# An Investigation into Overall Success and Withdrawal Rates 



EUNICE

Office of Institutional Effectiveness and Accreditation

Dr. Paul Fowler

November 24, 2021

## Introduction

This paper is an investigation into student success at Louisiana State University at Eunice ${ }^{1}$. It seeks to answer a simple question asked of the Office of Institutional Effectiveness in late October 2021:

1. What is the overall success rate for students taking courses in AY 2020-2021?

In addition, this paper seeks to answer two additional questions embedded in the first.
2. Are there inequities in success rates among individual student sub-groups?
3. What is the overall withdrawal rate?

This paper seeks to answer all three questions at a macro-level beginning with data from AY 2020-2021. It is worth noting that this is the first time that such a study has been completed at LSU Eunice in at least 17 years. The overall expectation is that the answers to the three questions above will generate additional questions.

During the Extended Cabinet meeting on November 16, 2021, there was discussion of this report resulting in some additional questions being asked. The additional questions below from Extended Cabinet pick up where the other three questions end. The questions were
4. What courses were the Pathways to Success students having difficulty with? This question was asked specifically for new first-time, Black or African American students with a Pell Grant placed in the Pathways to Success Program.
5. What are the longitudinal success and withdrawal rates for part-time and full-time students? Does one group perform better than another?
6. How does the success rate for MATH 1020 compare to MATH 1021? ${ }^{2}$

This paper will only provide conclusions based on interpretation of the data. Additionally, this paper will not provide recommendations; however, in providing recommendations for improvements, the following took place during AY 2020-2021 and should be considered.

- Hurricane Laura made landfall in southwest Louisiana on August 27, 2020,
- Hurricane Delta made landfall in southwest Louisiana on October 9, 2020,
- the ongoing Covid-19 Pandemic, and
- the deep freeze in mid-February 2021.

Each of these issues affected campus operations. The three storms destroyed homes and disrupted power to students in the LSU Eunice service area, and the pandemic affected operations in that classroom capacity was limited during fall 2020.

## Methodology

This paper utilizes data from LSU Eunice's Office of Institutional Research. The report downloads the outcome (final grade) for each course taken along with 40 different demographic

[^0]variables for each student. ${ }^{3}$ The data includes all methodologies (face-to-face and online) at all LSU Eunice sites regardless of whether they met over an 8 -week or 16 -week session. This data does not include courses offered during the summer or the intersession semesters. The course success rates were generated by
$$
\text { Success }=\left(\frac{\text { frequency of a grade of } A, B, C, \text { or } P}{\text { Total enrollment on the census day }}\right) * 100^{4}
$$
and include every student enrolled as noted.

## Discussion

## Answer to Question 1: What is the Overall Success Rate for AY 2020-2021?

The data shown in Table 1 details the results for the 20,750 instances of course taking by all students enrolled in AY 2020-2021. It is broken into twelve individual sections based on student demographics with the first being Ethnicity. Overall, 14,950 of the 20,750 instances of course taking resulted in success with 6,575 earning an A, 4,996 earning a B, 3,083 earning a C , and 296 earning a $P$ (Pass). A grade of $D$ in most cases is not transferrable and/or does not count for degree credit so it was not considered as success. The overall success rate was then calculated as

$$
\text { success }=\left(\frac{6,575+4,996+3,083+296}{20750}\right) * 100=\left(\frac{14,950}{20750}\right) * 100=72.048 * 100=72.0 \% .
$$

Therefore, the answer to question 1 is $72.0 \%$ for all students taking all courses during AY 20202021 (see the blue numbers located in the far-right column of Table 1; the $72.0 \%$ is within a red circle).

How does the $72.0 \%$ success rate for AY 2020-2021 compare with other academic years? Table 2 and Figure 1 seek to partially answer that question and detail the success rates by enrollment status based on the census date of each semester. The means and medians to the far-right of Table 2 are calculated for AY 2010-2011 through 2019-2020 so that AY 2020-2021 can be compared to historical averages. ${ }^{5}$ Several observations are apparent from Table 2 and Figure 1 with the first being that the overall success rate of $72.0 \%$ for AY 2020-2021 is below both the mean and median for the longitudinal data. This is common to every enrollment status group except those labeled as "none". ${ }^{6}$

[^1]Next, the overall success rate for each academic year is shown by the dark blue numbers in Table 2, which correspond to the heavy dark blue line in Figure 1. Figure 1 shows that dual enrollment (light blue), unclassified (orange), and sophomore (light green) students had higher success rates in their courses. At the same time, new first-time students (black line), returning freshmen (red line), unclassified transfer (brown line), and those without an enrollment status (dark green line) had lower success rates.

## Answer to Question 2: Are there Inequities Among Subgroups?

As shown in Table 1, data is broken out by various demographics with section A being Ethnicity. The percent success shown in the far-right column indicates the proportion of the student group having success. In theory, each student group should approximate the overall $72.0 \%$. While practice is often much different than theory, the percent success cell was highlighted yellow if the deviation was 5 percentage points below the $72.0 \%$ and the total $n$ for the group was $>30$.
The success rate for Black or African American students was $57.2 \%\left(\left(\frac{2937}{5138}\right) * 100\right)$ with a deviation of 14.8 percentage points from the $72.0 \%$.

Additional demographic sections of Table 1 having little deviation below the 72.0\% were Sections B-Gender and D-Age. Other demographic characteristics had a moderate deviation from the $72.0 \%$. These included sections C-Pell Grant; H-Method (LSUO 8-week online); and K-Part-Time and L-Full-Time students relating to 8-week online courses. Finally, those with large deviation from the $72.0 \%$ were sections $G / I$-Pathways to Success with a difference of more than 20 percentage points overall (section G) and better than 25 percentage points for online methodologies.

Next, Table 1 Section J-New First-Time Students indicates that face-to-face methodologies create some difficulty with a success rate of $68.4 \%$; however, online methodologies for new students lead to double digit decreases in success in some cases.

Table 3 depicts the longitudinal data for demographic groups where the largest variation existed in Table 1 sections A, C, G/I, and J. In every case, the success rates for AY 2020-2021 were below the mean and the median for the longitudinal data. Figure 2 depicts the numeric data for the ten years with a linear (dotted) trendline for the overall success rates only. Figure 2 shows that the lines for both overall success and students with Pell Grants are fluctuating but are relatively stable. However, Figure 2 shows two troubling trends in the longitudinal data. The first is that Black or African American students, students receiving Pell Grants, Pathways to Success Students, and New First-Time Students are performing below the overall success rates for the past ten years.

The second trend in Figure 2 is that the lack of success with certain student groups accelerated in the past few academic years. The data suggests that the needs of the new first-time (light blue line), Pathways to Success (green line), and Black or African American (orange line) students are not being met as the slopes of the three lines are negative, indicating that the success rates have decreased since AY 2017-2018. Success rates for new first-time students have decreased eight percentage points while success rates for Pathways to Success have decreased 15 percentage points since AY 2017-2018. Further, success rates for Black or African American students decreased 9.2 percentage points over the same time period.

Figure 2 contains several callouts that serve to detail the history of the change of chancellors since Chancellor Russell. She made several changes to advising, the Registrar's Office, and Pathways to Success during her tenure as Chancellor to help facilitate student success. Doing so apparently had the opposite effect.

Given the data discussed above, the answer to question two is that there does appear to be inequities among certain student groups given the results depicted in Table 1, Table 3, and Figure 2. The data suggests that students in the Pathways to Success Program, students who are new first-time, and students who are Black or African American need to be better served.

## Answer to Question 3: What is the Overall Withdrawal Rate for AY 2020-2021?

The next question considered in this paper relates to students withdrawing from their courses. Table 1 presents the overall course withdrawal rates for AY 2020-2021, which includes 2,456 instances of course withdrawal out of 20,750 instances of course taking for a rate of $11.8 \%$. Further examination of the withdrawal rates from AY 2020-2021 included in Table 4 finds that Pathways to Success students withdrew from courses at a rate between $16.6 \%$ and $17.6 \%$ depending on the methodology used. This was followed by Black or African American students withdrawing at a rate of $15.2 \%$ and new first-time students between $14.4 \%$ and $15.0 \%$ depending on the type of course. Students with Pell Grants withdrew at a rate of $13.4 \%$ while students with ages 18-24 withdrew at $12.6 \%$.

Next, Table 5 examines the withdrawal rates longitudinally from AY 2010-2011 through AY 2019-2020 using the same groups as Table 3. The longitudinal mean from AY 2020-2011 through AY 2019-2020 was $10.1 \%$ while the median was $9.9 \%$, both indicating that the $11.8 \%$ for AY 2020-2021 exceeded the withdrawal rate for the ten-year time period. The linear (dotted) trendline in Figure 3 is slightly positively-sloped, indicating that withdrawal rates are increasing. In every case, the group means detailed in Table 5 all had a withdrawal rate greater than the mean and the median for all students in all courses during the ten-year time period. Figure 3 includes the same callouts as Figure 2.

## Results for New First-Time, Black or African American Students with a Pell Grant in the Pathways to Success Program

Given the demographic breakdown of success and withdrawal rates examined in this paper in Table 1 through Table 5, it was decided to further analyze the data by whether students met specific demographic criteria. Table 6 and Figure 4 detail the longitudinal success and withdrawal rates for new first-time, Black or African American students with a Pell Grant placed in the Pathways to Success Program from AY 2020-2011 through AY 2020-2021. Based on the data, several findings are apparent. First, students meeting the criteria have consistently performed below the general student population and needed additional support (comparing the light blue line in Figure 4 with the dark blue line). In addition, the students meeting the criteria above withdrew from courses at a higher rate (comparing the dark green line in Figure 4 to the light green line). ${ }^{7}$

[^2]Second, comparing the data for AY 2020-2021 only, the students meeting the criteria above had a success rate of $44.2 \%$; the lowest in eleven years. This was 27.8 percentage points below the $72.0 \%$ for the overall student body. At the same time, the withdrawal rate was $15.9 \%$ which was 4.1 percentage points higher than the overall student body at $11.8 \%$.

Third, comparing the demographic group to its own historical rates, the success rate in AY 2020-2021 for the students under discussion was $44.2 \%$ as noted above. This is a difference of 16.7 percentage points when compared to the longitudinal mean of $60.9 \%$ from AY 2010-2011 through 2019-2020. Similarly, the withdrawal rate was $15.9 \%$ for AY 2020-2021. This was slightly above the group mean of $14.6 \%$.

Finally, the third finding indicates that student performance has dropped substantially beginning in AY 2018-2019. The totality of the situation suggests that urgent change is needed to support these students.


#### Abstract

Answer to Question 4: Success Rates for New First-Time, Black or African American Students with a Pell Grant Placed in the Pathways to Success Program by Course ${ }^{8}$ Which courses were the Pathways to Success students having difficulty with? To answer question four, the Office of Institutional Effectiveness returned to the discussion from Table 6 and Figure 4. This discussion centered on the course success and withdrawal rates for new first-time, Black or African American students with a Pell Grant placed into the Pathways to Success program. Table 7 is a summary of the same data from Table 6 broken out by course with the success rates by course in the far-right column for each row and the success rates for each year at the bottom. ${ }^{9}$ Cells that are shaded gray indicate that the courses were not offered or did not exist for that academic year. Cells with no data and not shaded indicate that no students from the demographic group enrolled in the course for the given academic year.


As noted, the far-right column in Table 7 depicts the success rate for each course from AY 2010-2011 through AY 2020-2021. The yellow highlighting for the success rates indicates students under discussion had difficulty with the course, and these included BADM 1001, CJ 1107, MATH 0001, and MUS 1751. ${ }^{10}$ Both BADM 1001 and CJ 1107 had pockets of success but fluctuated widely over the 11-year period. The success rates from MUS 1751 were somewhat acceptable through up until AY 2015-2016. The success rate dropped dramatically after that to 33.3\% for AY 2018-2019 and 22.2\% for AY 2020-2021. ${ }^{11}$ For MATH 0001, there are problematic results for the first three years: increased success from AY 2013-2014 through 2016-2017, then double digit decreases beginning in AY 2017-2018. It is also interesting to note that nearly three-fourths ( $71.6 \%$ ) of the students in the demographic group had success in ENGL 1001 in their first semester of attendance.

[^3]Finally, cells with blue highlighting for course success in the far-right column of Table 7 indicates that there were additional course options for new first-time students after the Student Success Center took over Pathways to Success operations in October 2017. Some choices were successful (see SOCL 2001) or moderately successful (see CMST 2060) based on a limited sample. Given that, the rest of the courses highlighted blue contributed to the lack of success. This lack of success is likely due to the fact that many Pathways to Success students have difficulty with reading comprehension and many of the courses highlighted blue are reading intensive.

## Answer to Question 5: Full-Time and Part-Time Students

What were the success and withdrawal rates based on whether a student was part-time or fulltime? ${ }^{12}$ Table 8 and Figure 5 seek to answer that question over the 11-year period. Full-time course success is represented by the dark blue line, while the withdrawal rate is represented by the light blue line. Part-time student success rates are shown by the dark green line, and the withdrawal rate is shown by the light green line. While the data and the lines show some variability over the eleven years, the two sets of lines are similar. Further, the means and medians indicate little variability, with the part-time students having a slightly lower success rate and a slightly higher withdrawal rate; however, these differences are less than one percentage point. Given the statistics, the data in Table 8 and Figure 5 does suggest that the success rates could be improved, especially for AY 2020-2021. This would, no doubt lead to fewer withdrawals.

## Success in the First College Level Mathematics Course

How does the success rate for MATH 1020 compare to MATH 1021? During the Extended Cabinet meeting on November 16, 2021, there was a short discussion on success and withdrawal rates for the first college level mathematics courses and how each compared. Table 9 and Figure 6 present the data for the eleven-year period, with the mean and median being calculated for AY 2010-2011 through AY 2019-2020. This was done to compare AY 2020-2021 to the previous ten years. Cells shaded gray indicate that the course was not offered or did not exist for that academic year. MATH 1015 is Applied College Algebra while MATH 1020 and MATH 1021 are both College Algebra used for fields related to science, engineering, and mathematics.

Several trends are presented in Table 9 and Figure 6. First, originally offered in fall 2013, the success rate for MATH 1015, shown as the dark green line ( $\overline{\mathrm{x}}=62.1 \%$ ), generally has been above that of the dark blue line for MATH 1021 ( $\bar{x}=56.6 \%$ ) except in AY 2020-2021 when the two were nearly identical at $53 \% .^{13}$ The data also indicates that the withdrawal rate for MATH 1015, shown as the light green line ( $\bar{x}=14.7 \%$ ), was below that of the light blue line for MATH 1021 ( $\overline{\mathrm{x}}=18.0 \%$ ). Again, the two were nearly identical in AY 2020-2021 at 23\%.

Next, the black line and dots represent the $\bar{x}=68.4 \%$ success rate and $\bar{x}=13.3 \%$ withdrawal rate for MATH 1020 in the four semesters it was offered. Comparing MATH 1020 to MATH 1021

[^4]is rather difficult due to just four data points for MATH 1020; however, the comparison does suggest that success rates are typically higher for MATH 1020 ( $\bar{x}=68.4 \%$ ) than they are for MATH 1021 ( $\overline{\mathrm{x}}=56.6 \%$ ). The data also suggests that the withdrawal rate for MATH 1020 ( $\overline{\mathrm{x}}=$ $13.3 \%$ ) is slightly less than the withdrawal rate for MATH 1021 ( $\bar{x}=18.0 \%$ ).

Third, the data in Table 1 and Figure 6 suggests that success rates for all three courses have decreased since AY 2017-2018. In fact, the success rate for MATH 1015 was at a low in AY 2020-2021 and was 8.9 percentage points below the mean of $62.1 \%$. The same is true for MATH 1020 with the success rate ten percentage points below the mean of $68.4 \%$. For MATH 1021, the success rate of $53.3 \%$ in AY 2020-2021 was the course's second lowest success rate other than the 51.0\% in AY 2010-2011. The 53.3\% for AY 2020-2021 was 3.3 percentage points below the mean of $56.6 \%$.

## Conclusions

The Office of Institutional Effectiveness and Accreditation provides an interpretation based on the data. As a result, the answers are repeated based on the discussion above.

1. What is the overall success rate for students taking courses in AY 2020-2021? It was $72.0 \%$ according to Table 1 considering all students in all courses during AY 2020-2021. The $72.0 \%$ is slightly less than the ten-year mean of $74.2 \%$ in the longitudinal data presented in Table 3.
2. Are there inequities in success rates among individual student sub-groups? The data suggests that inequities exist in success and withdrawal rates and that these inequities have existed for some time. Table 6 and Figure 4 indicate the magnitude of the issues.
3. What is the overall withdrawal rate? The overall withdrawal rate for AY 2020-2021 was $11.8 \%$ according to Table 1. Table 5, and Figure 3 indicate that the $11.8 \%$ withdrawal rate from AY 2020-2021 exceeds the overall withdrawal rate from the longitudinal data. The data from Table 4 and Table 5 indicates that many of the same groups discussed in the answer to question two had higher withdrawal rates.
4. What courses were the Pathways to Success students having difficulty with? This question was asked specifically for new first-time, Black or African American students with a Pell Grant placed in the Pathways to Success Program. This demographic subgroup seems to have difficulty with several courses in their first semester. These include MATH 0001, BADM 1001, CJ 1107, and several reading intensive courses such as history and psychology (see Table 7).
5. What are the longitudinal success and withdrawal rates for part-time and full-time students? Does one group perform better than another? Table 8 and Figure 5 provide the answer that there is some variation between the two groups; however, they tend to have similar success and withdrawal rates for most academic years.
6. How does the success rate for MATH 1020 compare to MATH 1021? The data presented in Table 9 and Figure 6 indicated that the success rate for MATH 1020 generally exceeded the success rate for MATH 1021, keeping in mind that MATH 1020 had only four data points. The data for the withdrawal rates for MATH 1020 were slightly higher than MATH 1021. Comparing MATH 1015 to MATH 1021, students generally had a higher success and lower withdrawal rates for MATH 1015 than for MATH 1021.

Note that this paper does not address why these trends are occurring. The question of why is left for the Chancellor's Cabinet or the Achieving the Dream Core Team. Further, any recommendations for improvement will come from the Chancellor's Cabinet and the Achieving the Dream Core Team.

## Related Reports

The following are related reports posted to the Institutional Effectiveness Website:

- Quick Fact Summary 2018-6: End of Semester Outcomes of DFWIR (April 4, 2018)
- Quick Fact Summary 2018-5: End of Semester Outcomes Based on a D or F at Midterm (April 4, 2018)
- Quick Fact Summary 2018-4: Student Withdrawal Comparison (March 28, 2018)

Questions on this report may be directed to Dr. Paul Fowler, Director of Institutional Effectiveness and Accreditation at pfowler@lsue.edu.

Table 1. AY 2020-2021 LSU Eunice Overall Success Rates - All students in all courses.

| A. Ethnicity | A | AU | B | C | D | F | 1 | IP | NC | NR | P | W | WB | Grand Total | Percent Success |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| American Indian or Alaska Native | 20 |  | 36 | 18 | 5 | 8 |  |  |  |  | 4 | 15 |  | 106 | 73.6 |
| Asian | 77 |  | 36 | 14 | 9 | 7 |  |  |  | 1 |  | 14 |  | 158 | 80.4 |
| Black or African American | 1063 |  | 1006 | 837 | 377 | 1007 | 1 |  | 2 | 33 | 31 | 781 |  | 5138 | 57.2 |
| Hispanic of any race | 188 |  | 128 | 104 | 19 | 69 |  |  | 2 | 1 | 7 | 92 |  | 610 | 70.0 |
| Native Hawaiian or Other Pacific |  |  | 1 | 1 |  | 4 |  |  |  |  |  |  |  | 6 | 33.3 |
| Nonresident Alien | 38 |  | 19 | 9 | 3 | 8 |  |  |  |  |  | 10 |  | 87 | 75.9 |
| Race/Ethnicity Unknown | 190 |  | 121 | 86 | 21 | 84 | 2 |  |  | 1 | 4 | 69 |  | 578 | 69.4 |
| Two or more races | 119 |  | 90 | 59 | 20 | 36 |  |  |  |  | 2 | 61 |  | 387 | 69.8 |
| White | 4880 | 1 | 3559 | 1955 | 549 | 985 | 1 | 1 | 13 | 74 | 248 | 1413 | 1 | 13680 | 77.8 |
| Grand Total | 6575 | 1 | 4996 | 3083 | 1003 | 2208 | 4 | 1 | 17 | 110 | 296 | 2455 | 1 | 20750 | 72.0 |
| B. Gender | A | AU | B | C | D | F | I | IP | NC | NR | P | W | WB | Grand Total | Percent Success |
| F | 4767 |  | 3816 | 2311 | 744 | 1566 | 4 | 1 | 17 | 96 | 263 | 1709 |  | 15294 | 73.0 |
| M | 1808 | 1 | 1180 | 772 | 259 | 642 |  |  |  | 14 | 33 | 746 | 1 | 5456 | 69.5 |
| Grand Total | 6575 | 1 | 4996 | 3083 | 1003 | 2208 | 4 | 1 | 17 | 110 | 296 | 2455 | 1 | 20750 | 72.0 |
| C. Pell Grant Recipient? | A | AU | B | C | D | F | 1 | IP | NC | NR | P | W | WB | Grand Total | Percent Success |
| N | 4196 | 1 | 2892 | 1579 | 464 | 907 | 1 | 1 | 4 | 109 | 191 | 1230 |  | 11575 | 76.5 |
| Y | 2379 |  | 2104 | 1504 | 539 | 1301 | 3 |  | 13 | 1 | 105 | 1225 | 1 | 9175 | 66.4 |
| Grand Total | 6575 | 1 | 4996 | 3083 | 1003 | 2208 | 4 | 1 | 17 | 110 | 296 | 2455 | 1 | 20750 | 72.0 |
| D. Age | A | AU | B | C | D | F | 1 | IP | NC | NR | P | W | WB | Grand Total | Percent Success |
| 15-17 | 914 |  | 455 | 220 | 45 | 64 |  |  |  | 1 |  | 145 |  | 1844 | 86.2 |
| 18-24 | 4375 |  | 3534 | 2276 | 805 | 1808 | 4 |  | 11 | 67 | 160 | 1874 | 1 | 14915 | 69.4 |
| 25 and greater | 1286 | 1 | 1007 | 587 | 153 | 336 |  | 1 | 6 | 42 | 136 | 436 |  | 3991 | 75.6 |
| Grand Total | 6575 | 1 | 4996 | 3083 | 1003 | 2208 | 4 | 1 | 17 | 110 | 296 | 2455 | 1 | 20750 | 72.0 |
| E. Athlete? | A | AU | B | C | D | F | I | IP | NC | NR | P | W | WB | Grand Total | Percent Success |
| N | 5989 | 1 | 4718 | 2951 | 940 | 2129 | 4 | 1 | 17 | 110 | 296 | 2355 | 1 | 19512 | 71.5 |
| Y with sports participation courses | 586 |  | 278 | 132 | 63 | 79 |  |  |  |  |  | 100 |  | 1238 | 80.5 |
| Grand Total | 6575 | 1 | 4996 | 3083 | 1003 | 2208 | 4 | 1 | 17 | 110 | 296 | 2455 | 1 | 20750 | 72.0 |
| F. Dual Enrollment? | A | AU | B | C | D | F | I | IP | NC | NR | P | W | WB | Grand Total | Percent Success |
| N | 5555 | 1 | 4487 | 2844 | 967 | 2171 | 4 | 1 | 17 | 109 | 296 | 2315 | 1 | 18768 | 70.2 |
| Y | 1020 |  | 509 | 239 | 36 | 37 |  |  |  | 1 |  | 140 |  | 1982 | 89.2 |
| Grand Total | 6575 | 1 | 4996 | 3083 | 1003 | 2208 | 4 | 1 | 17 | 110 | 296 | 2455 | 1 | 20750 | 72.0 |
| G. Pathways to Success? | A | AU | B | C | D | F | I | IP | NC | NR | P | W | WB | Grand Total | Percent Success |
| N | 6140 | 1 | 4530 | 2672 | 825 | 1580 | 2 | 1 | 17 | 110 | 296 | 2034 |  | 18208 | 74.9 |
| Y | 435 |  | 466 | 411 | 178 | 628 | 2 |  |  |  |  | 421 | 1 | 2542 | 51.6 |
| Grand Total | 6575 | 1 | 4996 | 3083 | 1003 | 2208 | 4 | 1 | 17 | 110 | 296 | 2455 | 1 | 20750 | 72.0 |


| H. Method | A | AU | B | C | D | F | I | IP | NC | NR | P | W | WB | Grand Total | Percent Success |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LSUE 8-week online | 528 |  | 376 | 238 | 72 | 252 |  |  |  |  |  | 136 |  | 1602 | 71.3 |
| 16-week face-to-face | 3288 | 1 | 2700 | 1752 | 562 | 924 | 2 | 1 | 11 | 110 | 296 | 1445 | 1 | 11093 | 72.4 |
| LSUE 16-week online | 2567 |  | 1804 | 1016 | 334 | 927 | 1 |  | 6 |  |  | 808 |  | 7463 | 72.2 |
| LSUO 8-week online | 192 |  | 116 | 77 | 35 | 105 | 1 |  |  |  |  | 66 |  | 592 | 65.0 |
| Grand Total | 6575 | 1 | 4996 | 3083 | 1003 | 2208 | 4 | 1 | 17 | 110 | 296 | 2455 | 1 | 20750 | 72.0 |
| I. Pathways to Success Only | A | AU | B | C | D | F | I | IP | NC | NR | P | W | WB | Grand Total | Percent Success |
| 8-week online | 16 |  | 8 | 20 | 9 | 38 |  |  |  |  |  | 6 |  | 97 | 45.4 |
| 16-week face-to-face | 314 |  | 317 | 254 | 104 | 339 | 2 |  |  |  |  | 266 | 1 | 1597 | 55.4 |
| 16-week online | 105 |  | 141 | 137 | 65 | 251 |  |  |  |  |  | 149 |  | 848 | 45.2 |
| Grand Total | 435 | 0 | 466 | 411 | 178 | 628 | 2 | 0 | 0 | 0 | 0 | 421 | 1 | 2542 | 51.6 |
| J. New First-Time Students Only | A | AU | B | C | D | F | 1 | IP | NC | NR | P | W | WB | Grand Total | Percent Success |
| LSUE 8-week online | 51 |  | 43 | 21 | 10 | 51 |  |  |  |  |  | 10 |  | 186 | 61.8 |
| 16-week face-to-face | 748 |  | 554 | 373 | 114 | 291 |  |  |  |  |  | 368 | 1 | 2449 | 68.4 |
| LSUE 16-week online | 284 |  | 291 | 206 | 93 | 354 |  |  |  |  |  | 206 |  | 1434 | 54.5 |
| LSUO 8-week online | 39 |  | 20 | 19 | 11 | 40 |  |  |  |  |  | 10 |  | 139 | 56.1 |
| Grand Total | 1122 | 0 | 908 | 619 | 228 | 736 | 0 | 0 | 0 | 0 | 0 | 594 | 1 | 4208 | 63.0 |
| K. All Part-Time Students (registered < $\mathbf{1 2} \mathbf{~ h r s ) ~}$ | A | AU | B | C | D | F | I | IP | NC | NR | P | W | WB | Grand Total | Percent Success |
| LSUE 8-week online | 155 |  | 84 | 51 | 21 | 72 |  |  |  |  |  | 46 |  | 429 | 67.6 |
| 16-week face-to-face | 855 | 1 | 906 | 522 | 188 | 234 | 1 | 1 | 11 | 110 | 285 | 450 |  | 3564 | 72.1 |
| LSUE 16-week online | 934 |  | 708 | 387 | 112 | 278 | 1 |  | 6 |  |  | 283 |  | 2709 | 74.9 |
| LSUO 8-week online | 64 |  | 35 | 21 | 6 | 25 | 1 |  |  |  |  | 34 |  | 186 | 64.5 |
| Grand Total | 2008 | 1 | 1733 | 981 | 327 | 609 | 3 | 1 | 17 | 110 | 285 | 813 | 0 | 6888 | 72.7 |
| L. All Full-Time Students (registered $\geq 12 \mathrm{hrs}$ ) | A | AU | B | C | D | F | I | IP | NC | NR | P | W | WB | Grand Total | Percent Success |
| LSUE 8-week online | 373 |  | 292 | 187 | 51 | 180 |  |  |  |  |  | 90 |  | 1173 | 72.6 |
| 16-week face-to-face | 2433 |  | 1794 | 1230 | 374 | 690 | 1 |  |  |  | 11 | 995 | 1 | 7529 | 72.6 |
| LSUE 16-week online | 1633 |  | 1096 | 629 | 222 | 649 |  |  |  |  |  | 525 |  | 4754 | 70.6 |
| LSUO 8-week online | 128 |  | 81 | 56 | 29 | 80 |  |  |  |  |  | 32 |  | 406 | 65.3 |
| Grand Total | 4567 | 0 | 3263 | 2102 | 676 | 1599 | 1 | 0 | 0 | 0 | 11 | 1642 | 1 | 13862 | 71.7 |

Table 2. Longitudinal success rates by enrollment status.

| Description/Academic Year | $10-11$ | $11-12$ | $12-13$ | $13-14$ | $14-15$ | $15-16$ | $16-17$ | $17-18$ | $18-19$ | $19-20$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | 20-21 | Mean |
| :---: | Median

Figure 1. Longitudinal success rates by enrollment status.


Table 3. Longitudinal success rate data (as a percentage). ${ }^{14}$

| Description/Academic Year | $10-11$ | $11-12$ | $12-13$ | $13-14$ | $14-15$ | $15-16$ | $16-17$ | $17-18$ | $18-19$ | $19-20$ | $20-21$ | Mean |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Median

Figure 2. Success Rates using the data from Table 3.


[^5]Table 4. AY 2020-2021 Frequency and percent of withdrawal. ${ }^{15}$

| Description | Frequency <br> of W | Group <br> Frequency | Percent <br> W |
| :--- | :---: | :---: | :---: |
| I. Pathways 16-week Online | 149 | 848 | 17.6 |
| I. Pathways Face-to-Face | 266 | 1597 | 16.7 |
| G Pathways to Success | 421 | 2542 | 16.6 |
| A. Black or African American | 781 | 5138 | 15.2 |
| J. New First-Time Face to Face | 368 | 2449 | 15.0 |
| J. New First-Time 16-Week Online | 206 | 1434 | 14.4 |
| C. Pell Grants Yes | 1225 | 9175 | 13.4 |
| D. Age 18-24 | 1874 | 14915 | 12.6 |

${ }^{15}$ The students in these demographic groups are not mutually exclusive.

Table 5. Longitudinal withdrawal data (as a percentage). ${ }^{16}$

| Description/Academic Year | $10-11$ | $11-12$ | $12-13$ | $13-14$ | $14-15$ | $15-16$ | $16-17$ | $17-18$ | $18-19$ | $19-20$ | $20-21$ | Mean | Median |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Courses | 10.8 | 10.5 | 9.9 | 9.7 | 9.9 | 9.9 | 10.3 | 9.5 | 11.9 | 9.1 | 11.8 | 10.1 | 9.9 |
| A. Black or African American | 14.4 | 13.8 | 12.2 | 13.8 | 14.0 | 13.4 | 13.5 | 11.5 | 16.9 | 11.2 | 15.2 | 13.5 | 13.6 |
| C. Pell Grant Recipient | 11.9 | 11.3 | 10.8 | 11.6 | 10.3 | 10.6 | 11.0 | 11.3 | 13.7 | 9.7 | 13.4 | 11.2 | 11.1 |
| G/I. Pathways to Success | 16.4 | 14.3 | 14.1 | 14.2 | 15.5 | 17.0 | 16.6 | 11.9 | 15.1 | 9.4 | 16.6 | 14.5 | 14.7 |
| J. New First-Time | 11.9 | 12.2 | 10.7 | 11.8 | 12.2 | 12.0 | 11.9 | 10.8 | 13.9 | 11.9 | 14.1 | 11.9 | 11.9 |

Figure 3. Withdrawal rate as a percentage from Table 5.


[^6]Table 6. Success and Withdrawal Rates - New first-time, Black or African American students with a Pell Grant enrolled in the Pathways to Success Program (NFFBAPP) compared to overall student body.

| Description/Academic Year | $10-11$ | $11-12$ | $12-13$ | $13-14$ | $14-15$ | $15-16$ | $16-17$ | $17-18$ | $18-19$ | $19-20$ | $20-21$ | Mean |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Median

Figure 4. Success and Withdrawal Rates - New first-time, Black or African American students with a Pell Grant enrolled in the Pathways to Success Program compared to overall student body.


Table 7. Pathways to Success longitudinal success rates by course.

| Course | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | n <br> Success | Total n | \% Success by Course |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ART 1440 |  |  |  |  | 50.0 |  |  |  |  |  | 45.5 | 7 | 16 | 43.8 |
| ART 2470 |  |  |  |  |  |  |  |  |  |  | 0.0 | 0 | 1 | 0.0 |
| BADM1001 | 12.5 | 28.6 | 0.0 | 0.0 | 100.0 | 100.0 | 50.0 | 0.0 |  |  | 50.0 | 16 | 43 | 37.2 |
| BIOL1001 | 0.0 |  |  |  |  |  |  |  | 25.0 | 100.0 | 20.0 | 5 | 21 | 23.8 |
| BIT1000 |  | 50.0 |  |  |  |  |  |  |  |  |  | 1 | 2 | 50.0 |
| CJ 1107 | 25.0 | 42.9 | 50.0 | 0.0 | 40.0 | 60.0 | 0.0 | 0.0 | 9.1 | 70.0 | 71.4 | 23 | 55 | 41.8 |
| CMST1061 | 63.1 | 71.8 | 62.1 | 64.7 | 64.3 | 57.6 | 60.6 | 79.3 | 53.1 | 59.3 | 40.9 | 220 | 354 | 62.1 |
| CMST2010 |  |  |  |  |  |  |  |  |  | 100.0 | 30.0 | 4 | 11 | 36.4 |
| CMST2060 |  |  |  |  |  |  | 100.0 |  |  | 100.0 | 50.0 | 4 | 6 | 66.7 |
| CPS 1001 | 83.3 | 90.0 | 60.0 | 40.0 | 72.7 | 83.3 | 80.0 | 0.0 | 66.7 |  | 0.0 | 48 | 69 | 69.6 |
| ECON2010 | 0.0 |  |  |  |  |  |  |  |  |  |  | 0 | 1 | 0.0 |
| ENGL0001 | 67.6 | 61.7 | 61.1 | 65.0 | 68.8 | 69.5 | 73.7 | 68.8 | 64.1 | 50.0 | 53.4 | 711 | 1113 | 63.9 |
| ENGL1001 | 76.9 | 80.0 | 57.1 | 80.0 | 50.0 | 87.5 | 50.0 | 100.0 | 66.7 | 75.0 | 66.7 | 48 | 67 | 71.6 |
| ENGL1002 |  |  | 100.0 |  |  | 100.0 |  |  |  |  |  | 2 | 2 | 100.0 |
| FSCI1001 |  |  |  |  |  |  |  |  |  |  | 0.0 | 0 | 1 | 0.0 |
| GEOG1001 |  |  |  |  |  |  |  |  |  |  | 0.0 | 0 | 1 | 0.0 |
| HIST1001 |  |  |  |  |  |  |  |  |  | 33.3 | 0.0 | 1 | 5 | 20.0 |
| HIST1003 |  |  |  |  |  |  |  |  |  |  | 0.0 | 0 | 1 | 0.0 |
| HIST2055 |  |  |  |  |  |  |  |  | 50.0 | 0.0 | 60.0 | 4 | 8 | 50.0 |
| HIST2057 |  |  |  |  |  |  |  |  |  | 25.0 |  | 1 | 4 | 25.0 |
| HPRE1142 |  | 100.0 | 50.0 |  | 0.0 |  | 100.0 | 100.0 | 50.0 | 100.0 | 100.0 | 10 | 13 | 76.9 |
| HPRE1146 | 100.0 | 100.0 |  |  |  |  |  |  | 100.0 |  | 100.0 | 11 | 11 | 100.0 |
| HPRE1242 |  |  |  |  |  | 100.0 |  |  | 100.0 |  | 100.0 | 4 | 4 | 100.0 |
| HPRE1501 |  | 100.0 | 50.0 |  | 0.0 | 100.0 |  |  | 71.4 | 100.0 | 100.0 | 23 | 27 | 85.2 |
| HPRE1600 | 50.0 | 0.0 | 100.0 |  | 100.0 |  | 87.5 | 87.5 | 78.9 |  | 100.0 | 39 | 48 | 81.3 |
| MATH0001 | 33.1 | 41.2 | 40.8 | 54.9 | 51.3 | 56.9 | 50.0 | 33.9 | 33.7 | 23.6 | 32.3 | 379 | 942 | 40.2 |
| MATH0002 | 0.0 | 0.0 | 50.0 | 33.3 | 33.3 | 66.7 | 66.7 |  |  |  |  | 12 | 29 | 41.4 |
| MATH0015 |  |  |  |  |  |  |  | 0.0 | 16.7 |  | 0.0 | 1 | 9 | 11.1 |
| MATH0021 |  |  |  |  |  |  |  | 0.0 | 0.0 |  |  | 0 | 5 | 0.0 |
| MATH1015 |  |  |  | 0.0 | 50.0 | 0.0 | 0.0 |  | 25.0 | 100.0 |  | 3 | 11 | 27.3 |
| MATH1021 | 0.0 | 0.0 |  |  | 0.0 | 0.0 |  | 50.0 | 50.0 | 50.0 |  | 4 | 17 | 23.5 |
| MATH1425 |  |  | 0.0 |  |  |  |  |  |  |  |  | 0 | 1 | 0.0 |
| MUS 1751 | 66.7 |  | 0.0 | 83.3 | 75.0 | 66.7 | 0.0 | 0.0 | 33.3 | 0.0 | 22.2 | 15 | 34 | 44.1 |
| OIS 2000 | 0.0 |  |  |  |  |  |  |  |  |  |  | 0 | 1 | 0.0 |
| POLS2051 |  |  |  |  |  |  |  |  |  |  | 100.0 | 1 | 1 | 100.0 |
| PSYC2000 |  |  |  |  |  | 100.0 |  | 100.0 | 100.0 |  | 28.6 | 7 | 12 | 58.3 |
| PSYC2070 | 50.0 |  | 0.0 |  | 100.0 | 100.0 |  |  | 100.0 |  | 62.5 | 10 | 15 | 66.7 |
| SOCL2001 |  |  |  |  |  |  |  |  |  | 100.0 | 75.0 | 8 | 10 | 80.0 |
| SOCL2501 |  |  |  |  |  |  |  |  |  | 100.0 |  | 1 | 1 | 100.0 |
| THTR1020 | 0.0 | 100.0 |  |  |  |  |  |  |  |  |  | 1 | 2 | 50.0 |
| UNIV0008 | 66.7 | 66.7 | 80.0 | 80.0 | 100.0 | 80.0 | 0.0 | 100.0 |  | 33.3 | 60.0 | 35 | 48 | 72.9 |
| UNIV1005 | 69.2 | 76.1 | 70.5 | 68.0 | 68.9 | 76.2 | 72.0 | 79.7 | 72.9 | 66.2 | 41.1 | 773 | 1122 | 68.9 |
| \% Success by AY | 57.9 | 62.5 | 59.4 | 62.2 | 62.8 | 68.1 | 65.1 | 64.2 | 56.2 | 50.2 | 44.2 | 2432 | 4144 | 58.7 |

Table 8. Full-time and part-time student success and withdrawal rates by academic year.

| Description/Academic Year | $10-11$ | $11-12$ | $12-13$ | $13-14$ | $14-15$ | $15-16$ | $16-17$ | $17-18$ | $18-19$ | $19-20$ | $20-21$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Mean | Median |
| :--- |
| Success Part-Time |

Figure 5. Full-time and part-time student success and withdrawal rates by academic year.


Table 9. Success and withdrawal rates for all students taking College Algebra.

| Description/Academic Year | $10-11$ | $11-12$ | $12-13$ | $13-14$ | $14-15$ | $15-16$ | $16-17$ | $17-18$ | $18-19$ | $19-20$ | $20-21$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mean | Median |  |  |  |  |  |  |  |  |  |  |
| \% Success MATH 1015 |  |  |  | 61.7 | 60.4 | 64.4 | 62.7 | 65.8 | 63.2 | 56.4 | 53.2 |
| \% Success MATH 1020 |  |  | 78.6 |  |  |  |  | 65.2 |  | 61.3 | 58.4 |
| \% Success MATH 1021 | 51.0 | 54.8 | 58.4 | 57.3 | 61.9 | 54.0 | 57.6 | 60.9 | 55.2 | 55.0 | 53.3 |
| \% Withdrawal MATH 1015 |  |  |  | 15.2 | 15.8 | 11.9 | 12.8 | 11.6 | 18.2 | 17.1 | 23.2 |
| \% Withdrawal MATH 1020 |  |  | 3.6 |  |  |  |  | 21.7 |  | 14.7 | 15.7 |
| \% Withdrawal MATH 1021 | 19.1 | 14.8 | 13.2 | 12.6 | 11.2 | 19.2 | 20.2 | 21.1 | 24.7 | 23.8 | 23.1 |

Figure 6. Success and withdrawal rates for all students taking College Algebra.



[^0]:    ${ }^{1}$ Thank you to Dr. Michael Alleman for editing.
    ${ }^{2}$ MATH 1020 and MATH 1021 are College Algebra. MATH 1020 is a five-credit hour version with two hours of developmental material as needed while MATH 1021 is a three-credit hour version.

[^1]:    ${ }^{3}$ It is important to note that frequencies of course taking and success in those courses are discussed here. While student headcount influences course-taking over a particular academic year, it is not discussed in this paper. The report for each academic year contains approximately 19,000 records. ${ }^{4}$ The denominator includes all students enrolled on the census day for a given semester. It includes all grades of A, AU, B, C, D, F, P, and NC along with other outcomes such as I, NR, IP, W, and WB (see Table 1).
    ${ }^{5}$ While the mean is the sum of all scores divided by the number of scores in the data set, the median is the midpoint of the data. The median is included because it is less susceptible to outliers. The distribution of scores approaches normal when the mean is equal to the median.
    ${ }^{6}$ Students with "none" as enrollment status enrolled in the "C6" eight-week session that began during the second half of the semester.

[^2]:    ${ }^{7}$ From AY 2004-2005 through AY October 2017, the Pathways to Success Program encouraged students to withdraw from courses after they had exhausted all other possibilities to increase success. This was

[^3]:    done to protect students' grade point average. The former director is not aware if this practice was continued when the program was transferred to the Student Success Center.
    ${ }^{8}$ See http:///sue.catalog.acalog.com/ for the course titles and descriptions.
    ${ }^{9}$ Note that the success rates at the bottom of Table 7 match the success rates for the demographic group considered in Table 6.
    ${ }^{10}$ Data was only highlighted yellow for the lowest success rates when the $n>30$. This was done because sampling distribution of the mean begins to normalize when $n$ approaches 30 thus reducing sampling error.
    ${ }^{11} \mathrm{~N}=17$ for the last five years.

[^4]:    ${ }^{12}$ Part-time is 0 to 11 hours at census so that it includes students registering only for the second half (8week session) of the semester. Full-time is 12 or more registered hours at census.
    ${ }^{13}$ Again, please note that the statistics calculated in blue are for AY 2010-2011 through AY 2019-2020.

[^5]:    14 The students in these demographic groups are not mutually exclusive.

[^6]:    ${ }^{16}$ The students in these demographic groups are not mutually exclusive.

