

## Introduction

It is a widely held belief, supported by research, that there is a robust relationship between education and income. To invest in education is to invest in human capital. According to a 2017 economic research report by the Federal Reserve Bank of St. Louis, people who have received a two- or four-year degree earn higher incomes than those who don't.¹ The higher wage that college graduates earn is often called the "college wage premium." These earnings may vary from state to state, but the evidence is clear that college graduates nationwide out-earn workers who have not received a higher education.²

### Family Financial Outcomes Based on Education

Education*	Percentage of families	Median income [2013]	Median wealth (2013)	Wealth-to- income ratio**	Millionaires (family wealth)
No high school diploma	12%	\$22,320	\$37,766	1.43	1 in 110
High school diploma	50%	\$41,190	\$95,072	2.15	1 in 18
Two- or four-year degreee	25%	\$76,293	\$273,488	3.45	1 in 4.6
Advanced degree	13%	\$116,265	\$689,100	5.58	1 in 2.6

NOTE: \*Based on the education level of a family headed by someone 40 years of age or older. \*\*This ratio shows how much wealth each group has per dollar of income. For example, the ratio for families without a high school degree was 1.43, which means that, on average, for every \$1 of income, there was \$1.43 of wealth. The ratio is a measure of how efficient people are at turning income into wealth.

SOURCE: Boshara, Ray: Emmons, William R. and Noeth, Bryan. "The Demographics of Wealth: How Age, Education and Race Separate Thrivers from Strugglers in Today's Economy." Essay No. 2: Education and Wealth, Federal Reserve Bank of St. Louis, May 2015, pp. 4, 5, 9, and 13; <a href="https://www.stlouisfed.org/-/media/Files/PDFs/HFS/essays/HFS-Essay-2-2015-Education-and-Wealth.pdf">https://www.stlouisfed.org/-/media/Files/PDFs/HFS/essays/HFS-Essay-2-2015-Education-and-Wealth.pdf</a>.

Source: https://research.stlouisfed.org/publications/page1-econ/2017/01/03/education-income-and-wealth/

With a clear division of income levels between workers who have achieved college academic success and those who haven't, it would make sense that more and more students would be enrolling and receiving college degrees. This, however, may very well be a false narrative.

Despite the fact that 66% of recent high school completers enrolled in college in 2019, the number of ethnic minorities who have earned an academic degree has not kept pace.<sup>3</sup> Only 39.2% of those aged 25 to 29 in 2020 had a bachelor's degree or higher.<sup>4</sup> In addition, while racial gaps in degree completion have narrowed, these gaps have not narrowed nearly enough, with 27.7% of Black adults and 24.9% of Hispanic adults aged 25 to 29 having completed a bachelor's degree, versus 44.6% of those who are white and 72% of those who are Asian.

Indeed, the student groups historically disenfranchised from college – low-income, Black, Latinx, and academically at-risk students – continue to struggle to college completion. This is especially true for those who experience financial obstacles to college access and completion. This population experienced increasing enrollment rates but stagnating completion rates. And even when academic achievement is considered, lack of financial resources is still a significant obstacle to college completion. Unfortunately, academic achievement alone is not enough to get students to college completion. What was previously an issue of enrolling more students in college is now an issue of too many students starting college but not completing. This leaves thousands of students with college debt but no college degree.

# **Assessing Financial Aid**

The main path for college students to access financial aid is by filling out the Free Application for Federal Student Aid [FAFSA] form. The FAFSA is the form used by Federal Student Aid [a part of the U.S. Department of Education] to distribute more than \$120 billion in federal aid each year, and is used to make decisions regarding financial aid awards at the state and college/university levels. Completing the FAFSA form, however, can be arduous and is not a guarantee that a student will receive financial aid. As a result, students end up missing out on billions of dollars in federal aid because they simply don't fill out the FAFSA form. According to the National College Attainment Network, as of June 2021, the number of FAFSA applications was down by 5% from the previous year.

An additional challenge is that completing the FAFSA is a lengthy and complicated process. In December 2020, the U.S. Congress passed the <u>Consolidated Appropriations Act</u>, whose purpose was to streamline the FAFSA process, making it easier for millions of college-going students to access federal financial aid. However, in June 2021 that revision process was delayed by the Department of Education until the 2024-25 school year.<sup>12</sup>

Furthermore, once a student has completed the FAFSA form, there may be additional information required in order to process and approve their application. Many students, particularly those who are from underrepresented and minoritized groups, are flagged for further investigation, putting their financial aid access at risk.<sup>13</sup>

Each year the U.S. Department of Education selects around 25% of applications to audit through a verification process. This process requires students to attest to, and even prove, that the information they provided on their FAFSA application is accurate.

Many students, particularly those who are from underrepresented and minoritized groups, are flagged for further investigation, putting their financial aid access at risk.

The flagging and verification process is nearly three times higher (60%) for students who qualify for federal need-based Pell Grants. This is extremely concerning as nearly 25% of students eligible for Pell Grants fail to complete the verification process and end up losing out on thousands of dollars in federal aid. The current process requires students who need financial aid the most to go to great lengths to prove their eligibility. Evidence of this additional burden can especially be found at community colleges, who typically serve a disproportionately high number of Pell Grant recipients, where almost 25% of financial aid office budgets are spent on verification procedures as compared to private universities who only typically use 1% of their financial aid office budgets on such endeavours. <sup>13</sup>

## Types of Financial Aid

The type of aid a student receives is also important to consider, as loans, grants, and work-study monies all exert different effects on persistence. Alon [2007] found that minority student persistence was particularly sensitive to grants and scholarships, whereas loans and work-study funds were less helpful in persisting, a finding with support elsewhere. In a study regarding the separate issues of stopout and dropout, researchers surmised that loans (versus no aid) may actually increase dropout, while work-study aid may decrease dropout.

### **Debt But No Degree**

Not having easy access to financial aid programs is especially concerning when students feel they have to drop out of college but have not yet received their degrees. In the U.S., the overall dropout rate is 40% for undergraduate students and 30% of college students drop out before beginning their sophomore year. Students who have completed some, but not all of the courses needed to graduate don't have access to the college wage premium as they have not earned their degree, yet they carry the weight of financial debt incurred during the year(s) that they did spend enrolled in college courses.

# Dropout Rate



In the U.S., the overall dropout rate is **40% for undergraduate students** and 30% of college students drop out before beginning their sophomore year.

### **Dual Enrollment**

More and more high school students are interested in receiving college credits while still enrolled in high school . Some higher education learning institutions are finding that having an option for Dual Enrollment has a positive impact on the institution's finances. With the constantly changing higher education landscape, allowing students to dual enroll may prove to be the consistent student population that community colleges are seeking in order to sustain and grow.

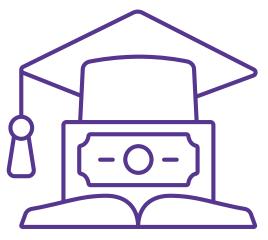
Students who are concurrently enrolled in two separate educational institutions, also known as dual enrollment, also face hurdles in accessing financial aid. Dually enrolled students, typically high school students taking college courses, are not eligible for federal financial aid. Additionally, college credits earned through dual enrollment programs can affect the amount of time that a student can receive state and federal financial aid and the maximum financial award amounts students receive from federal student loan programs. This effectively means that students who would benefit from dual enrollment programs may miss out on much needed additional financial support that would help to see them through college.

To create more <u>equity in education</u>, higher education institutions need to shrink the equity gap by removing financial barriers to success. Simplifying the FAFSA application process, giving dually-enrolled students equal access to financial aid, and reducing the amount of education debt for students who did not complete a college degree are all vital parts of overcoming academic and financial obstacles for students.

To this end, higher education institutions are increasingly seeking ways to support students in their journey to access financial support in order to help them achieve degree completion.

# How Higher Education Institutions Can Help

The first step in assisting students to access financial assistance is by identifying low-income, high-risk students that could benefit from financial aid consultation services. Early Warning Systems (EWS) that use predictive analytics allow college administrators and student retention specialists to effectively connect with students, assist them in developing a plan for success, and intervene



when necessary and in the most effective ways. Additionally, predictive analytics can anticipate issues before they occur, allowing student retention specialists to flag at-risk students and begin activating intervention channels.

The power of predictive analytics is in its ability to leverage known data about the student to not just determine which students need assistance but also to determine what challenges a student might face on their path to success. To do so these methods use data harvested from campus-wide systems that can range from basic 'geographic' and 'demographic' features to more actionable 'academic ability', 'performance' and 'behavioral' features on campus that can indicate when a student might be falling off path.

70% of high school students dually enrolled in college courses take those courses at a two-year institution, making these colleges the largest beneficiary of increased enrollment.

In addition, these systems may or may not use the important, yet sensitive, 'ability to pay' and 'financial support' insights gathered from the FAFSA and financial aid system on campus. These specific data points can often further explain why some students may experience roadblocks while looking to complete their degree objective. While data gathered from the FAFSA form submitted by students is commonly leveraged in the early stages of a relationship between a student and an institution (i.e. during financial aid packaging), data gleaned from the FAFSA form can also can impact an institution's ability to meet the needs of students during later stages of the student's academic career.

# Student Engagement

Given the importance of helping students attain financial aid in order to achieve graduation success, it is vital for learning institutions to proactively engage with students and remind them of the importance of filling out the FAFSA application.

Community college students are a group particularly vulnerable to attrition, with nearly half not persisting to their second fall semester. Community college students are increasingly nontraditional, which means they are older than the average college student, are more likely to be Black or Latinx, are more likely to come from low-income households, and are more likely to be underprepared. Thus, they are more susceptible to some of the concerns mentioned above, and therefore great potential exists to support these students with Early Warning Systems that can use financial information.



Community college students are a group particularly vulnerable to attrition, with nearly half not persisting to their second fall semester

For instance, even beyond income information, just having data on whether students completed the FAFSA [at times separate from whether funding was awarded] can be key to understanding persistence and completion rates, especially part-time students.<sup>21</sup> Academic advisors and success coaches can use this information to encourage students to complete the FAFSA – even at a late stage – or in preparation for the following academic year.

This engagement can be done through targeted messaging and one-on-one consultations.

#### One-on-One Consultations

One way to actively engage students is through one-on-one consultations that allow student retention specialists to collaborate with students to build a guided pathway through financial aid programs that meet their individual needs. Engaging with students most in need helps to identify issues preventing students from academic success. During one-on-one consultations, student retention specialists can help identify specific workshops and other available resources for accessing and applying for financial aid.

One-on-one consultations also allow student success specialists to educate dually-enrolled students early about the financial aid process and to establish a sense of trust, open communication, and support that will last throughout the student's academic career at that institution.

## Increasing Student Retention and Success through Engagement

Higher education learning institutions that have taken advantage of technologies and programs that engage directly with students have realized increasing rates of student success and completion. Since 2017, community colleges that have partnered with Watermark to advance engagement with their students have seen a 12.3% increase in FAFSA completion across all students and, more specifically, an increase of 10% for Hispanic students on campus. Additionally, returning students that were engaged with a FAFSA-related note or alert from Watermark's student success solution increased their FAFSA completion rates by 12.6%. This suggests that these institutions have improved upon how they are engaging their students.

As of the most recent academic year, students at Watermark's partner institutions submit their FAFSA application on average within 161 days of the FAFSA becoming available. This is two months sooner than previously experienced. Students also, on average, submit their FAFSA 60 days prior to the fall start of school. This is a 58% increase over what was previously demonstrated. It suggests that Watermark's partner learning institutions have been able to nudge students toward more timely FAFSA completion, ultimately leading to improved financial support and successful student outcomes.

## Conclusion

Knowing how devastating the lack of financial aid or the ability to pay for college can be for graduation rates, 78 we must use our best efforts to flag these and other obstacles to college completion. Predictive analytics have been used to close the retention gap and alert advisors and other end users of students at risk of dropping out. 232 This technology has the power to assist those students who have traditionally struggled in degree completion, closing the racial and income gaps in college completion and decreasing overall economic inequality as the education gap is leveled. Even academically-qualified students will find financial obstacles preventing them from graduating with a college degree. With increasing interest in academic equity issues in recent years, retention and engagement programs have proven effective in helping to close the equity gap by retaining students who might otherwise drop out.

The additional students persisting and completing have saved each institution money by bringing in tuition dollars, both from the students and the state. These institutions can also utilize the data they have about their students to build in additional supports during the recruitment stage, through degree completion and overall student success.

#### References

- 1. Wolla, S. A., & Sullivan, J. [n.d.]. Education, income, and wealth. Economic Research Federal Reserve Bank of St. Louis. <a href="https://research.stlouisfed.org/publications/page1-econ/2017/01/03/education-income-and-wealth/">https://research.stlouisfed.org/publications/page1-econ/2017/01/03/education-income-and-wealth/</a>.
- 2. Northern, A. M., Poiner, J., & Sublett, C. [2018, March 1]. What you make depends on where you live: College earnings across states and metropolitan areas. The Thomas B. Fordham Institute. <a href="https://fordhaminstitute.org/national/research/what-you-make-depends-on-where-you-live">https://fordhaminstitute.org/national/research/what-you-make-depends-on-where-you-live</a>.
- 3. Digest of Education Statistics, 2020. National Center for Education Statistics (NCES) Home Page, a part of the U.S. Department of Education. (n.d.). https://nces.ed.gov/programs/digest/d20/tables/dt20\_302.10.asp
- 4. Digest of Education Statistics, 2020. National Center for Education Statistics (NCES) Home Page, a part of the U.S. Department of Education. [n.d.]. <a href="https://nces.ed.gov/programs/digest/d20/tables/dt20\_104.20.asp">https://nces.ed.gov/programs/digest/d20/tables/dt20\_104.20.asp</a>.
- 5. Gewertz, Catherine. 2018. "Low-Income Students: More Going to College, But Few Earning Degrees." Education Week High School & Beyond. Retrieved July 27, 2021.
- 6. Leonhardt, David. 2018. "The Growing College Graduation Gap." The New York Times, June 8.
- 7. Alon, Sigal. 2011. "Who Benefits Most from Financial Aid? The Heterogeneous Effect of Need-Based Grants on Students' College Persistence." Social Science Quarterly 92(3):807–29.
- 8. Rosenbaum, James E., Caitlin Ahearn, Kelly Becker, and Janet Rosenbaum. 2015. <u>The New Forgotten Half and Research Directions to Support Them</u>. New York: W.T. Grant Foundation.
- 9. U.S. Department of Education. 2021. "About Us." Federal Student Aid. Retrieved July 20, 2021.
- 10. Jdickler. [2021, June 28]. Students, parents leave billions of dollars on the table by failing to file a FAFSA. CNBC. <a href="https://www.cnbc.com/2021/06/28/the-fafsa-deadline-for-college-financial-aid-is-june-30.html">https://www.cnbc.com/2021/06/28/the-fafsa-deadline-for-college-financial-aid-is-june-30.html</a>.
- 11. NATIONAL FAFSA COMPLETION RATES FOR HIGH SCHOOL SENIORS AND GRADUATES. National College Attainment Network. (n.d.). <a href="https://www.ncan.org/page/NationalFAFSACompletionRatesforHighSchoolSeniorsandGraduates">https://www.ncan.org/page/NationalFAFSACompletionRatesforHighSchoolSeniorsandGraduates</a>.
- 12. Stratford, M. [2021, June 12]. Education department delays major student Aid overhaul. POLITICO. <a href="https://www.politico.com/news/2021/06/11/education-department-deadline-college-aid-493584">https://www.politico.com/news/2021/06/11/education-department-deadline-college-aid-493584</a>.
- 13. Guzman-Alvarez, A., & Page, L. C. (2021, July 12). Fafsa verification: An undue burden for students and public colleges. Brookings. <a href="https://www.brookings.edu/blog/brown-center-chalkboard/2021/06/07/fafsa-verification-an-undue-burden-for-students-and-public-colleges/">https://www.brookings.edu/blog/brown-center-chalkboard/2021/06/07/fafsa-verification-an-undue-burden-for-students-and-public-colleges/</a>.
- 14. Alon, Sigal. 2007. "The Influence of Financial Aid in Leveling Group Differences in Graduating from Elite Institutions." Economics of Education Review 26(3):296–311.
- 15. Dynarski, Susan M. 2003. "<u>Does Aid Matter? Measuring the Effect of Student Aid on College Attendance and Completion</u>." The American Economic Review 93[1]:279–88.
- 16. Stratton, Leslie S., Dennis M. O'Toole, and James N. Wetzel. 2008. "A Multinomial Logit Model of College Stopout and Dropout Behavior." Economics of Education Review 27(3):319–31.
- 17. College dropout rates. EducationData. [2021, July 25]. https://educationdata.org/college-dropout-rates.

- 18. Financial aid for dual enrollment: Inside higher ed. Confessions of a Community College Dean. [n.d.]. <a href="https://www.insidehighered.com/blogs/confessions-community-college-dean/financial-aid-dual-enrollment">https://www.insidehighered.com/blogs/confessions-community-college-dean/financial-aid-dual-enrollment</a>.
- 19. How do credits earned through dual enrollment programs impact a student's financial aid eligibility? [n.d.]. <a href="https://www.cwu.edu/hspartnerships/sites/cts.cwu.edu.hspartnerships/files/documents/Financial-aid-and-dually-enrolled-students.pdf">https://www.cwu.edu/hspartnerships/sites/cts.cwu.edu.hspartnerships/files/documents/Financial-aid-and-dually-enrolled-students.pdf</a>.
- 20. American Association of Community Colleges. 2012. <u>Reclaiming the American Dream: Community Colleges</u> and the Nation's Future. A Report from the 21st-Century Commission on the Future of Community Colleges. Washington, D.C.: American Association of Community Colleges.
- 21. McKinney, Lyle and Heather Novak. 2013. "The Relationship Between FAFSA Filing and Persistence Among First-Year Community College Students." Community College Review 41[1]:63–85. <a href="https://doi.org/10.1177%2F0091552112469251">https://doi.org/10.1177%2F0091552112469251</a>.
- 22. Fike, David S. and Renea Fike. 2008. "Predictors of First-Year Student Retention in the Community College." Community College Review 36(2):68–88.
- 23. Kash, Wyatt. 2019. "Predictive Analytics Bolster Graduation Rates, ROI." EdScoop. Retrieved March 14, 2019.
- 24. Blackwell, David W. 2019. "<u>UK LEADS Drives Increases in Retention, Graduation</u>." UKNow. Retrieved February 21, 2019.



At Watermark, insights inspire progress. Watermark's software gives higher education institutions the insights they need to improve, evolve, and empower student success. Watermark's integrated digital solutions support assessment and accreditation, faculty activity reporting, course evaluation and surveys, and catalog and curriculum development for more than 1,700 higher education institutions around the world.

To learn more, visit www.watermarkinsights.com.