working full-time.⁷⁷ In this way, universities are essentially investing in the likelihood that a student will have a fruitful career.

In January of 2019, the University of Utah became the first major university in the West to offer an Income Share Agreement.⁷⁸ The program is starting with 18 majors and applies to students who are within 32 credit hours of matriculation. The U of U’s program asks students to pay 2.85% of their income after graduation for three to 10 years, depending on the student’s major and the amount received – between \$3,000 and \$10,000.⁷⁹



CARES ACT

The Coronavirus Aid, Relief, and Economic Security (CARES) Act provided \$48 million as of the summer of 2020 to the emergency funds of colleges and universities in the Utah System of Higher Education (not including technical colleges). Collectively, the institutions are distributing these funds directly to students to help with financial aid, emergency relief, and other support.

The U of U is prioritizing “need-based financial support” with its \$9 million in student funding. USU is using \$5 million of its \$9 million through its “student need index based on an estimate of the expenses associated with attending USU and a student’s total contributions...from student’s FAFSA...[ensuring that] USU can give larger awards to the students who need it most.” Weber State is focusing its \$6 million based on need and “who the university has determined most likely-suffered expenses due to the campus disruption.” UVU is using its \$11 million for qualifying students to get help with expenses such as food, housing, health care, technology, course materials and child-care services. Snow College and SLCC will use funding “to assist students who suffered loss while enrolled spring semester 2020” and for others affected by the pandemic.

Under \$1 million of the CARES Act amount is directed toward “Other Student Emergency Funds” for students who do not qualify for CARES Act funding. This includes students who are non-citizens, international students and DACA recipients. For instance, SUU is using a portion of these funds towards their food pantry. Dixie State has set up a COVID-19 Emergency Financial Relief Fund to assist with lost employment expenses such as rent, car payments, and other basic needs, and the Dixie State Struggling Student Fund helps with expenses such as food, utilities and rent. Snow College is also focusing on child-care costs and lost wages.

Source: Utah System of Higher Education, USHE institutions allocate nearly \$50 million to students through institutional aid, CARES Act Funds, May 22, 2020, <https://attheu.utah.edu/announcements/ushe-institutions-allocate-nearly-50-million-to-students-through-institutional-aid-cares-act-funds/>.

CROSSOVER INTERVENTIONS

In addition to the interventions for certain student sub-populations, institutions use a variety of supports to engage students generally, or target several of the sub-populations discussed in this report.

For instance, in terms of scholarships, SLCC’s PACE program seeks to increase enrollment and graduation rates for students that are at least one of the following:

- First-Generation college student,
- Lower-income, or
- From a population that is underrepresented in higher education.⁸⁰

This section outlines interventions for crossover populations. It includes programs that offer preparation support for students and remediation to get students ready for college-level classes, learning assessments and competency-based education to speed students along. This section also discusses guided pathways for students to navigate their education and stackable credentials to keep students on track. It details myriad support programs from wraparound services to advising and mentoring, and explores what is referred to as “high impact practices” that keep students connected to their education.

Preparation, Remediation and Corequisite Remediation

Preparatory programs and remediation courses can be of particular help to first-generation students and students who are more likely to have not performed as well in their high school courses. However, remediation slows down progress toward graduation. Furthermore, financial aid cannot be used for remedial courses.

BYU offers a Summer Visiting Program for high school graduates or students with some college from other institutions who have not been accepted to BYU. It is open to all students, but includes a large percentage of lower-income and first-generation students. The

goal is to help prospective-students get familiar with college through a shortened seven-week term and to encourage students to apply the following year.

The Utah System of Higher Education has implemented a systemwide redesign of mathematics courses that aligns with meta-majors. (See the *Guided Pathways, Meta-Majors and Stackable Credentials* section.) This redesign helps many students tie their math courses to their educational interests, which is particularly helpful for students who need remediation in math.

Weber State is focusing on getting students beyond developmental (dev) classes, with a particular effort toward students who are taking developmental classes for both math and English – considered “dev/dev” – through its Wildcat Scholars program. Students who test into both developmental classes struggle with understanding the deeper meaning of math equations and the meanings behind writings. While Weber has not been targeting any specific demographics, it finds that lower income, Hispanic/Latino and first-generation students are more likely to be dev/dev. Importantly, a Weber State representative suggests that “the dev/dev kids are likely going to fail with regular remedial classes.”

UVU gets students ready for college courses with its Assessment and Learning in Knowledge Spaces – ALEKS – programming. Its Placement, Preparation, and Learning math modules help move students beyond remedial classes to jumpstart their education.

The Weber State’s Wildcat Scholars program builds relationships among students and provides them with cohorts to progress together. It requires some ALEKS classes in the fall, but then provides spring “co-requisite” classes – meaning that the course has a remedial element combined with college credit component. In these cases, remediation is built into six-hour math and English classes. That way students move beyond remediation more quickly. Weber State received federal money for the program. As a result, retention rates are increasing for these students. In 2018, the pilot program started with 35 students, in 2019 increased to 75, and is ramping up to 300 by 2022. Furthermore, Weber State and Ogden-Weber Tech have a partnership wherein Weber State students take remedial math at the tech college to take advantage of its lower tuition.

With remedial classes, students get no credit toward their degrees, potentially costing them time and money. To ease the burden, California and Texas outlawed remediation that is not corequisite.⁸¹ There are criticisms, including faculty concerns about students feeling unprepared in classes and, perhaps, subsequently dropping out – not to mention the added strain it could put on professors. However, early results show that the policy is working as planned.

When moving beyond remedial courses, Dixie State has revamped its college-math options. It had a high failing rate for its introductory math class, so the university created three optional math classes for those students who do not need algebra for their majors.

Dixie State’s “Student Success Program” provides additional resources to so-called “low index” students (calculated by ACT score and high school GPA). There are approximately 400 students (45% of which are racial or ethnic minorities) in this program, which requires a) an academic success class (discussed below), b) study-hall, and c) tutoring. Dixie beefed up the program in 2017 and credits it with increasing retention by 7% from 2018 to 2019 among students with a low index score. Overall, freshmen retention increased 4% during the period.⁸²

Dixie State also offers new freshmen a program called “Trailblazers Connections,” which includes an academic success class. In 2019, 1,300 of 2,300 incoming freshmen enrolled in the class, and starting in fall 2020, students will need to actively choose to opt out of the class. The “Trailblazers Connections” course has been a three-day pre-semester class, but it is moving to a five-day pilot. The “Trailblazer Connections” course is essentially “higher ed 101,” where students learn to use the university’s college management program, time management skills and engage with mentors. In addition, the university has a Study Skills and Student Success class that combines Trailblazer support with study skills for students who are enrolled in remedial courses. Further, Dixie has created a grant program that provides funding to different departments to implement retention efforts.

Prior Learning Assessment and Competency-Based Education

Another strategy to help speed students to completion of their degrees is with prior learning assessments. These assessments look at students' experience to determine if they should advance beyond the coursework in certain areas and receive credit for their previously gained knowledge and skill. For instance, a student might earn language credit if they speak a second language fluently in the home, or a student with military experience in electronics might receive credit for that work. One study indicated that prior learning assessments appear to boost completion rates.⁸³

WGU is focused on prior learning assessments. BYU employs them as part of its Foreign Language Achievement Testing Service. Many Utah institutions use them to some degree, though not necessarily on a wide scale. For instance, Weber State and USU each offer PLA for only one course. Snow College uses PLA a part of a mastery-based Associate of Science degree.

USHE is interested in bolstering prior learning assessments – and has introduced a new policy that aligns prior learning within the system – but does not have much sway over the actions of individual institutions on this topic. Still, USHE representatives say that it is encouraging these institutions to deploy the assessments and developing a plan for advising and communicating with students about credit for prior learning. Further, it has helped set a statewide standard for minimum scores and maximum credits on standardized exams, Advanced Placement courses, College-Level Examination Program tests, DSST tests and International Baccalaureate credits; a student who takes an exam would receive the same course credit at any USHE institution.

Another group of interventions is called competency-based education (CBE), which the U.S. Department of Education defines as an approach that focuses less on seat time “in favor of a structure that creates flexibility, allows students to progress as they demonstrate mastery of academic content, regardless of time, place, or pace of learning.”⁸⁴ This form of education costs less for students and can help reduce their time obtaining a degree.⁸⁵ Competency-based education is self-directed so it supports students who are self-motivated and want to learn at their own pace. This helps meet the needs of individual learners by providing more flexibility, but it is not necessarily for those who want a “typical” college experience.

WGU was an early adopter of this approach. Students pay a flat-rate tuition to take as many classes as they can pass within a term, giving them a financial incentive to move through a degree as quickly as their schedules and level of subject mastery allow. Unlike a typical college experience, student can show their competency in one course and move to the next without waiting for a new semester to begin.

The Utah System of Higher Education has been involved with both Salt Lake Community College and Utah State University to implement competency-based general education programs.⁸⁶ The two institutions are developing general education components on behalf of the system so that competency-based education will be available to all students, but the institutions will not have to develop their own assessments and curriculum.

SLCC has found that competency-based education works best for the most motivated students, but that they do not always benefit from cost savings – or even time to completion. Instead, students mostly appreciate the flexibility of such programs and end up completing at higher rates. SLCC has found that most of the students who embrace competency-based education are older (their average age is 34) and have other demands on their time that make a more flexible learning schedule critical. More than two-thirds of SLCC's School of Applied Technology certificates are through competency-based education, with hybrid online and in-person classes, though some are more heavily hands-on than others. SLCC

Another strategy to help speed students to completion of their degrees is with prior learning assessments. These assessments look at students' experience to determine if they should advance beyond the coursework in certain areas and receive credit for their previously gained knowledge and skill.

continues to expand these programs while documenting the ways in which they are most effective and developing a handbook to share the institution’s work with USHE.

USHE’s technical colleges are all competency-based. The tech programs operate in an open-entry/open-exit format, meaning students can start and finish their programs on almost any day of the week. Most technical college students can also progress quickly due to prior learning assessments. The obvious exceptions are for programs wherein there is a state licensure requirement governing how many hours of instruction you have; for example, cosmetology is 1,600 hours regardless of prior learning.

Guided Pathways, Meta-Majors and Stackable Credentials

“Guided pathways” is an approach designed to assist incoming, transfer and returning college students to enroll in and complete the appropriate classes/curriculum for meeting their educational goals.⁸⁷ Instead of giving students a course manual to pick and choose classes on their own, institutions provide a map of courses that efficiently move the students through degrees. Students can stray from the map and even choose a new map (or degree path) altogether, but with a certain intentionality to completing their education that they might not have otherwise. Nationally, the guided pathways approach has yielded higher completion rates.⁸⁸

Similarly, “meta-majors” allow students a bit more flexibility early in their degree selection. Meta-majors are areas of study or cluster of disciplines within institutions. Meta-majors can be exploratory for undecided students who are not sure what to do; having over 100 options can be stifling for many students. Meta-majors show students a set of courses that are related to a general field of study. They provide the flexibility of taking a variety of courses within that field, but without the danger of taking credits that are not needed – which would otherwise increase cost and time to completion.

USHE’s meta-major working group focused on identifying and aligning meta-majors across the system and developing appropriate math pathways for those meta-majors.⁸⁹ SLCC has found that for students who are undecided about a major at enrollment, meta-majors provide a lot of assistance. Dixie State started using meta-majors in the fall of 2020.

USU is focusing exploration through six large meta-major groups. While 70% of incoming students are able to narrow a focus area to one or two possible majors – a USU representative noted that many students arrive undecided. USU has found that students who switch majors actually have a higher retention rate, but at some point institutions have to force students to make decisions toward their degrees. To develop its meta-majors, USU analyzed 10 years of data to understand how students move through the system – finding, for instance, a pathway of many engineering students who move on to USU’s landscape architecture program.

Another way to keep students from losing or “wasting” credits as they progress through their education is through what are known as “stackable credentials.” Credentials are considered stackable when they are “part of a sequence of credentials that can be accumulated over time and move an individual along a career pathway or up a career ladder.”⁹⁰ For instance, a student could stack credentials by starting at a tech school for a certificate, then leverage the certificate into an associate’s degree at a community college, and later leverage the associate’s degree into a four-year degree – and not waste any credits or duplicate prior coursework. Also, if a student started at a four-year school but only wanted a certificate or an associate’s degree, credits could be stacked to help accomplish that.

Importantly, stackable credentials provide students with built-in exit points so they can enter the labor force and come back to education later in a very easy manner. If stackable

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Utah is home to several dual-mission institutions, including UVU, Weber State, Dixie State and Snow College. These four colleges all offer certifications, associates degrees and bachelor's degrees, overlapping to become a one-stop shop for students.

credentials are designed correctly, they incorporate natural breaks so that if a student does choose to stop (for economic or any number of other reasons), they can leave with a credential that was designed specifically to get them a job.

Dixie now has six “stacks:” engineering, general education, business, computing & design, health sciences and humanities. These guide students from certificates to associates or bachelor's degrees, and one continues on to a master's degree.⁹¹

These programs are also often found at community colleges, where often the goals of the institution take the needs of the community and local businesses into consideration. Community colleges are in a unique position to deploy a stackable-credentials approach and can respond faster through stackable credentials than many four-year institutions can through full curriculum changes.⁹² This is because community colleges typically offer more certifications than four-year institutions; these certifications are designed – with the help of industry – to be responsive to industry needs. At Utah's technical colleges, accreditation requires that every program be overseen by an employer advisory committee that inspects curricula, equipment and facilities to ensure students are getting the skills that are responsive to industry needs.

Utah is home to several dual-mission institutions, including UVU, Weber State, Dixie State and Snow College. These four colleges all offer certifications, associates degrees and bachelor's degrees, overlapping to become a one-stop shop for students.⁹³ These schools will often attract students with certificates, and then continue to reach out to students in order to put them on a structured pathway to a degree. For many students whose families have not obtained degrees after high school, or who cannot afford tuition, seeking a college degree can seem daunting if not impossible.⁹⁴ The stackable certifications and degree pathways that these dual-mission schools offer can make education after high school appear more feasible. Like community colleges, these institutions work with the needs of local businesses, helping students target certifications and degrees that lead to jobs.

In 2017, UVU reached out beyond its dual mission to work with Mountainland Technical College “to create common-sense, articulated education pathways to foster continuity between institutions. Continuity enables students to progress more easily through articulated degree programs such as information technology, nursing, digital media, and others.”⁹⁵ Legislation passed in 2020 combined Utah's higher ed and tech systems.⁹⁶ This could be beneficial in developing these articulated education pathways throughout the USHE system – for a more seamless transition between even more tech schools, community colleges, dual-mission institutions and four-year universities.

WGU, meanwhile, is looking at working more closely with community colleges. As part of the “WGU Academy,” WGU has developed a stackable credentials approach where the institution provides a “bridge” program to college, charging students \$400 for a coach to help bring students up to college level on math, reading and writing. In addition, WGU has implemented a micro-credentials approach. For instance, a student can receive a certificate after four months of work, and then stack numerous certificates on top of that all the way until completing a bachelor's degree. This is a particularly good model for adult learners who may not be able to envision spending four years in college, but little by little take the steps they need to complete a degree. Through these measures, WGU is focusing on increasing completion rates instead of focusing on enrollment, improving the ROI for students and expanding educational attainment for a broader range of citizens.

Finally, headquartered in Salt Lake City is another online post-secondary option. BYU-Pathway Worldwide offers certificate and degrees through BYU-Idaho and in 2021 will begin offering them through Ensign College (formerly LDS Business College). Its PathwayConnect

One university representative told Utah Foundation that post-secondary institutions must strike a balance between investing in support services and providing financial assistance. He suggested that one of the reasons for the increasing tuition costs are these wraparound services, and it is critical to ensure a good return on investment in terms of student performance and attainment.

program allows students to take courses in a manner where they stack up certifications en route to an associate degree and finally a bachelor's degree, all at very affordable per-credit costs.

Wraparound Services

Other institutions have worked to create a system of “wraparound services” – often paid for through tuition or student fees – to try to support students. These might include instructional help, but also transportation, child-care services, food programs and other non-instructional services.⁹⁷

Davis Tech, for instance, focuses on a range of wraparound services, including:

- Child care.
- Providing food packs at the pantry on campus for those who need it, and connecting students to the pantry in Bountiful.
- Bus passes for all students and car repairs at a reduced rate through Davis Tech's automotive certificate program.
- Employment services.
- Veteran services.
- Free mental health care for students.

Dixie State also provides free mental health services at its Health and Wellness Center to address anxiety and depression among students.

At the higher education level, transit programs help institutions meet their parking needs. The U of U provides UTA passes and UVU and BYU provide UVX bus passes, giving students greater mobility and reducing their cost burdens.

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Advising, Mentoring and Coaching

Student advising is a time-tested means of getting students on the right track and keeping them there. As one U of U representative told Utah Foundation “the gift of an advisor is to help change a person's life in 30 minutes.”

The approaches to advising vary. More recently, institutions have been using “intrusive” advising, where advisors dive into students' previous grades and current activities to better understand them. For instance, if a student drops a course, case managers contact them to intervene; if a student is taking a class that they do not need for their degree or has not yet paid their tuition, the student gets a text message about it. Institutional systems monitor students to alert advisors when a student raises red flags.⁹⁸

Utah's technical colleges are well equipped for interventions since they tend to be smaller than higher education institutions. Some of the Utah's tech colleges have set behavioral

intervention teams that meet weekly to discuss specific students and develop game plans to provide assistance.

The U of U uses its Academic Advising not only to help students find appropriate courses, but to help uncover students' strengths and interests to better align students' goals and their majors. The U of U's Student Success Advocates is another tier of support. This group of educational experts help students identify their educational and career goals, provide students with strategies for success, and help them engage supportive practices. Some suggest that this program is at least partly responsible for the U of U's improvements in graduation rates.⁹⁹ Dixie has also "decentralized" its advisory model for 2019-2020 and now has a separate coordinator for each college.

Dixie State is also employing several unique advising approaches. One is through its Peer Coach Program, an initiative that identifies several dozen high-performing students to act as mentors. These mentors reach out to all new freshman by communicating before the school year starts and meeting with them at orientation, focusing on their "index score" to determine who needs the most help. They use texting, messaging apps and face-to-face contact to engage students. Educational coaches are embedded in students' success classes and meet with their charges three to four times per semester. The trained/certified mentors use intake forms to help understand the students and use a strong social component, emphasizing that "you belong here" and "I'm a student just like you."

Some institutions are moving beyond intrusive advising to proactive and "appreciative advising." This method is also focused on working with students' own assets and "translating" confusing post-secondary education information for students. The U of U is using this type of advising, moving from intrusive to proactive in an effort to "help students get answers to questions they don't know they should be asking." This is a six-step approach:

Disarm: Make a positive first impression with the student, build rapport, and create a safe, welcoming space.

Discover: Ask positive, open-ended questions that help advisors learn about students' strengths, skills and abilities.

Dream: Inquire about students' hopes and dreams for their futures.

Design: Co-create a plan for making their dreams a reality (semester by semester map: degree works program, internship, meet with career coach, resume-building).

Deliver: The student delivers on the plan created in the Design phase and the advisor is available to encourage and support students.

Don't Settle: Advisors and students alike need to set their own internal bars of expectation high.¹⁰⁰

Some institutions target their advising to groups of students that often need the most assistance. SLCC's Bruin Scholars program provides one-on-one attention from staff members and personalized administrative assistance to "first-generation, undocumented, transitioning-out-of-foster care, nontraditional students, and students who just need help figuring out college."¹⁰¹ Dixie State has about 200 students – lower income, first generation, and student with disabilities – who receive one-on-one advising and tutoring. The size of the program does not cover the need because funding is always a concern in expanding advisory programs.

USU is improving its existing advisors' work through rigorous annual assessments. As a result, USU is graduating students more quickly and retaining more students.

Some institutions are moving beyond intrusive advising to proactive and "appreciative advising." This method is also focused on working with students' own assets and "translating" confusing post-secondary education information for students.

Student Data Analytics

Tied tightly with advising, mentoring and coaching is analytics.

WGU is looking to use machine learning AI to tailor students' online experiences. By learning how students work best, the university's interactions are modified to best engage with each student individually. In addition, WGU is seeking to analyze how students are doing by demographic features and locations across the country to improve the university experience.

USU uses student data analytics to improve practices, optimize programs, target outreach to academically vulnerable students and improve engagement. As one USU official said, programs "need to be intentionally designed to create better students, counselors, teachers and school."

These analytics are for the first time revealing the "staircase effect," with the most vulnerable often getting the least help, and the least vulnerable getting the most. USU is focused on flipping the staircase and targeting opportunities to get the most vulnerable populations through the door. Data analysis shows that services for vulnerable students have eight-times the impact than similar services for other students. As the USU official put it, "Analytics are telling us stories about students that we never knew."

Dixie State is now implementing data analytics and predictive modeling. This includes a centralized source of data, including comments from tutors, mentors and faculty. If a student raises a red flag in one area, Dixie State mobilizes all the relevant staff for the needed student support, from its Student Affairs personnel to Financial Aid.

The U of U's approach is also data-driven. This has helped administrators understand students and direct support toward advisors. The U of U's Institutional Research in conjunction with 10 colleges have hired people to gather and communicate information; this is their "analytics team" or "data ambassadors." They use "predictive analytics" with which they run models and produce intuitive dashboards for advisors. Models show with "70-80% accuracy which student will be retained" for the following semester. The largest benefit of these is to alert advisors as to who might not stay with their college plans, and why, due to either internal or external factors. This helps advisors provide "strategic nudges" that are personal for their students. "Running analytics isn't that complex," said one observer. "Deploying action plans is the tough part. What you do with the data is hard."

By using analytics, institutions can clearly see that financial aid, living on campus, and employment on campus are important. Institutions can then turn their findings into a focus on the practices that yield the most significant return.

High-Impact Practices

Not all interventions work. A study of nearly 1,000 higher-education retention and completion initiatives at more than 55 colleges and universities found that "Academic advising meetings, Greek life, supplemental instruction, scholarships and tutoring are the programs that correlate most with improved student retention rates."¹⁰²

In addition, part of what creates a successful college experience is having just that – a college experience that exceeds just classwork. Students who commute, have families, are older or are lower-income may be less likely to participate in extracurricular activities or networking events.¹⁰³ Having academic advising meetings, supplemental instruction, tutoring and a supportive network of peers through cohorts have been found to have a

By using analytics, institutions can clearly see that financial aid, living on campus, and employment on campus are important. Institutions can then turn their findings into a focus on the practices that yield the most significant return.

strong correlation with improved retention rates.¹⁰⁴ But support networks work differently for students with different identities. In addition, the timing of these supports is important; extracurricular college life is important for all students in the first four or five terms, but later on academic support shows more effects.¹⁰⁵

Institutions around the state have long used various means to enhance student engagement, but in the 2000s, research emerged suggesting that these practices improved student retention. There are four categories of high-impact practices:

1. Service learning or community engagement learning such as internships and study abroad programs.
2. A “first-year experience,” which includes both curricular activities and those extracurricular activities which enhance the curricular ones.
3. Supplemental instruction.
4. Undergraduate research projects, such as senior capstones and research with faculty.

In November of 2017, the Utah Board of Regents prioritized the Association of American Colleges & Universities’ high-impact practices and set a goal that institutions ensure 100% of their students participate in at least two HIPs, one in the first 30 credits and the second within their major.¹⁰⁶ The HIPs are: 1) first-year seminars and experiences; 2) common intellectual experiences; 3) learning communities; 4) writing-intensive courses; 5) collaborative assignments and projects; 6) undergraduate research; 7) diversity/global learning; 8) ePortfolios; 9) service learning, community-based learning; 10) internships; and 11) capstone courses and projects.¹⁰⁷

USHE institutions have developed a variety of programs along these lines. For instance, SLCC’s Campus Internship Program looks to put students to work on campus. Eight-in-10 SLCC students work and may not have flexible schedules. Working on campus provides the flexibility they might need. Further, SLCC seeks to connect the jobs to students’ educational focus. The program allows student to work up to 20 hours per week at a minimum of \$12 per hour. More importantly, it keeps them on campus and provides further opportunities to engage in campus activities.

The U of U incorporates experiential learning specific to each college. For instance, the College of Natural Resources takes trips to local forests. This way, students form connections with faculty and see firsthand the career options their majors might yield.

These high-impact practices are required by all of the USHE higher-education institutions. Looking ahead, all Utah post-secondary institutions may benefit from analyzing which programs are the most helpful, with the greatest return on investment, particularly for those students who face the greatest obstacles for retention and completion.

CONCLUSION

All students experience obstacles to retention and completion during their post-secondary education. Institutions provide assistance to help them overcome these obstacles in an effort to provide them with a better chance at success.

Some groups are more likely to face greater challenges to their post-secondary success. This report focuses on three such groups: adult learners, first-generation students and lower-income students. Utah institutions would benefit from providing extra support to these and other students in the face of its changing population. Failure to help these students reach their potential would have negative impacts on the students themselves as well as the state as a whole.

This report finds that there are a host of options for engaging and re-engaging with adult learners. This includes offering robust child-care services, providing a wider availability of online opportunities and providing credit based upon students’ experiences and their pre-existing competencies in a subject. First-generation students would benefit from targeted strategies. These include programs that help bridge their background to post-secondary

education. Lower-income students are aided by federal grants, loans and work-study programs. But this does not always go far enough. The Utah Promise Scholarship and other state assistance provides the help that some student need, along with micro-grants and even income-share agreements.

Each of the groups at the focus of this report would also benefit from programs that cross over among the groups. Preparation assistance is important, as is remedial assistance that is integrated into college level classes. Prior learning assessments and competency-based programs are helping students speed up their time to completion. Guided pathways and meta-majors help provide some students with the structure they need so that they do not get lost in too many course options. Wraparound services are there to support students along the way. Also, advising has come a long way from just suggesting classes to include a connection to wraparound services. This advising is informed by student data analytics. But more than that, analytics can help reveal new high-impact practices that provide the greatest return on investment in helping student retention and completion.

ENDNOTES

- 1 Matthew Dembicki, “Wraparound services and student success,” <https://ccdaily.com/2019/05/wrap-around-services-student-success/>.
- 2 Ibid.
- 3 Kem C. Gardner Policy Institute, “Utah’s Increasing Diversity: Population Projections by Race/Ethnicity,” <https://gardner.utah.edu/wp-content/uploads/Utah-Projections-Race-Ethnicity-2019.pdf>. See also Kem C. Gardner Policy Institute, “School and College Age Populations: 1980-2065,” <https://gardner.utah.edu/wp-content/uploads/SchoolAge-Final.pdf> and Kem C. Gardner Policy Institute, “Utah’s Increasing Diversity: Population Projections by Race/Ethnicity,” <https://gardner.utah.edu/wp-content/uploads/Utah-Projections-Race-Ethnicity-2019.pdf>.
- 4 Pew Research Center, “A Rising Share of Undergraduates Are From Poor Families, Especially at Less Selective Colleges,” www.pewsocialtrends.org/2019/05/22/a-rising-share-of-undergraduates-are-from-poor-families-especially-at-less-selective-colleges/.
- 5 Utah System of Higher Education, “Utah’s Growing Opportunity Gap,” https://ushe.edu/wp-content/uploads/2019/07/Utahs-Growing-Opportunity-Gap-Final_updated-template.pdf.
- 6 Ibid.
- 7 James Paterson, “Report: How states are planning to boost attainment rates,” www.educationdive.com/news/report-how-states-are-planning-to-boost-attainment-rates/556804/.
- 8 Ibid.
- 9 Utah Office of Legislative Research and General Counsel, “Statewide P-20 Goals and Outcome Metrics Prepared for the Education Interim Committee, 11/15/17,” <https://le.utah.gov/interim/2017/pdf/00004803.pdf>.
- 10 Ibid.
- 11 Ibid.
- 12 Educationdata, “2019 College Enrollment & Student Demographic Statistics,” <https://educationdata.org/college-enrollment-statistics/>. And National Center for Education Statistics, “Definitions and Data,” <https://nces.ed.gov/pubs/web/97578e.asp>; Elissa Nadworny, “Today’s College Students Aren’t Who You Think They Are,” www.npr.org/sections/ed/2018/09/04/638561407/todays-college-students-arent-who-you-think-they-are. And National Center for Education Statistics, “Demographic and Enrollment Characteristics of Nontraditional Undergraduates: 2011–12,” <https://nces.ed.gov/pubs2015/2015025.pdf>.
- 13 Sara Weissman, “New Coalition Highlights the Need For Student Voices in Higher Education Policy,” <https://diverseeducation.com/article/156003/>.
- 14 Utah System of Higher Education, “In a national context: Utah’s growing opportunity gap,” <https://ushe.edu/in-a-national-context-utahs-growing-opportunity-gap/>.
- 15 Ibid.
- 16 Utah System of Higher Education, “43,000 additional students expected at Utah’s public colleges and universities over the next ten years,” <https://ushe.edu/43000-additional-students-expected-at-utahs-public-colleges-and-universities-over-the-next-ten-years/><https://ushe.edu/43000-additional-students-expected-at-utahs-public-colleges-and-universities-over-the-next-ten-years/>. Utah Foundation calculations.
- 17 Kem C. Gardner Policy Institute, “School and College Age Populations: 1980-2065,” <https://gardner.utah.edu/wp-content/uploads/SchoolAge-Final.pdf>. And Kem C. Gardner Policy Institute, “Utah’s Increasing Diversity: Population Projections by Race/Ethnicity,” <https://gardner.utah.edu/wp-content/uploads/Utah-Projections-Race-Ethnicity-2019.pdf>.
- 18 Utah System of Higher Education, “Utah’s Growing Opportunity Gap,” https://ushe.edu/wp-content/uploads/2019/07/Utahs-Growing-Opportunity-Gap-Final_updated-template.pdf.
- 19 Stanford Center for Education Policy Analysis, Is Separate Still Unequal? New Evidence on School Segregation and Racial Academic Achievement, Gaps, <https://edopportunity.org/papers/wp19-06-v092019.pdf>.
- 20 Dawna-Cricket-Martita Meehan and Charles Negy, “Undergraduate Students’ Adaptation to College: Does Being Married Make a Difference?” *Journal of College Student Development*, Volume 44, Number 5, September/October 2003, pp. 670-690, www.researchgate.net/publication/236803880_Undergraduate_Students'_Adaptation_to_College_Does_Being_Married_Make_a_Difference.

- 21 Julie Peller, "Four Ways Congress Can Help a New Generation of Students," www.realcleareducation.com/articles/2019/04/24/four_ways_congress_can_help_a_new_generation_of_students_110323.html.
- 22 U.S. Census Bureau, American Community Survey.
- 23 Julie Peller, "Four Ways Congress Can Help a New Generation of Students," www.realcleareducation.com/articles/2019/04/24/four_ways_congress_can_help_a_new_generation_of_students_110323.html.
- 24 Living Wage, Living Wage Calculator in Utah, <https://livingwage.mit.edu/states/49>.
- 25 Julie Peller, "Four Ways Congress Can Help a New Generation of Students," www.realcleareducation.com/articles/2019/04/24/four_ways_congress_can_help_a_new_generation_of_students_110323.html.
- 26 U.S. Census Bureau, American Community Survey.
- 27 Ellie Ashford, "Re-engaging part-time students," www.ccdaily.com/2019/03/re-engaging-part-time-students/.
- 28 Complete College America, Time is the Enemy, p. 3, https://completecollege.org/wp-content/uploads/2017/08/Time_Is_the_Enemy.pdf.
- 29 Ellie Ashford, "Re-engaging part-time students," www.ccdaily.com/2019/03/re-engaging-part-time-students/.
- 30 Utah System of High Education, "How is USHE working to help increase graduation rates?," <https://ushe.edu/how-is-ushe-working-to-help-increase-graduation-rates/>.
- 31 Ibid.
- 32 Salt Lake Community College, "Early Childhood Care and Education," www.slcc.edu/eccleslabschool/services.aspx.
- 33 Salt Lake Community College, "Child Care and Family Services," www.slcc.edu/childcare/index.aspx.
- 34 Utah System of High Education, "How is USHE working to help increase graduation rates?," <https://ushe.edu/how-is-ushe-working-to-help-increase-graduation-rates/>.
- 35 Robert Toutkoushian, "Talking 'Bout My Generation: Defining 'First-Generation Students' in Higher Education Research," www.insidehighered.com/sites/default/server_files/files/Talking%20Bout%20My%20Generation%20Fall%202015%20ASHE.pdf.
- 36 Ibid.
- 37 Terry T. Ishitani, "Studying Attrition and Degree Completion Behavior among First-Generation College Students in the United States," www.iwu.edu/first-generation/Ishitan.pdf.
- 38 Ashley Smith, "Who's in First (Generation)?," www.insidehighered.com/news/2015/11/10/who-are-first-generation-students-and-how-do-they-fare
- 39 The Hechinger Report, "To help first-generation students succeed, colleges enlist their parents," <https://hechingerreport.org/to-help-first-generation-students-succeed-colleges-enlist-their-parents/>.
- 40 Sara Weissman, "Experts Share Tips For the College Transition," <https://diverseeducation.com/article/152230/>.
- 41 Ibid.
- 42 Ibid.
- 43 StepUp Utah, "StepUp Utah College Ambassadors," <https://stepuputah.com/program/ambassadors/>.
- 44 Utah Valley University, "I Am First," www.uvu.edu/iamfirst/.
- 45 Utah State University, Aggie First Scholars, www.usu.edu/first-scholars/.
- 46 The Utah Statesman, "Aggie First Scholars program increasing retention rates," <https://usustatesman.com/aggie-first-scholars-program-increasing-retention-rates/>.
- 47 Ibid.
- 48 Anthony P. Carnevale, Megan L. Fasules, Michael C. Quinn, Kathryn Peltier Campbell, *Born to Win, Schooled to Lose, Why Equally Talented Students Don't Get Equal Chances to Be All They Can Be*, 2019, p. 5, https://1gyhoq479ufd3yna29x7ubjn-wpengine.netdna-ssl.com/wp-content/uploads/FR-Born_to_win

schooled_to_lose.pdf.

49 Julie Peller, “Four Ways Congress Can Help a New Generation of Students,” www.realcleareducation.com/articles/2019/04/24/four_ways_congress_can_help_a_new_generation_of_students_110323.html.

50 Ibid.

51 Higher Education Strategic Planning Commission, Interim Report, November 13, 2018, p. 19.

52 Katharine M. Broton & Sara Goldrick-Rab, “Working for College: The Causal Impacts of Financial Grants on Undergraduate Employment,” <https://journals.sagepub.com/doi/pdf/10.3102/0162373716638440>.

53 Andy Johnston, “One surprising barrier to college success: Dense higher education lingo,” <https://hechingerreport.org/one-surprising-barrier-to-success-in-college-understanding-higher-education-lingo/>.

54 Form Your Future, “FAFSA Tracker,” <https://formyourfuture.org/fafsa-tracker/>.

55 Utah System of Higher Education, <https://ushe.edu/utah-students-left-over-55-million-in-unclaimed-federal-financial-aid-in-2018-19/>.

56 Julie Peller, “Four Ways Congress Can Help a New Generation of Students,” www.realcleareducation.com/articles/2019/04/24/four_ways_congress_can_help_a_new_generation_of_students_110323.html.

57 Today’s Students Coalition is hoping to increase to the income threshold for expected family contribution. Weissman, Sara, “New Coalition Highlights the Need For Student Voices in Higher Education Policy,” <https://diverseeducation.com/article/156003/>.

58 Claire McNery, “Texas To Require High School Graduates To Apply For College Financial Aid,” www.npr.org/2019/08/02/747719542/texas-to-require-high-school-graduates-to-apply-for-college-financial-aid?utm_medium=RSS&utm_campaign=education.

59 Georgetown University Center on Education and the Workforce, “Born to Win, Schooled to Lose,” <https://cew.georgetown.edu/cew-reports/schooled2lose/>.

60 Matthew Dembicki, “Wraparound services and student success,” www.ccdaily.com/2019/05/wrap-around-services-student-success/

61 Ibid.

62 Elissa Nadworthy, “Confused By Your College Financial Aid Letter? You’re Not Alone,” www.npr.org/2019/04/10/642287824/confused-by-your-college-financial-aid-letter-you-re-not-alone.

63 Ibid.

64 Ibid.

65 Ibid.

66 WalletHub, “States with the Most and Least Student Debt,” <https://wallethub.com/edu/e/best-and-worst-states-for-student-debt/7520/>.

67 Utah System of Higher Education, “Report: Utah saw 82% decrease in state need-based financial aid over the last decade,” <https://ushe.edu/report-utah-saw-82-decrease-in-state-need-based-financial-aid-over-the-last-decade/>.

68 Ibid.

69 Utah System of Higher Education, “Adoption of Policy R620, Access Utah Promise Scholarship,” https://ushe.edu/wp-content/uploads/pdf/agendas/20190517/TABA_2019-05-17.pdf.

70 Weber State University, “Dream Weber,” www.weber.edu/dreamweber.

71 Salt Lake City Community College, “SLCC Promise,” www.slcc.edu/promise/.

72 Utah State Legislature, “H.B. 260 Access Utah Promise Scholarship Program,” <https://le.utah.gov/~2019/bills/static/HB0260.html>.

73 Utah System of Higher Education, “R622, Career and Technical Education Scholarship Program,” <https://ushe.edu/ushe-policies/r622-career-and-technical-education-scholarship-program/>.

74 Utah State Board of Education, Scholarship and Tuition Awards, www.schools.utah.gov/cte/resources/

scholarshipsawards?mid=3119&tid=0.

75 Julie Peller, “Four Ways Congress Can Help a New Generation of Students,” www.realcleareducation.com/articles/2019/04/24/four_ways_congress_can_help_a_new_generation_of_students_110323.html.

76 University of Utah, “University of Utah receives prestigious grant from Lumina Foundation to support degree completion initiatives,” https://unews.utah.edu/university-of-utah-receives-prestigious-grant-from-lumina-foundation-to-support-degree-completion-initiatives/?doing_wp_cron=1557501793.3623878955841064453125.

77 Ibid.

78 Ibid.

79 Ibid.

80 SLCC, PACE, www.slcc.edu/pace/index.aspx.

81 EdSource, “More California community college students entering, passing transfer-level math and English as result of landmark law,” <https://edsources.org/2019/more-california-community-college-students-entering-passing-transfer-level-math-and-english-as-result-of-landmark-law/617999>.

82 Before 2019, retention had been flat for several years.

83 CAEL, Fueling the Race to Postsecondary Success: A 48-Institution Study of Prior Learning Assessment and Adult Student Outcomes, http://cdn2.hubspot.net/hubfs/617695/premium_content_resources/pla/PDF/PLA_Executive-Summary.pdf.

84 U.S. Department of Education, “Competency-Based Learning or Personalized Learning,” www.ed.gov/oii-news/competency-based-learning-or-personalized-learning.

85 Brookings, “Top 6 trends in higher education,” www.brookings.edu/blog/education-plus-development/2019/01/10/top-6-trends-in-higher-education/.

86 Utah System of High Education, “How is USHE working to help increase graduation rates?,” <https://ushe.edu/how-is-ushe-working-to-help-increase-graduation-rates/>.

87 Ibid.

88 Brookings, “5 ways to boost community college completion rates,” www.brookings.edu/interactives/5-ways-to-boost-community-college-completion-rates/?utm_campaign=Brown%20Center%20on%20Education%20Policy&utm_source=hs_email&utm_medium=email&utm_content=66719739.

89 Utah System of High Education, “How is USHE working to help increase graduation rates?,” <https://ushe.edu/how-is-ushe-working-to-help-increase-graduation-rates/>.

90 Department of Labor, “Notice of availability of funds and funding opportunity announcement for: Youth-Build,” www.reginfo.gov/public/do/DownloadDocument?objectID=83086801.

91 Dixie presentation Higher Ed Approps., Feb 6, 8:00 AM, <https://le.utah.gov/interim/2020/pdf/00000989.pdf>.

92 Sandra Kurtinitis, “Stackable Credentialing: Redefining the Modern Community College,” <https://evolution.com/programming/credentials/stackable-credentialing-redefining-the-modern-community-college/>.

93 Salt Lake Chamber, “Education & Workforce Forum: Utah’s Dual Mission Universities,” <https://business.slchamber.com/events/details/education-workforce-forum-utah-s-dual-mission-universities-11476>.

94 Ibid.

95 Astrid S. Tuminez and Clay Christensen: Technical education collaboration creates upward mobility for more Utahns, www.sltrib.com/opinion/commentary/2020/02/02/astrid-s-tuminez-clay/.

96 S.B. 111 Higher Education Amendments, <https://le.utah.gov/~2020/bills/static/SB0111.html>.

97 Matthew Dembicki, “Wraparound services and student success,” <http://ccdailly.com/2019/05/wrap-around-services-student-success/>.

98 Ellie Ashford, “Re-engaging part-time students,” www.ccdaily.com/2019/03/re-engaging-part-time-students/.

99 Deseret News, www.deseret.com/utah/2019/10/1/20891549/schools-increase-college-graduation-rates-utah.

100 Appreciate Advising, www.appreciativeadvising.net/.

101 Salt Lake Community College, “Bruin Scholars,” www.slcc.edu/oss/bruin.aspx.

102 Civitas, https://go.civitaslearning.com/l/481481/2019-09-10/256gnd?_ga=2.126144397.1826179170.1574443201-355485610.1574443201.

103 EdSurge, “To Retain College Students, Look to Academic Support and Campus Activities, New Report Finds,” www.edsurge.com/news/2019-09-12-to-retain-college-students-look-to-academic-support-and-campus-activities-new-report-finds.

104 EdSurge, “To Retain College Students, Look to Academic Support and Campus Activities, New Report Finds,” www.edsurge.com/news/2019-09-12-to-retain-college-students-look-to-academic-support-and-campus-activities-new-report-finds.

105 Ibid.

106 Utah System of High Education, “How is USHE working to help increase graduation rates?,” <https://ushe.edu/how-is-ushe-working-to-help-increase-graduation-rates/>.

107 Association of American Colleges & Universities, *High-Impact Educational Practices*, www.aacu.org/node/4084.



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