Annual Discipline Update for 2021-2022 PART A - Economics

SECTION 1: BASIC PROGRAM/DISCIPLINE INFORMATION

SAC Name: **Economics**

Disciplines included in this SAC: Economics

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Classes/Services offered at: CA / RC / SE / SY

SECTION 2: REFLECTING ON DATA

In this section, we will explore data collected through the Argos system covering the previous five years–that is, from the 2016-17 academic year to the 2020-21 academic year. References to college-wide data include only those SACs available through the same Argos link. All data cited below can be found here: https://www.pcc.edu/institutional-effectiveness/program-profiles/

2A.Enrollment (SFTE) per year; Location (where course is taught); Modality

During the period of this Program Review, PCC offered the following economics courses:

- EC 200 Introduction to Economics
- EC 201 Principles of Economics: Microeconomics
- EC 202 Principles of Economics: Macroeconomics
- EC 203 Principles of Economics: Applications to Economic Issues
- EC 216 Labor Markets: Economics of Gender, Race, and Work
- EC 221 Globalization and International Relations
- EC 285 Introduction to Political Economy

The average student full-time equivalent (SFTE) over this period was 278.4. The Sylvania campus accounted for around half of those enrollments (52.6%), while the Rock Creek campus accounted for roughly one third (35.2%), with the remainder divided between the Cascade (7.5%) and Southeast (4.7%) campuses (see Figure 2A.1 in the Appendix). Note: SFTE is calcuated as:

$$\frac{number\ of\ students\ in\ each\ course \times number\ of\ clock\ hours\ the\ course\ meets\ per\ term}{510\ clock\ hours}$$

Between 2016-17 and 2020-21, economics enrollment decreased by 18.9%. For comparison, College-wide enrollments, as reflected in the data we have available, decreased by 22%. Hence, economics enrollment declined along with college-wide enrollments, but the drop in the former was smaller than in the latter. Campus enrollment changes, for economics and the College, over this period are as follows.

- Sylvania: -17.1% in economics, versus -22.5% College-wide
- Rock Creek: -10.7% in economics, versus -21.6% College-wide
- Cascade: -9.7% in economics, versus -16.9% College-wide
- Southeast: -90.9% in economics, versus -29.7% College-wide

Onsite and remote courses accounted for an average of 50.2% of our annual course offerings for this period, while online learning (OL) courses have accounted for an average of 48.7%. Hybrid courses and blended courses account for the remainder. For comparison, the College-wide data suggest an average of 72.3% of total enrollments for onsite and remote courses, and 24% for online courses (see Figures 2A.2 and 2A.3 in the Appendix).

Finally, although the economics subject area committee strives to offer a diverse range of courses to interested students, EC 201 (microeconomics) and EC 202 (macroeconomics) are the staple

courses of the program. Figures 2A.4 and 2A.5 in the Appendix show the distribution of SFTE by year across our course offerings.

2A1. Does this data suggest any questions that the SAC would like to pursue?

The clear overarching question concerns how the College will transition from the remote learning-based paradigm of the past two years to whatever new paradigm will emerge. Among the particular questions this raises are how will enrollments by modality change, and how might we shift our course offerings, especially in terms of modality, to meet the needs of our future students.

2A2. Do the data suggest adjustments be made in your discipline, such as schedule or course offerings, with regards to enrollment? If yes, what ideas/strategies do you have that you would like to implement or have help with in the upcoming academic year?

As we have indicated in the past, we believe it may suit some students better to take EC 202 before EC 201, but we are not yet sure that the College's advisors are aware of this. Anecdotal evidence continues to suggest that students are being advised to take EC 201 first.

Additionally, as noted in the previous section, we expect to make some adjustments to the modalities of our offerings. Ultimately, of course, this will include a transition from remote to onsite sections, but may also include expanded offerings of hybrid and blended sections.

2A3. Are there other data reports that you would find informative/useful with regards to enrollment? How would this information support decision-making for the SAC/discipline?

It may be useful to know more about the changes that have been made to the College's course offerings with regard to Gen Ed status and whether and how those changes have affected enrollments, SAC-by-SAC and course-by-course.

2A4. Is your program aware of any external influences that strongly affect recent enrollment? For example, state requirements, transferability challenges, other university policies, etc. Please explain.

We believe it would be difficult to detect any signal other than the impact of the pandemic and the shutdowns; however, to our knowledge, changes in state requirements and the like have not impacted economics enrollments.

2B. Course Success Rates

Data Definition: Success rate represents the percentage of students who successfully complete a course. It is calculated as:

$$\%S = \frac{Number\ of\ students\ receiving\ a\ grade\ of\ A, B, C, P, PR, or\ CM}{Number\ of\ students\ receiving\ a\ grade\ of\ A, B, C, D, F, P, NP, I, W, PR, CM, N, UP} \times 100$$

PR, CM, N, and UP are non-credit grades used in the Adult Basic Education program.

Success rates for gender and race are not calculated in our source data when the enrollment is less than 5. For any success rate that is not calculated, the total for that column is also not calculated in the source data.

2B1a. Are there any courses with lower or higher pass rates than others (over time, over many sections, or a notably higher or lower rate)? If so, which ones?

Due to substantially lower enrollments for our courses numbered greater than EC 202, we will limit our analysis here to just our core offerings: EC 200, 201, and 202. Across the academic years 2016-17 to 2020-21 success rates for these courses were as follows (standard deviations, reflecting variation across years, are in parentheses):

- EC 200 : 73.6% (2.7)
- EC 201 : 79.8% (1.2)
- EC 202 : 85.2% (1.1)

Low standard deviations here suggest that assessment of students has remained consistent over the time period under analysis. For comparison, the college-wide data show an average success rate of 86.3% with a standard deviation of 5.8. It must be recognized, however, that higher success rates across the college are in part reflective of the tendency for courses with lower SFTE's to have above-average success rates. Weighting for SFTE, the college-wide success rate over this period is 78.1%. On full comparison of the data, success rates in our core economics courses are consistent over time and in line with college success rates.

Looking only at the different economics course offerings, it is clear that success rates are higher later in the course sequence (see Figure 2B.1 in the Appendix for a year-to-year comparison). We have observed this pattern for a number of years and believe that it is chiefly a reflection of a sorting process that the earlier courses play. That is, students typically take EC 201 prior to EC 202 (and sometimes EC 200 before the 201 and 202 sequence), and those students who do better in the earlier course(s) are more likely to continue on in the sequence. This belief is reinforced by the substantially higher enrollment numbers in EC 201 as compared to EC 202 (see Figure 2A.4 in the Appendix).

2B1b. Are there any modalities with lower or higher pass rates than others (over time, over many sections, or a notably higher or lower rate)? If so, which ones?

Unlike in Section 2B1a. above, the following analysis includes all economics courses. Success rates by modality for the economics SAC, including standard deviations in parentheses and college-wide data for comparison, are as follows:

- Onsite : 78.8% (10.8) in economics, versus 87.5 (8.7) College-wide
- Online : 78.7% (6.5) in economics, versus 78.8 (8.2) College-wide
- Remote : 81% (4.1) in economics, versus 84.5 (9.2) College-wide
- Hybrid : 85.7% (6.3) in economics, versus 82.7 (9.4) College-wide

The data above suggest that the two primary modalities, onsite and online, have roughly equivalent success rates. Enrollments in remote and hybrid sections are too small to allow for comparison.

2B2. Strategy Insights

What strategies have you used to maintain high success rates? What can be learned that might be applied to courses with lower success rates? What are possible actions to be taken to understand/address lower success rates? Please clearly explain how your discipline intends to explore content/curriculum, pedagogy/teaching, course material selection, etc. using culturally responsive teaching approaches throughout the next year. Try to identify a realistic one year goal.

The most significant gap in success rates analyzed thus far is between EC 201 and EC 202, reflective, we believe, of the sorting process described above. While we do not expect that this discrepancy could ever be fully eliminated so long as most students opt for EC 201 as their entry point to the subject, we continue to focus on that course in our learning assessment and other work. We expect this focus to not only lead to improved outcomes in that course, but also to produce the most widely applicable strategies for improvements in our other offerings.

Additionally, we continue to share strategies and resources for culturally responsive teaching, especially at our SAC in-service meetings. Several of the economics SAC faculty are, likewise, working on a significant update of our OER textbook as part of an Open Oregon grant; and this work includes improvements to the current text for inclusivity. Major revisions should be completed by the end of this academic year, and we will be sharing and discussing the resulting text in the following year.

2B3. The data may indicate a pattern of inequities (in gender, race, or Pell eligibility) in student enrollment or success. Please clearly explain how your program intends to explore content/curriculum, pedagogy/teaching, course material selection, etc. using culturally responsive teaching approaches throughout the next year. Try to identify a realistic one year goal.

Success rates by gender, ethnicity, and Pell eligibility for the economics SAC, including standard deviations in parentheses and college-wide data for comparison, are as follows. (Note: success rates and standard deviations below are calculated as averages across courses and years, and are not weighted by enrollment.)

Enrollment Shares and Success Rates by Gender

	Economics Enrollment	Economics Success Rate	College Enrollment	College Success Rate
Female	42.00%	79.99% (5.8)	49.80%	85.56% (9.7)
Male	54.68%	77.83% (11.0)	46.33%	84.25% (10.5)
Nonbinary	0.31%	66.30% (18.8)	0.62%	77.73% (13.0)
Unknown	3.02%	81.16% (6.9)	3.26%	80.31% (12.7)

Enrollment Shares and Success Rates by Race/Ethnicity/Nationality

	Economics Enrollment	Economics Success Rate	College Enrollment	College Success Rate
Nat. Amer.	0.52%	78.80% (14.6)	0.85%	71.46% (15.2)
Asian	9.16%	80.38% (8.7)	6.89%	85.95% (10.8)
Black	4.31%	68.78% (10.9)	4.63%	70.49% (14.6)
Latinx	12.12%	74.59% (7.3)	13.30%	80.46% (12.8)
NH or PI	0.81%	83.93% (14.2)	0.63%	72.70% (14.1)
Internat.	4.11%	90.48% (5.9)	2.21%	85.49% (11.0)
White	55.47%	80.38% (9.9)	58.25%	86.19% (9.3)
Multiracial	7.01%	76.18% (9.3)	6.78%	78.21% (14.0)
Unknown	6.49%	80.61% (8.2)	6.47%	81.67% (12.0)

Enrollment Shares and Success Rates by Pell Eligibility

	Economics Enrollment	Economics Success Rate	College Enrollment	College Success Rate
Pell Offered	33.65%	72.83% (13.9)	37.88%	82.60% (11.3)
Pell Not Offered	66.35%	81.23% (7.9)	62.12%	87.04% (9.2)

Additional information on enrollments and success rates are available in the Appendix (figures 2B.2 through 2B.7).

The following characteristics of economics students are associated with a success rate in our courses greater than one (enrollment-adjusted) standard deviation from the college-wide (i.e. all courses and students) success rate.

Above the college average: NH or PI, International

Below the college average: Nonbinary, Black, Pell Offered

Among the cohorts whose success rates fall below the college average by more than one standard deviation, Pell-offered students constitute the largest cohort in terms of enrollment. We will be discussing this finding in particular, as well as the other two cohorts falling below the college average, in upcoming SAC in-service meetings. More generally, we will be discussing, both within the SAC and with the rest of our colleagues, an interesting observation: while success rates appear to have declined college-wide for students of color (excepting Asian students) and Pell-offered students since roughly 2018 or 2019, this has not been the case in economics (see Figures 2B.6 and 2B.7 in the Appendix).

2B4. What support does your SAC need to fully explore inequities in enrollment or student success? For example, are there any other data reports you would find useful to have related to student success?

It would be useful to have reports that tell us more about the educational backgrounds, both at PCC and prior, of our students and how those intersect with the demographics discussed above. For instance, if Pell-offered and Black students tend to have significantly lower success rates than other students, what else can we learn about these groups that may point us in the right direction to better teach and assess them?

Likewise, we would be interested in learning how others might explain the general college-wide downward trend in success rates among non-Asian students of color and Pell-offered students. It seems likely that this would in part have something to do with the pandemic measures, and hopefully the trends will reverse as we return to something more like normal. Just the same, there may be a number of insights that could be gleaned from a deeper analysis of this that may inform future course offerings, teaching strategies, and so on.

Appendix

Figure 2A.1 - Student FTE by Campus - Economics

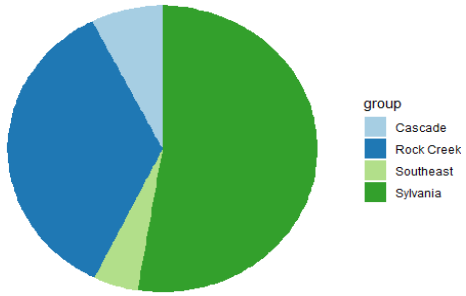


Figure 2A.2 - Student FTE by Modality - Economics

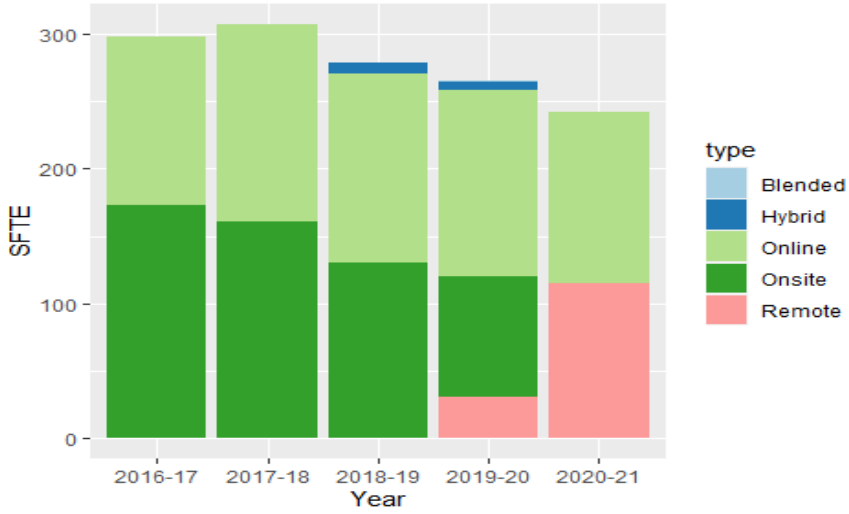


Figure 2A.3 - Student FTE by Modality - College

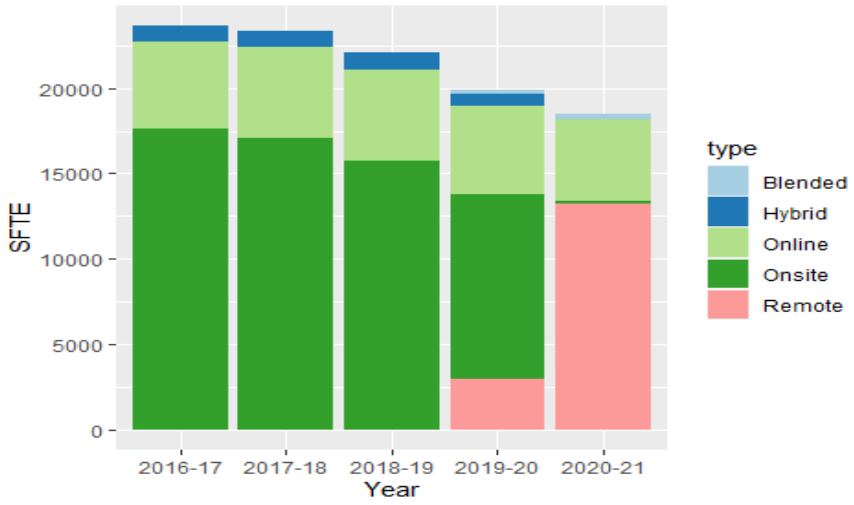


Figure 2A.4 - Student FTE Distribution Across Main Course Offerings

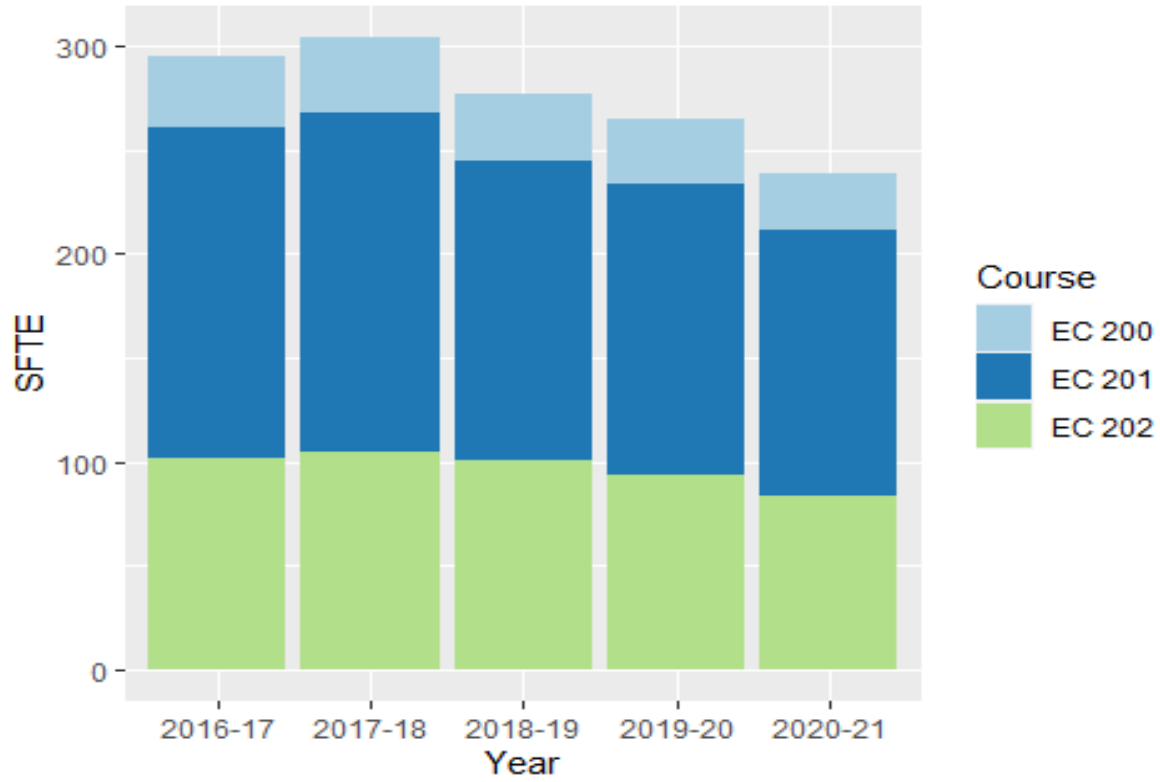


Figure 2A.5 - Student FTE Distribution Across Other Course Offerings

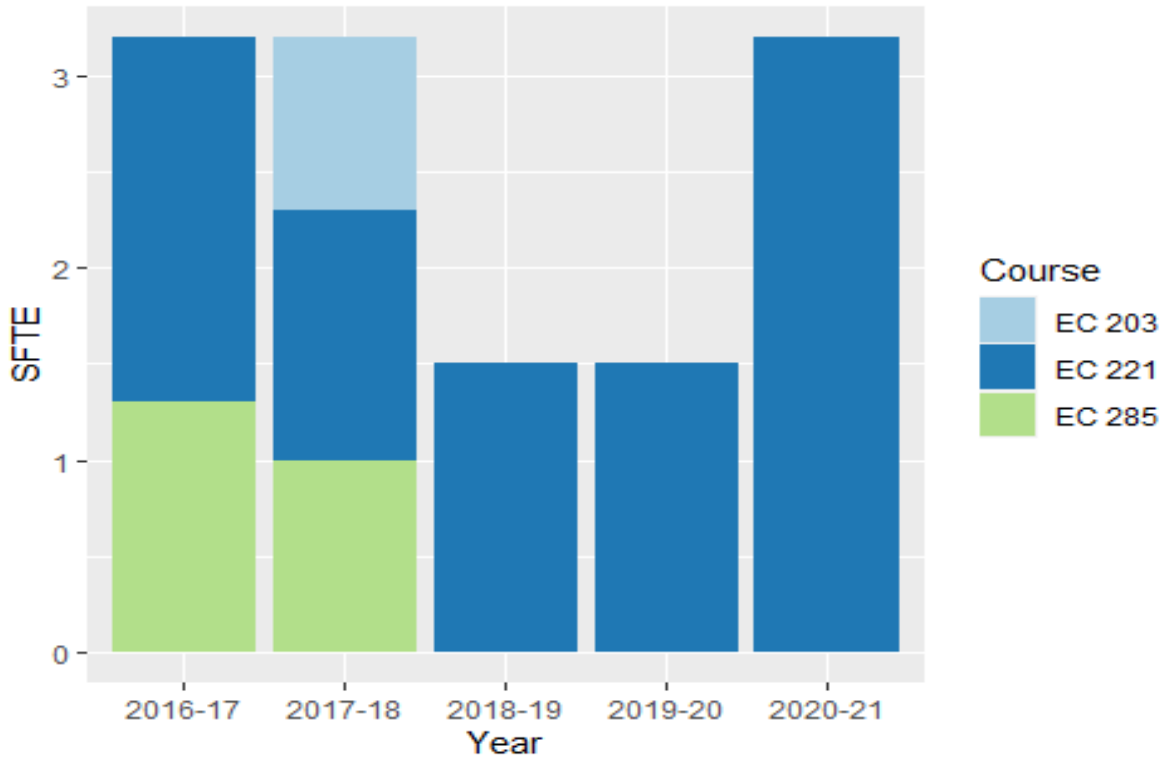


Figure 2B.1 - Success Rates - Main Courses

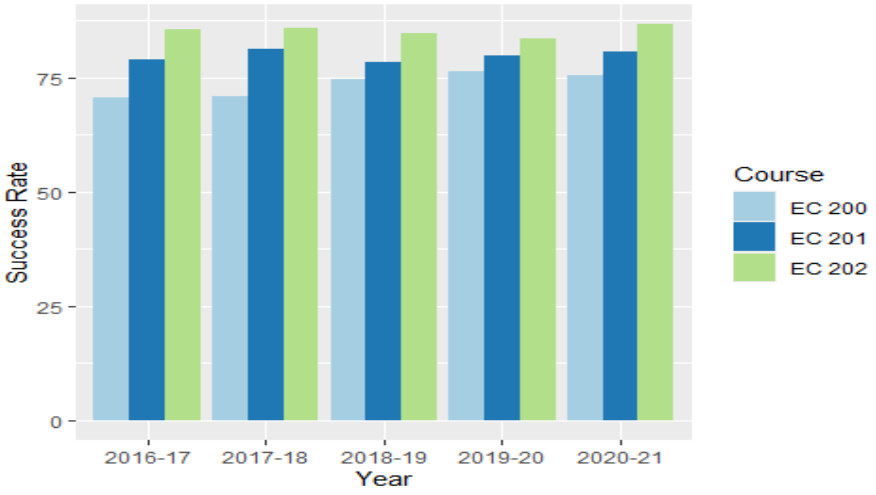
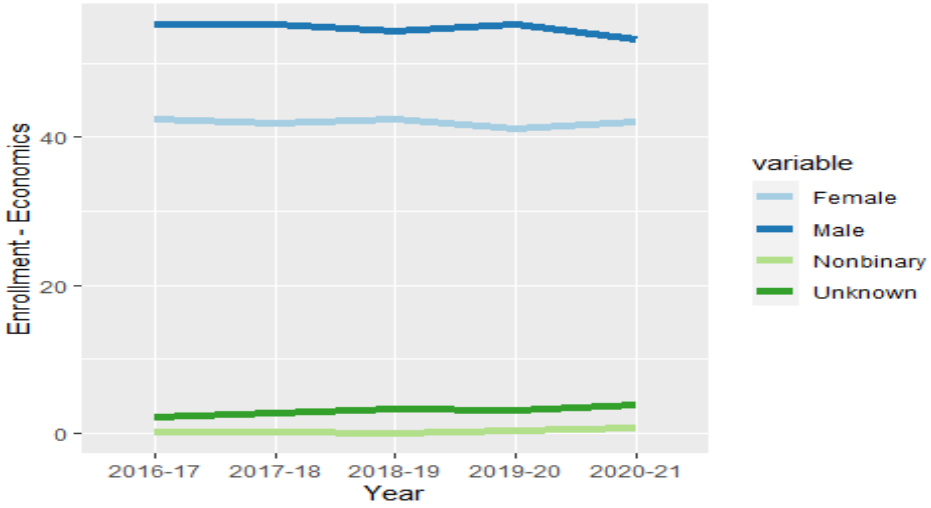


Figure 2B.2 – Enrollment Shares by Gender



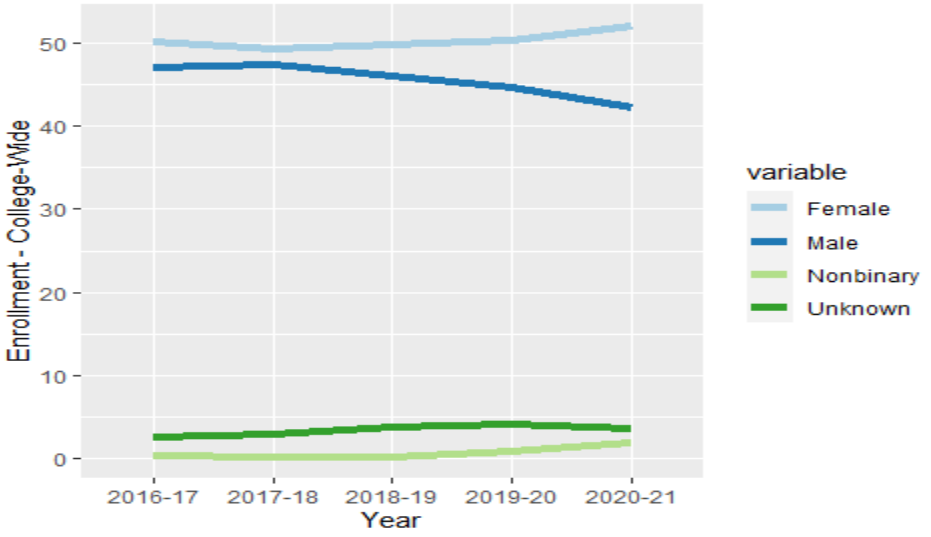


Figure 2B.3 – Enrollment Shares by Race/Ethnicity/Nationality

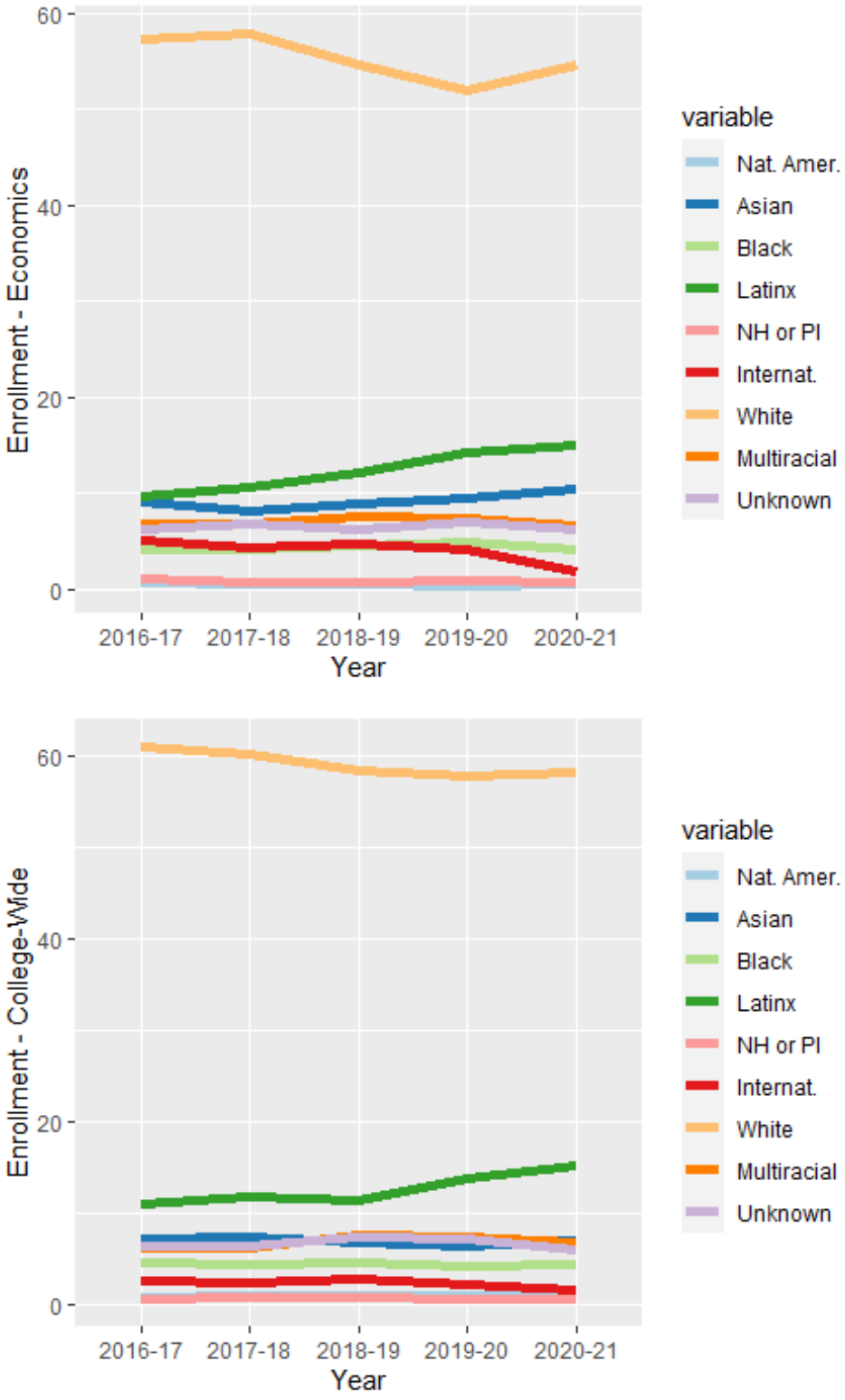


Figure 2B.4 – Enrollment Shares by Pell Eligibility

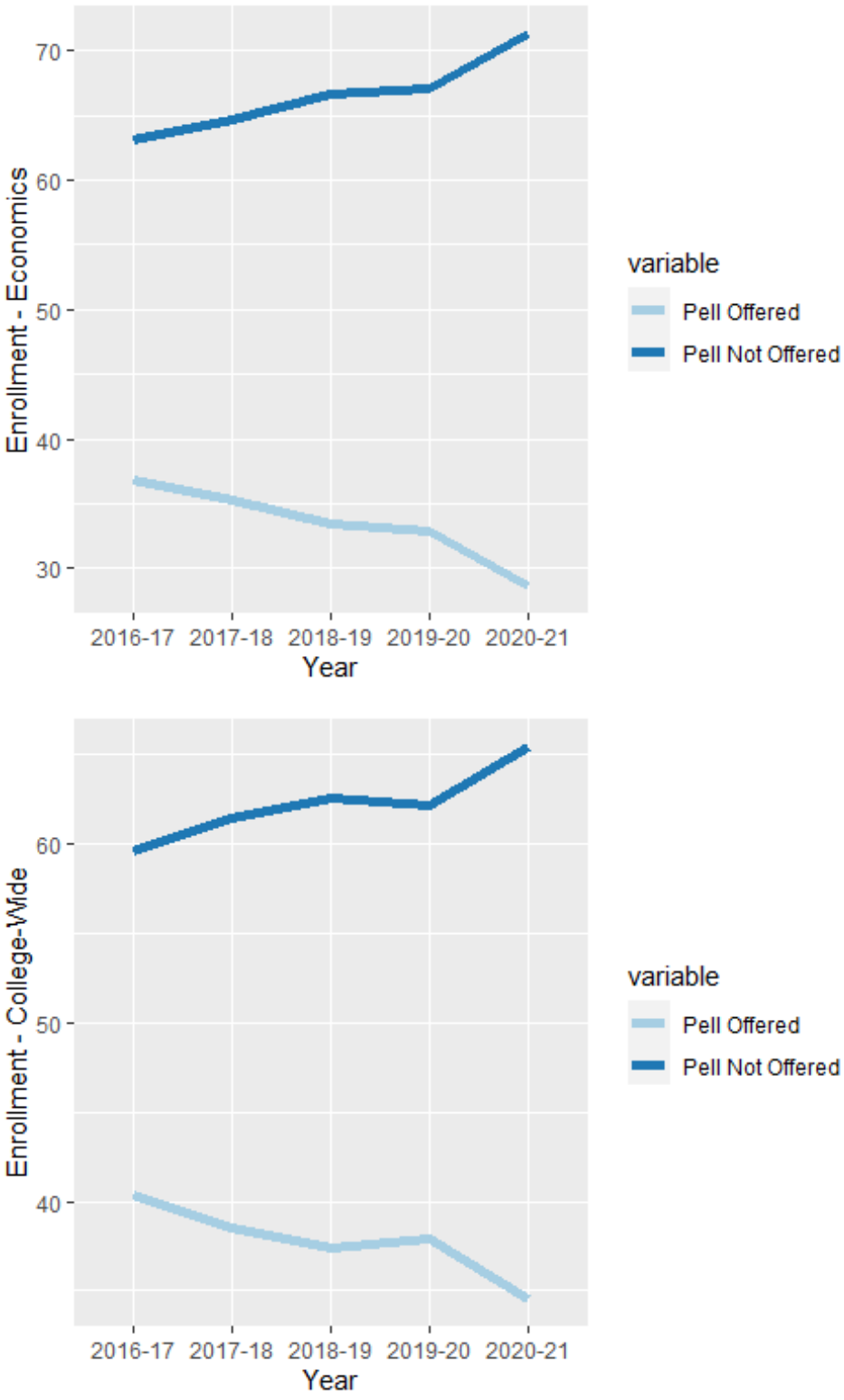


Figure 2B.5 - Success Rates by Gender

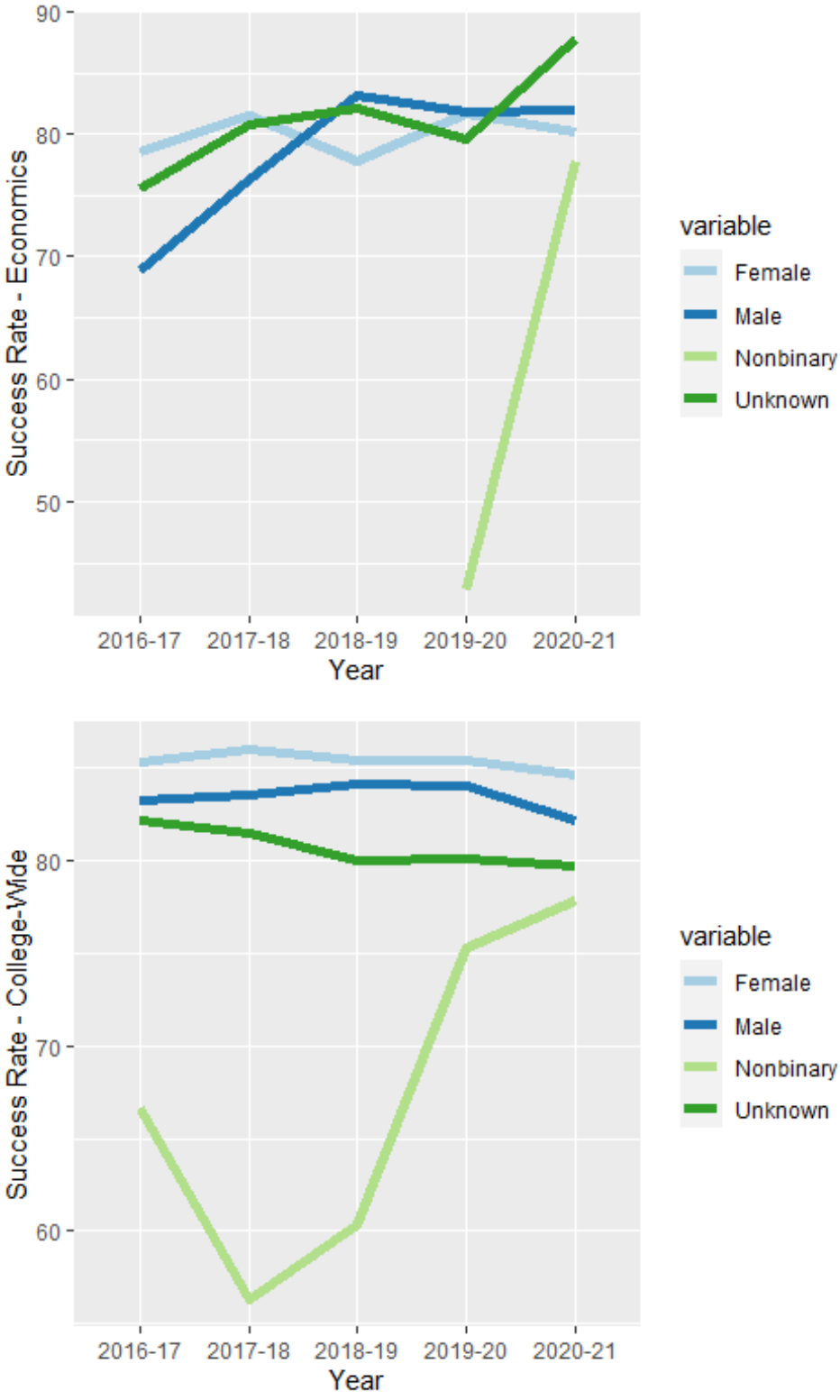


Figure 2B.6 - Success Rates by Race/Ethnicity/Nationality

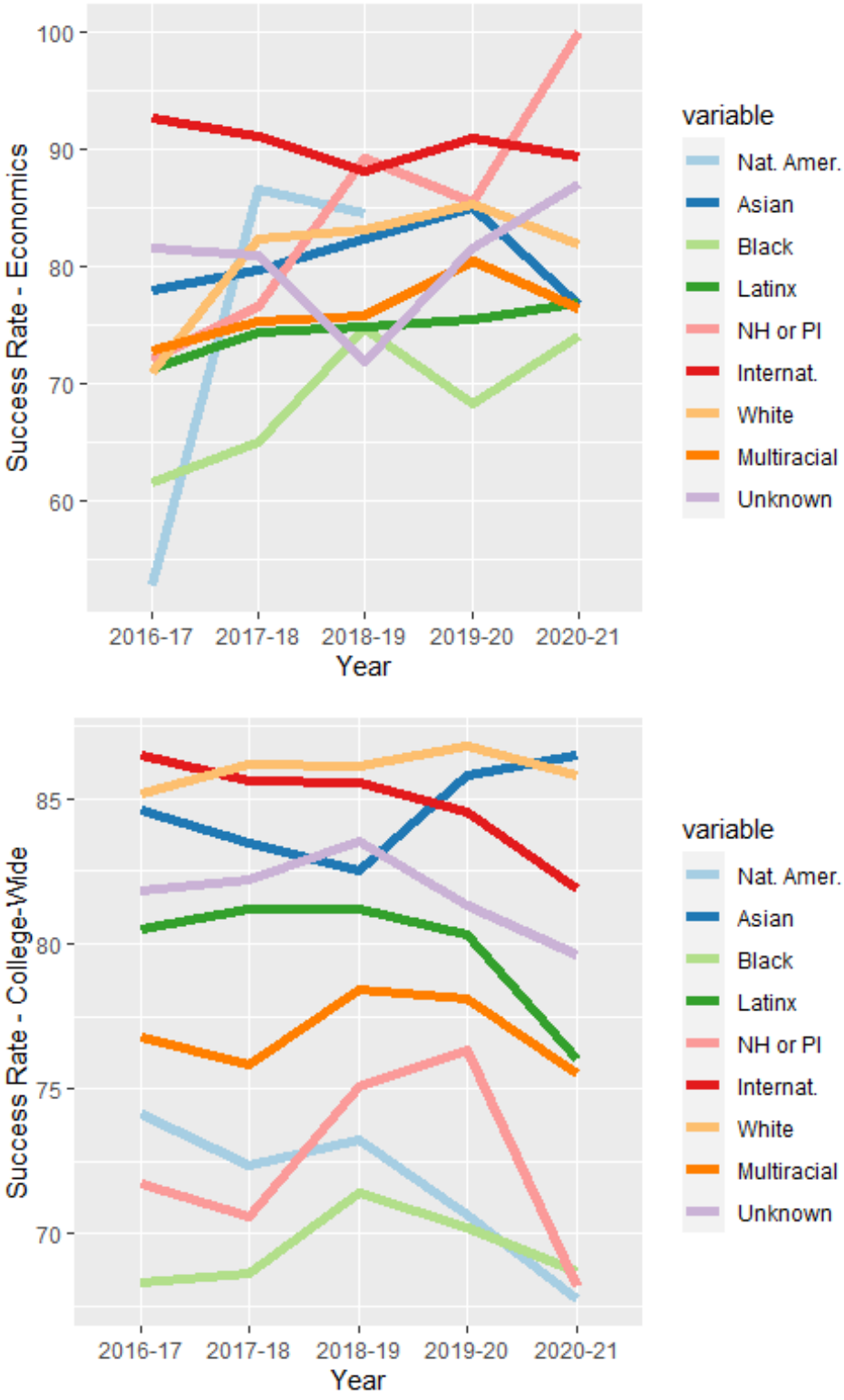
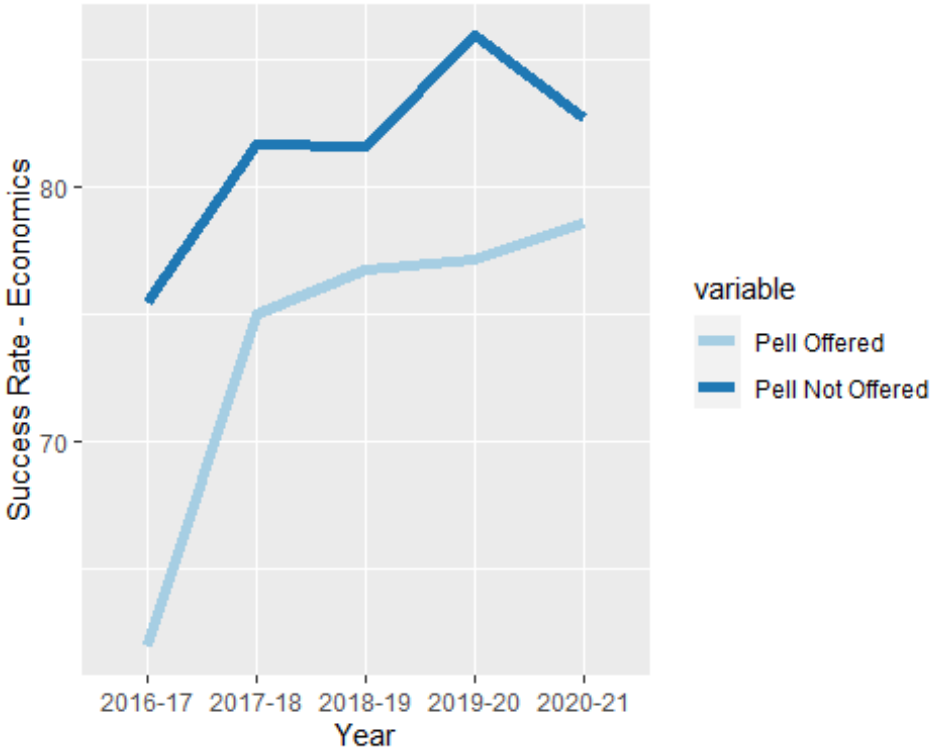
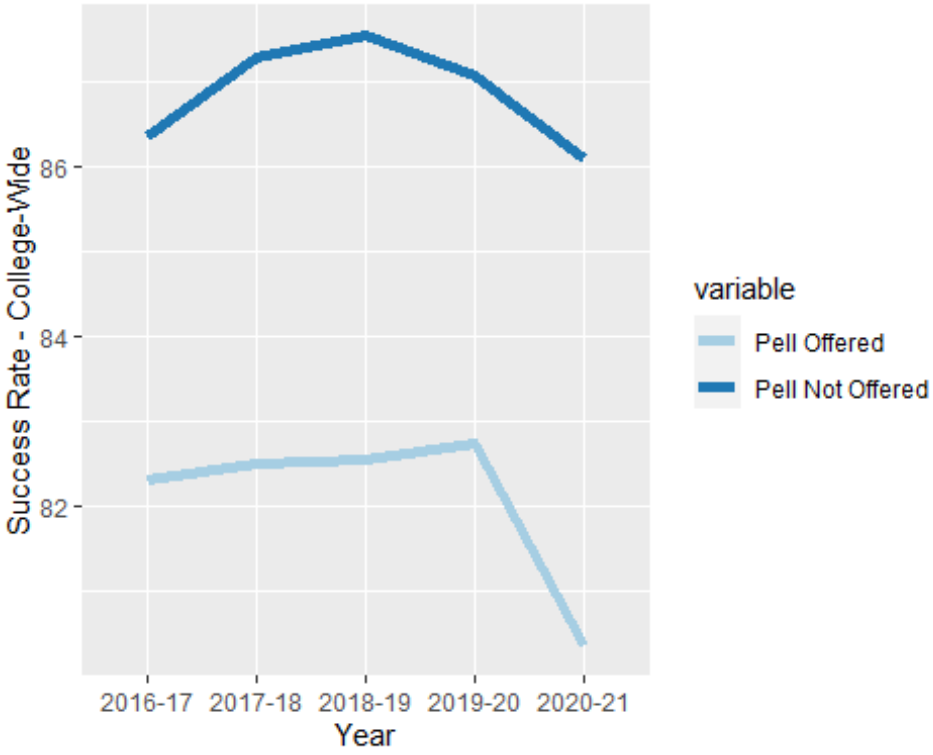


Figure 2B.7 - Success Rates by Pell Eligibility


Success Rate - Economics
80
70
2016-17
2017-18
2018-19
2019-20
2020-21
Year
variable
Pell Offered
Pell Not Offered


Success Rate - College-Wide
86
84
82
2016-17
2017-18
2018-19
2019-20
2020-21
Year
variable
Pell Offered
Pell Not Offered