LMC Comprehensive Program Review
Instructional Units

2017-2018

Report Name: Course Success/Retention Analysis Report
(Office of Equity & Inclusion/Academic Senate/Integrated Planning Group)

The following report contains the responses to Question #8 (Course Success/Retention Analysis) extracted directly from the submitted Comprehensive Program Reviews for Instructional Units and Learning Community Units. The information contained has not been altered, it was extracted exactly how it was written.

Click on the link below to go to the section:

8. Course Success/Retention Analysis

Please review the data provided on course retention and success, which has been disaggregated by as many elements as district can provide in their SQL Report

One of our college goals as stated in our Integrated Plan is to "Increase successful course completion, and term to term persistence." Our Equity Plan identifies African- American and low-income students as disproportionally impacted in terms of successful course completion. (Foster youth are also disproportionately impacted on this indicator, but numbers are too small to disaggregate by discipline/program)   Please indicate how well students in these groups are succeeding in your discipline.

Administration of Justice

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	93.8%	90.9%	92.6%
Success Rate (program/discipline)	70%	68.1%	74.5%

Anthropology

	African-American	Low Income Students	All students in program/discipline

Completion Rate (program/discipline)	95.7%(FA16) 91.9%(Spring17)	92.7%(FA16) 91.4%(Spring17)	92.6%(FA16) 92.4%(Spring17)
Success Rate (program/discipline)	71.7%(FA16) 71%(Spring17)	78.2%(FA16) 71.3%(Spring17)	79.8%(FA16) 75.8%(Spirng17)

Appliance Service Technology

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	92.3% (FA16) 100% (SP17)	98.5% (FA16) 100% (SP17)	96% (FA16) 98% (SP17)
Success Rate (program/discipline)	46.2% (FA16) 50% (SP17)	80.6% (FA16) 79.1% (SP17)	82.8% (FA16) 83.3% (SP17)

Arts/Graphic Communications/Humanities

African-American Low Income Students All students in program/discipline
Completion Rate: (program/discipline) 77.1% 83.7% 85%
Success Rate: (program/discipline) 60.2% 72.9% 73.4%

Astronomy

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	87.1% (Fa16) 83.8% (Sp17)	89.4% (Fa16) 84.6% (Sp17)	90.1% (Fa16) 86.8% (Sp17)
Success Rate (program/discipline)	62.1% (Fa16) 53.0% (Sp17)	73.1% (Fa16) 64.1% (Sp17)	72.9% (Fa16) 65.3% (Sp17)

Automotive Technology

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	83.3% (2016 fall) 96.6% (2017 Spring)	94.7% (2016 fall) 94.4% (Spring 2017)	93.8% (2016 fall) 94.8% (2017 Spring)
Success Rate (program/discipline)	45.8% (2016 Fall) 41.4% (2017Spring)	73.1% (2016 fall) 72.1% (2017 Spring)	71.9% (2016 fall) 75.6% (2017 Spring)

Biological Sciences

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	78.6%	82.8%	84.9%
Success Rate (program/discipline)	64.6%	72.6%	74.9%

Business

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	78.8% (FA16) 81.4% (SP17)	85.0% (FA16) 84.6% (SP17)	86.9% (FA16) 83.9% (SP17)
Success Rate (program/discipline)	66.8% (FA16) 65.4% (SP17)	72.6% (FA16) 72.5% (SP17)	74.5% (FA16) 71.6% (SP17)

Child Development

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	68.3	81.2	82.1
Success Rate (program/discipline)	49.8	67.8	70.2

Chemistry

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	83.0% (FA16) 82.3% (SP17)	84.5% (FA16) 87.8% (SP17)	85.7% (FA16) 85.5% (SP17)
Success Rate (program/discipline)	67.9% (FA16) 64.5% (SP17)	75.1% (FA16) 79.7% (SP17)	76.9% (FA16) 77.8% (SP17)

Computer Science

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	66.1%	75.1%	74.9%
Success Rate (program/discipline)	47.6%	59.6%	61.3%

Cooperative Education

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	50% (Fa 16) 66.7% (Sp 17)	81.1% (Fa 16) 84.6% (Sp 17)	78.6% (Fa 16) 81.3% (Sp 17)
Success Rate (program/discipline)	50% (Fa 16) 33.3% (Sp 17)	81.8% (Fa 16) 69.2% (Sp 17)	78.6% (Fa 16) 68.8% (Sp 17)

Dramatic Arts

	African-American	Low Income Students	All students in program/discipline

Completion Rate (program/discipline)	85%- SP 2017 85.6%-FA 2016 89.3%-SP 2016	89.1%- SP 2017 86.1%- FA 2016 88.2%- SP 2016	90.3%- SP 2017 87.6%- FA 2016 89.6%- SP 2016
Success Rate (program/discipline)	66.9%-SP 2017 72.7%-FA 2016 68.6%-SP 2016	75.3%-SP 2017 75.1%-FA 2016 77.6%-SP 2016	78.1%-SP 2017 76.6%-FA 2016 77.8%-SP 2016

Economics

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	97.4 % (FA 16) 90.6 % (SP 17)	92.2 % (FA 16) 91.3 % (SP 17)	93.6 % (FA 16) 90.8% (SP 17)
Success Rate (program/discipline)	87.2 % (FA 16) 86.8 % (SP 17)	87.6 % (FA 16) 86.3 % (SP 17)	88.4 % (FA 16) 85.8 % (SP 17)

Electrical/Instrument Technology

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	97.9% (FA16) 94.2% (SP17)	93.9% (FA16) 96.7% (SP17)	95.4% (FA16) 96.6% (SP17)
Success Rate (program/discipline)	89.6% (FA16) 73.1% (SP17)	84.9% (FA16) 78.3% (SP17)	86.2% (FA16) 81.8% (SP17)

Emergency Medical Services

	African-American	Low Income Students	All students in program/discipline
Completion Rate EMS Technology	(FA16) 66% (SP17) 54%	(FA16) 54% (SP17) 50%	(FA16) 79% (SP17) 81%
Success Rate (program/discipline)	(FA16) 69% (SP17) 55%	(FA16) 77% (SP17) 85%	(FA16) 80% (SP17) 85%

Engineering/Physics

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	71.4%	91.1%	93.2%
Success Rate (program/discipline)	71.4%	82.2%	86.5%

English – Transfer & Developmental

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	74.5%	79.6%	80.9

Success Rate (program/discipline)	57.4%	67.0%	69.4%

English as a Second Language

	African-American	Low Income Students	All students in program/discipline
Completion Rate ESL	95%	93.52% (non-low-income = 81.18%)	91.82%
Success Rate ESL	95%	84.67% (non-low-income = 74.36%)	82.23%

Fire Technology

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	87.5% (FA16) 100% (SP17)	88.4%(FA16) 95.4%(SP17)	88.3% (FA16) 94.8%(SP17)
Success Rate (program/discipline)	62.5%(FA16) 84.4% (SP17)	73.4%(FA16) 82.9% (SP17)	77.2%(FA16) 85.3%(SP17)

History

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	85% (average)	84.4% (average)	86.38% (average)
Success Rate (program/discipline)	61.13 % (average)	69.11% (average)	70.95% (average)

Humanities

African-American Low Income Students All students in program/discipline

Completion Rate: (program/discipline) 77.1% 83.7% 85%

Success Rate: (program/discipline) 60.2% 72.9% 73.4%

Journalism

	African-American	Low Income Students	All students in program/discipline
Completion Rate Journalism	F14-75.0% S15-92.0% F15-78.4% S16-83.3% F16-76.0% S17-90.3%	F14-81.7% S15-95.4% F15-81.3% S16-87.4% F16-86.3% S17-94.8%	F14-85.5% S15-94.7% F15-83.1% S16-90.1% F16-88.9% S17-92.8%
Success Rate Journalism	F14-53.1% S15-64.0% F15-64.9% S16-66.7% F16-60.0% S17-74.4%	F14-64.6% S15-81.6% F15-71.4% S16-77.0% F16-75.3% S17-80.5%	F14-70.2% S15-83.5% F15-73.2% S16-78.9% F16-75.4% S17-77.0%

Additional measure: Successful retention

	African-American	Low Income Students	All students in program/discipline
Successful retention (success/completion)	F14-70.8% S15-69.6% F15-82.8% S16-80.1% F16-78.9% S17-82.4%	F14-79.1% S15-85.5% F15-87.8% S16-88.1% F16-87.3% S17-84.9%	F14-82.1% S15-88.2% F15-88.1% S16-87.6% F16-84.8% S17-83.0%

Additional measure: College data for relative comparison (not same data set)

	African-American	Low Income Students	All students at Los Medanos College
Successful persistence (degrees/persist)	Degrees-42.3% Persistence-60.2% Successful P-70.3%	unavailable breakout	Degrees-47.0% Persistence-65.9% Successful P-71.3%

So what's in these numbers?

It is difficult to make any real sense of them without comparative data as I am not sure what is a good number and what is an acceptable range in terms of gaps. Since I am, in effect, a one-person program and don't have anyone to chew over these numbers with, I tried to make use of the college program review work sessions to dialog with those more statistically savvy. At one session in the fall, a math colleague looked at my data and said, "Your numbers are good." I asked, "How do you know?" "They're better than ours," was her response. At another session during the recent spring flex where our individual data sets were distributed, I shared mine with a science colleague and asked for help in trying to see something in them that I could discuss in this document. He echoed the earlier colleague's comment and said "Your numbers look fine." Again I asked, "How do you know?" to which he also replied, "They're better than ours." Then he schooled me on what he said was a more accurate measure to analyze — something he called "successful retention," a number derived by dividing the percent of success by the percent of retention. So I ran those numbers and added them to a second chart labeled "successful retention." But still, I am at a loss to explain what the numbers really mean for Journalism.

Overall, it would enrich the program review process if, in addition to providing statistics to evaluate, we were also given substantive professional development on how to interpret statistical data ;-) It would also be helpful if the printed information provided at the program review work sessions included college-wide and district-wide data with which to compare our program numbers. Because I did not have such data, I went fishing and although I was unable to find an exact comparison, I looked online at the 2017 Student Success Scorecard (scorecard.cccco.edu/scorecardrates). It includes overall persistence and completion rates for LMC as tracked based on degree, certificate and/or transfer-seeking students starting first time in 2010-11 tracked for six years through 2015-16. In the scorecard, persistence is defined as the percentage of those tracked students who enrolled in the first three consecutive terms. Completion is defined as the percentage of those tracked students who completed a degree, certificate or transfer-related outcomes. I entered the data into a third chart I labeled "successful persistence." Although the information is across time rather than semester by semester at the course level, it gave me some idea of the average persistence and completion rates of LMC students: 47% completion of degree, certificate or transfer-related outcomes and 65.9% persistence over three consecutive terms. It is slightly less for African-Americans. However, the "successful persistence" numbers I generated are relatively close: 70.3% for African-Americans and 71.3% overall. If the scorecard numbers give any indication about what

college-wide numbers might be, then except for an outlier year, 2014-15, Journalism numbers are likely to be above college-wide numbers.

Law Enforcement Academy

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	94.8% (FA 2016) 93.8(SP 2017)	94.9% (FA 2016) 90.9% (SP 2017)	92.6%
Success Rate (program/discipline)	69% (FA 2016) 70% (SP 2017)	74.1% (FA 2016) 68.1% (SP 2017)	74.5%

Licensed Vocational Nursing

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	100% 100%	100% 100%	100% 100%
Success Rate (program/discipline)	91.7% 100%	95% 98.4%	96.6% 98.8%

Math – Transfer

Pittsburg data:

Afr. Am students **Completion**	Number	Percent	Low income students **Completion**	Number	Percent	All students **Completion**	Number	Percent
Fall 2014	81	70.4%	Fall 2014	613	76.7%	Fall 2014	612	76.9%
Spring 2015	103	75.7%	Spring 2015	654	82.8	Spring 2015	549	79.5%
Fall 2015	91	72.2%	Fall 2015	643	76.5%	Fall 2015	649	76.9%
Spring 2016	108	74.5%	Spring 2016	662	80.4%	Spring 2016	597	79.6%
Fall 2016	123	83.1%	Fall 2016	711	79.3%	Fall 2016	813	80.2%
Spring 2017	109	73.2%	Spring 2017	722	81.2%	Spring 2017	701	79.9%

Afr Am students **success**	Number	Percent	Low income students **success**	Number	Percent	All students **success**	Number	Percent
Fall 2014	61	53.0%	Fall 2014	508	63.6%	Fall 2014	499	62.7
Spring 2015	69	50.7%	Spring 2015	522	66.1%	Spring 2015	431	62.4
Fall 2015	64	50.8%	Fall 2015	513	61.0%	Fall 2015	520	61.6
Spring 2016	79	54.5%	Spring 2016	523	63.5%	Spring 2016	467	62.3
Fall 2016	91	61.5%	Fall 2016	552	61.5%	Fall 2016	660	65.1
Spring 2017	82	55.0%	Spring 2017	578	65.0%	Spring 2017	567	64.7

Brentwood data:

Afr. Am students Completion	Number	Percent	Low income students Completion	Number	Percent	All students Completion	Number	Percent
Fall 2014	20	80.0%	Fall 2014		%	Fall 2014		%
Spring 2015	39	88.6%	Spring 2015	263	88.0%	Spring 2015	421	86.3%
Fall 2015	26	72.2%	Fall 2015	225	78.7%	Fall 2015	404	80.6%
Spring 2016	32	82.1%	Spring 2016	258	83.5%	Spring 2016	445	85.9%
Fall 2016	22	75.9%	Fall 2016	216	80.3%	Fall 2016	393	80.7%
Spring 2017	38	77.6%	Spring 2017	254	84.4%	Spring 2017	449	85.0%

Afr Am students success	Number	Percent	Low income students success	Number	Percent	All students success	Number	Percent
Fall 2014	17	68.0%	Fall 2014		%	Fall 2014		
Spring 2015	28	63.6%	Spring 2015	216	72.2%	Spring 2015	358	73.4%
Fall 2015	21	58.3%	Fall 2015	186	65.0%	Fall 2015	336	67.1%
Spring 2016	25	64.1%	Spring 2016	208	67.3%	Spring 2016	363	70.1%
Fall 2016	17	58.6%	Fall 2016	163	60.6%	Fall 2016	297	61.1%
Spring 2017	30	61.2%	Spring 2017	196	65.1%	Spring 2017	349	66.1%

Math – Developmental
Brentwood:

Afr. Am students Completion	Number	Percent	Low income students Completion	Number	Percent	All students Completion	Number	Percent
Fall 2014	58	80.6%	Fall 2014	307	83.2%	Fall 2014	491	82.8%
Spring 2015	64	74.4%	Spring 2015	277	82.9%	Spring 2015	451	85.1%
Fall 2015	57	78.1%	Fall 2015	249	83.6%	Fall 2015	425	83.8%
Spring 2016	40	60.6%	Spring 2016	233	75.2%	Spring 2016	374	77.1%
Fall 2016	45	66.2%	Fall 2016	192	74.1%	Fall 2016	330	78.4%
Spring 2017	33	57.9%	Spring 2017	142	70.3%	Spring 2017	266	76.7%

Afr Am students success	Number	Percent	Low income students success	Number	Percent	All students success	Number	Percent
Fall 2014	43	59.7%	Fall 2014	233	63.1%	Fall 2014	378	63.7%
Spring 2015	40	46.5%	Spring 2015	211	63.2%	Spring 2015	337	63.6%
Fall 2015	36	49.3%	Fall 2015	189	63.4%	Fall 2015	319	62.9%
Spring 2016	29	43.9%	Spring 2016	169	54.5%	Spring 2016	283	58.4%
Fall 2016	31	45.6%	Fall 2016	137	52.9%	Fall 2016	243	57.7%
Spring 2017	18	31.6%	Spring 2017	99	49.0%	Spring 2017	185	53.3%

Success, Pittsburg:

Afr Am students **success**	Number	Percent	Low income students **success**	Number	Percent	All students **success**	Number	Percent
Fall 2014	237	51.4%	Fall 2014	595	57.2%	Fall 2014	792	56.1%
Spring 2015	175	43.2%	Spring 2015	482	51.7%	Spring 2015	626	52.9%
Fall 2015	165	45.6%	Fall 2015	492	50.4%	Fall 2015	687	51.8%
Spring 2016	127	46.5%	Spring 2016	419	54.4%	Spring 2016	562	55.1%
Fall 2016	113	42.5%	Fall 2016	400	54.2%	Fall 2016	605	57.2%
Spring 2017	113	50.7%	Spring 2017	349	60.6%	Spring 2017	497	60.0%

Management & Supervision

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	84.6% (fa16) 100% (sp17)	82.9% (fa16) 82.4% (sp17)	86.4% (fa16) 85.7% (sp17)
Success Rate (program/discipline)	76.9% (fa16) 100% (sp17)	80% (fa16) 76.5% (sp17)	84.7% (fa16) 80.5% (sp17)

Music

	African-American	Low Income Students	All students in program/discipline
Completion Rate (Music Program)	84.08%	84.47%	84.28%
Success Rate (Music Program)	57.57%	65.75%	67.30%

Physical Education/Kinesiology

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	80.9-81.7	85.6-87.9	87.3-88.7
Success Rate (program/discipline)	65.1-68.3	74.1-80.1	75.6-81.7

Philosophy

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	73.2% (FA 16) 76.5% (SP 17)	81.3% (FA 16) 77.4% (SP 17)	84.4% (FA 16) 80.9% (SP 17)
Success Rate (program/discipline)	53.7% (FA 16) 54.4% (SP 17)	62.6% (FA 16) 61.3% (SP 17)	65.6% (FA 16) 64.3% (SP 17)

Physics

	African-American	Low Income Students	All students in program/discipline

Completion Rate	83.3%	92.8%	93.1%
Success Rate	72.2%	87.4%	87.4%

African-American students have lower completion rates and success rates than the student population as a whole. It appears that low income by itself is not a major impediment to completion rates or success rates.

Political Science

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	Completion Rate: 78.3% to 91.1%	Completion Rate: 82.3% to 89.4%	Completion Rate: 82.9% to 89.7%
Success Rate (program/discipline)	Success Rate: 63.6% to 74.7%	Success Rate: 71.6% to 77.5%	Success Rate: 71.8% to 78.5%

Psychology

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	2014FA-2017SP Average 79.41%	2014FA-2017SP Average 85.7%	2014FA-2017SP Average 86.0%
Success Rate (program/discipline)	2014FA-2017SP Average 56.75%	2014FA-2017SP Average 68.4%	2014FA-2017SP Average 70.25%

Process Technology

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	78.9% (FA16) 96.7% (SP17)	90.0% (FA16) 95.8% (SP17)	91.7% (FA16) 95.1% (SP17)
Success Rate (program/discipline)	71.1% (FA16) 90.0% (SP17)	78.8% (FA16) 89.4% (SP17)	81.2% (FA16) 87.5% (SP16)

Recording Arts

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	Available from	Records	Department
Success Rate (program/discipline)	Available from	Records	Department

Registered Nursing

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	100% (FA16) 96.6% (SP17)	98.2%(FA16) 99.1%(SP17)	98.6% (FA16) 98.9%(SP17)

Success Rate (program/discipline)	83.6%(FA16) 83.1% (SP17)	84.2%(FA16) 92% (SP17)	85.9%(FA16) 90.1%(SP17)

Sociology

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	2014FA-2017SP Average 73.6%	2014FA-2017SP Average 78.3%	2014FA-2017SP Average 79.7%
Success Rate (program/discipline)	2014FA-2017SP Average 49.3%	2014FA-2017SP Average 58.4%	2014FA-2017SP Average 60.3%

Speech/Communications

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	89.0% (F'16) 89.1% (Sp '17)	91.2% (F'16) 87.6% (Sp '17)	91.4% (F'16) 89.2% (Sp '17)
Success Rate (program/discipline)	77.0% (F'16) 80.9% (Sp'17)	82.2% (F'16) 78.3% (Sp'17)	83.2% (F'16) 81.2% (Sp'17)

Travel Marketing

	African-American	Low Income Students	All students in program/discipline
Completion Rate (Travel)	2016FA: 86.9% 2017SP: 86.7%	2016FA: 79.6% 2017SP: 87.1%	2016FA: 86.3% 2017SP: 84.7%
Success Rate (Travel)	2016FA: 57.4% 2017SP: 52.0%	2016FA: 44.4% 2017SP: 60.4%	2016FA: 65% 2017SP: 67.2%

Welding Technology

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	70.6% (FA16) 42.9% (SP17)	69.2% (FA16) 67.9% (SP17)	71.4% (FA16) 74.6% (SP17)
Success Rate (program/discipline)	41.2% (FA16) 28.6% (SP17)	51.9% (FA16) 47.4% (SP17)	54.6% (FA16) 54.8% (SP17)

World Languages

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	Increased retention, persistence and completion from 2016 for all languages	18- 100%	Increased retention rates for all sections of World Languages except for Sign Language

Success Rate (program/discipline)	World Languages has had successful success rates	17- 94.4	

Athletics (Course?)

CalWork (Course?)

Counseling (Course?)

DSPS (☺)

	African-American	Low Income Students	All students in program/discipline
Completion Rate (program/discipline)	Completion rates were lowest in fall 2015-- 87.9%. All other semesters, a completion rate of at least 90.5% was earned.	Completion rates were lowest in fall 2014— 87.5%. Beginning in spring 2016, success rates have stayed above 94.6% for all semesters.	Completion rates were lowest overall in fall 2014 (88.2%). All other semesters have a completion rate for all students above 90%
Success Rate (program/discipline)	Success rates have fluctuated widely for African American students. For semesters in which at least 10 students were enrolled, all success rates have ranged from 45%- 78.6%. For semesters with less than 10 African American students, the success rate has been 25- 28.6%. From these numbers, having a larger cohort of African American students enrolled seems to have an impact on the success rates of the whole group.	Success rates varied from a low of 55.2% spring 2015 spring to a high of 77.3% in spring 2017.	Success rates overall were above 50% for all semesters.

EOPS (Course?)

HONOR (☺) 2.2, 2.3, 2.4

1.   Course Completion & Success Analysis

Given that Honors Students have already been selected due to their academic accomplishments, comparing completion and success statistics with the overall LMC student body gives little useful information.

For example, data provided indicates an average **91% course success rate for Honors Students** who began the program during the Fall 2013, 15 & 16 semesters. This is much higher than the **LMC student body average of 71%** during that time period, but we cannot attribute this increase necessarily to any of our efforts.

Singling out *African American Honors Students*, the aggregated (and incomplete) data suggests they *succeeded at a rate of 87%* during the Fall 2013, 15 & 16 semesters, compared with an *overall LMC average success rate of only 60%* as reported in LMC's 2014-19 Equity Plan. This significant difference, however, is likely a result of the admissions guidelines to Honors.

A more interesting (and more complicated) study would be to compare Honors-eligible student success rates with those of program members, broken-out by racial/ethnic groups.

2.   Transfer & Degree/Certificate Outcomes

It is difficult to assess Honors Student transfer readiness patterns as we were only provided data for 70 students who began the program for Fall 2013. That is, of the 222 students who started the program between Fall 2013-Fall 2014, *we have data for only 32% of our members*. In addition, as students can join Honors at any point in their academic career, we cannot necessarily attribute transfer readiness to Honors Program efforts. After all, *many students enter the Honors Program already transfer ready*. With additional data more analysis can occur.

Those caveats aside, not surprisingly, of the 70 students who began Honors during Fall 2013, *67.1% were transfer ready within three years, and 71.4% were after four* – strong numbers that likely reflect the academic admission standards of the Honors Program. There seems to be a slight transfer readiness gap for the 9 African American students (67% after 4-years) and 20 Hispanic Students (65%) when compared to their general Fall 2013 Honors cohort (71%), but the sample numbers are too small to draw meaningful conclusions.

3.   Research & Data Needs

As previously mentioned, several studies could provide helpful information to the Program most notably a comparison of the racial/ethnic composition of students in the Honors Program as compared with Honors-eligible peers.

International Students (Cohort?)

Library (Course?)

MESA (☺) 2.2, 2.3, 2.4

1.   Course Completion & Success Analysis

1. Are overall course success rates for students meeting your program goals/expectations? Over the past five years are course success rates improving, declining, fluctuating or holding steady? Why?

Overall Term
Success 13-14 79% 14-15 83% 15-16 82% 16-17 82%
Completion 13-14 85% 14-15 89% 15-16 89% 16-17 91%
Our success and completion rates rose from 13-14 to the following year and have stayed steady since then. While there is some room to grow they are very high and well above LMC's rates. We would like to improve success rates in our courses as most students are completing, but success can be raised.

2. Are students successfully completing courses at an equitable rate? If not, why might this be the case? From analysis of the data the African American students do see a bit of a gape of success rates. They complete, but are not as successful as some as the other groups. We have discussed this data and want to institute a focus cohort and mentorship on our Black students in STEM.
3. One of our college goals as stated in our Integrated Plan is to "Increase successful course completion, and term to term persistence," and our Equity Plan identifies African- American students as significantly disproportionally impacted in terms of successful course completion. Please specifically address how well African American students are succeeding and indicate any opportunities for improvement.

Currently AA success rate is 78% and Completion rate is 91%. Success is lower than our overall average success of the cohort and of other groups as stated above. From analysis of the data the African American students do see a bit of a gap of success rates. They complete, but are not as successful as some as the other groups. We have discussed this data and want to institute a focus cohort and mentorship on our Black students in STEM.

 Summarize and analyze any additional data relevant to this section. This may include data from the Cohort Tracker Tool on "Course Success" and "Course Completion" or any additional data that your program collects that relates to this area.

2. TRANSFER & DEGREE/CERTIFICATE OUTCOMES Review the Section 2.3 Data Handout for your program and answer the following questions:

1. Are the overall Transfer Readiness numbers for students in your program meeting your program goals/expectations?   Transfer ready is not a great measurement for STEM as they are high unit major's. They often are "transfer ready" by definition but have a long way to go before they meet UC and CSU transfer requirements for their major.

To answer this question simply, yes our students are transfer ready, but we often look at actual transfer number as a benchmark of achievement in STEM. By the end of each term about 50% of our students are "transfer ready".

2. Are students equitably achieving Transfer Readiness? If not, which groups are frequently overrepresented/under-represented?

African American students do see a bit of a gap of transfer readiness rates. We have discussed this data and want to institute a focus cohort and mentorship on our Black students in STEM. However please see the previous answer about transfer readiness not being a marker of success for stem.

3. Specifically indicate how well African American students are achieving Transfer Readiness in your program.

25% AA students were transfer ready as compared to an overall 50% rate.

Summarize and analyze any additional data relevant to this section. This may include data from the Cohort Tracker Tool on "Transfer Directed Status," "Transfer Ready Status," "Degree/Certificate Completion," or any additional data that your program collects that relates to this area.

PUENETE (☺) 2.2, 2.3, 2.4

1.   Course Completion & Success Analysis
Review the Section 2.2 Data Handout for your program and answer the following questions:

1. Are overall course success rates for students meeting your program goals/expectations? Over the past five years are course success rates improving, declining, fluctuating or holding steady? Why?

    Course success rates remain strong for Puente students in their first two semesters at LMC, largely because of the high-touch, intrusive nature of the program and the support students receive, thereby meeting program expectations.

2. Are students successfully completing courses at an equitable rate? If not, why might this be the case?
    The Puente cohort consists primarily of Latinx students; no further data is disaggregated at this time for the program.

3. One of our college goals as stated in our Integrated Plan is to "Increase successful course completion, and term to term persistence," and our Equity Plan identifies African- American students as significantly disproportionally impacted in terms of successful course completion. Please specifically address how well African American students are succeeding and indicate any opportunities for improvement.
    Over the past five years, of the over 150 students in the Puente program, 3 have identified as African-American. Those students' completion results have been comparable to other demographics within the program.

Summarize and analyze any additional data relevant to this section. This may include data from the Cohort Tracker Tool on "Course Success" and "Course Completion" or any additional data that your program collects that relates to this area.

2.   Transfer & Degree/Certificate Outcomes
Review the Section 2.3 Data Handout for your program and answer the following questions:

1. Are the overall Transfer Readiness numbers for students in your program meeting your program goals/expectations?
    While the percentage of Puente students who are transfer ready in three years continues to improve, the goal of the overall program is to continue increasing that number. Previously, lack

of a consistent Puente Counselor impaired students' ability to maintain a relationship with a counselor over their time at LMC, which is one of the key tenets of the Puente model. Our hope is that now, with a dedicated Puente Counselor, we will continue to see the number of transfer-ready students increase.

Our target goal is to have one-third of Puente students transfer-ready in three years, and one-half transfer-ready in four years.

2. Are students equitably achieving Transfer Readiness? If not, which groups are frequently over-represented/under-represented?
Please refer to Section 2.2.3.

3. Specifically indicate how well African American students are achieving Transfer Readiness in your program.
Please refer to Section 2.2.3.

Summarize and analyze any additional data relevant to this section. This may include data from the Cohort Tracker Tool on "Transfer Directed Status," "Transfer Ready Status," "Degree/Certificate Completion," or any additional data that your program collects that relates to this area.

3.   Additional Data Analysis (OPTIONAL)

Summarize and analyze any additional data that your program collects. Note key trends as applicable.

Consistently, data reveals a drop in both student success and term-to-term retention for second- and third-year Puente students. To meet the continued need for second and third year students to remain involved, several opportunities for that involvement continue to be developed.

- Beginning in Fall 2016, eight second-year Puente students were hired as student tutors in the Center for Academic Support. Although many worked in other departments as well, their primary function was to tutor first-year Puente students in their English 95 course. Students were paid directly from the Puente annual budget allocation or, for those who qualified, from Federal Student Work-Study funds.
Based on the popularity of the student tutor pilot, and the success first-year students experienced in working with second-year students, we hired eight more second-year Puente students as tutors in Fall 2017. Because the English entry point changed from English 95 to English 100/100S, those students were only able to tutor for one semester: the second semester course, English 221, is filled with both first- and second-year Puente students.
- All Puente students were invited to attend San Francisco State University's Project Connect Day, a day of workshops devoted to community college student transfer. All LMC Puente students will be invited for an end-of-the-year celebration honoring this year's graduates, as well.
- Although not a direct connection with the Puente class, the Puente club functions as an extension of the program. This year, second year students formed the club's governing board and first and second year students, as well as interested students from the campus' general population, formed the basis of the club. While the model requires some re-structuring, the basic idea of providing previous students and current students a space to socialize outside of class has proved to be a positive move towards second year student engagement.

4.   Research & Data Needs (OPTIONAL)

Describe any additional data or research needs that your program would benefit from.

- Several key pieces of data would further assist the coordinators in determining how best to structure the program for student success. Data revealing the following would assist:

- o Student success and completion rates for students who enroll in Accelerated Math and Accelerated English (for Puente, this would be the English 100/100S course).
- o Trends in second year enrollment for Puente students: if we were able to determine which course(s) the majority of Puente students take in their second year, we may be able to offer specific Puente sections in an effort to keep the cohort engaged and supported in their second year.
- o Transfer velocity rates of Puente students.
- o Actual transfer rates of Puente students.

TRANSFER ACADEMY (☺) 2.2, 2.3, 2.4

1.   Course Completion & Success Analysis

Review the Section 2.2 Data Handout for your program and answer the following questions:

1. Are overall course success rates for students meeting your program goals/expectations? Over the past five years are course success rates improving, declining, fluctuating or holding steady? Why?

Transfer Academy has held different target numbers for course success rates during the past five years. The program has not adopted a permanent objective in regards to course success. Looking at the past five years of course success data, first semester course success has remained relatively stable, with an average success rate of 78%, a high of 83%, and low of 76%.

When analyzing first semester success rates, Transfer Academy believes its current rate of course success can be attributed to a combination of academic and socioeconomic factors. Upon meeting with faculty and students, Transfer Academy finds that students in its program, students who do not pass a course could have financial or family complications that inhibit the student's ability to concentrate and complete the course successfully. Transfer Academy first semester demonstrates that the support of faculty and staff is a contributor to maintaining a stable course success rate completion.

Looking back at Transfer Academy's past five years, the course success rates fluctuate between the second and fourth semesters. During the second semester it showed a slightly decrease of course success, with an average success rate of 75%, a high of 80%, and low of 71%. The slight decrease indicates that Transfer Academy students could be affected by outside influences, that might discourage their willingness to continue their education. On the other hand, the third semester course success rate has shown a slightly increase with the highest of 81% in 2015. The increase could be due to students' ability to determine their career pathway and realization of possible graduation completion timeline. As for the four semester course success rate, Transfer Academy showed to be relatively stable rate.

2. Are students successfully completing courses at an equitable rate? If not, why might this be the case?

Upon assessment, it was found that Transfer Academy students are not succeeding in courses at an equitable rate. African American students in the Transfer Academy program have consistently shown lower course success rates in their first semester, for the last four years. While there has been an 8% improvement in the last academic year, African American students are still 7% less likely to pass to show overall course success in their first semester compared to other Transfer Academy students.

African American students have shown more improvement in the program's second semester. From Fall 2013-Fall 2015, African American students were 13-15% less likely to show overall course success in the second semester. However, in Fall 2016, African American students in the Transfer Academy were 2% more likely to show overall course success, in comparison to the rest of the program.

We believe the upward trend in second semester course success can be attributed to consistent staffing and counseling for students in the program. Students who began in Fall 2015 have received consistent communication and counseling from the same staff, and access program support frequently.

While first semester course success is beginning to improve for African American students in the Transfer Academy program, more evaluation and discussion is necessary to increase course success. Transfer Academy staff are planning for increased professional development for Transfer Academy faculty, with a focus on supporting African American students in the classroom.

 One of our college goals as stated in our Integrated Plan is to "Increase successful course completion, and term to term persistence," and our Equity Plan identifies African- American students as significantly disproportionally impacted in terms of successful course completion. Please specifically address how well African American students are succeeding and indicate any opportunities for improvement.

See above.

Summarize and analyze any additional data relevant to this section. This may include data from the Cohort Tracker Tool on "Course Success" and "Course Completion" or any additional data that your program collects that relates to this area.

No additional data to report.

2.   Transfer & Degree/Certificate Outcomes
Review the Section 2.3 Data Handout for your program and answer the following questions:

1. Are the overall Transfer Readiness numbers for students in your program meeting your program goals/expectations?

Data is limited for Transfer Academy's transfer readiness numbers. Because the program is only six years old, only one cohort reports a five year transfer readiness result, and only two additional cohorts report three and four year transfer readiness numbers. Results seem consistent across the three cohorts: 36-42% of students achieve transfer readiness in three years, 47-49% achieve transfer readiness in four years, and in the single cohort reporting, 47% achieved transfer readiness in five years.

Transfer Academy would like to achieve higher transfer readiness rates for the learning community, and we believe we have taken appropriate steps in the last three years to change program design in support of this. Transfer Academy has altered its English and math course sequence to accommodate and encourage accelerated coursework, significantly shortening a Transfer Academy student's transfer readiness timeline. The program is also assessing a larger issue, of Transfer Academy students who discontinue their education before transfer readiness is achieved.

2. Are students equitably achieving Transfer Readiness? If not, which groups are frequently over-represented/under-represented?

Upon assessment, it was found that Transfer Academy students are not achieving transfer readiness at an equitable rate. African American students in the Transfer Academy program have consistently shown lower achievement of transfer readiness in three years, and this gap has widened in the three years of data reported. As of Fall 2014, African American students in Transfer Academy were 13% less likely to achieve transfer readiness in three years, in comparison to the program as a whole.

3. Specifically indicate how well African American students are achieving Transfer Readiness in your program.

See above.

Summarize and analyze any additional data relevant to this section. This may include data from the Cohort Tracker Tool on "Transfer Directed Status," "Transfer Ready Status," "Degree/Certificate Completion," or any additional data that your program collects that relates to this area.

Additional data addressed in following section.

3.   Additional Data Analysis (OPTIONAL)
Summarize and analyze any additional data that your program collects. Note key trends as applicable.

Transfer Academy completed an external program evaluation in 2016. A number of trends surfaced, and those of note include:

- 44-47% of the 2011, 2012, and 2013 cohort are not currently enrolled in college, without having attained a bachelor's degree.
- Counseling hours correlate with higher likelihood of 4 year enrollment: students with 6+ counseling visiting are 3.5 time more likely to graduate from a 4-year university.
- Transfer Academy students find consistent meetings with the Transfer Academy counselor as a major strength of the program, followed by the ability to build peer-to-peer relationships, and strong faculty/staff relationships.

4.   Research & Data Needs (OPTIONAL)
Describe any additional data or research needs that your program would benefit from.

Transfer Academy benefited from the research work completed in 2016 by an external evaluator. The external evaluation group utilized data from the National Student Clearinghouse to report on Transfer Academy students' persistence in higher education, whether at LMC, another community college, or upon transfer, and those students' degree attainment. Transfer Academy would benefit from additional training in National Student Clearinghouse to utilize available data in transfer success.

UMOJA (2.2, 2.3, 2.4)

1. Course Completion & Success Analysis
1. Are overall course success rates for students meeting your program goals/expectations? Over the past five years are course success rates improving, declining, fluctuating or holding steady? Why? Overall course success rates for the Umoja Scholars Program are not meeting our program

expectations. Earlier years' retention rates were in the 70th and 80th percentile; however, the program was smaller, had less course offerings, included F/T faculty for both English and Math, and did not include acceleration.

There does appear to be an increase in success rates after the completion of their first year. This could be after completing accelerated Math and their first two semesters of English (assuming they passed their classes).

2. Are students successfully completing courses at an equitable rate? If not, why might this be the case?
   It appears that students in the Umoja Scholars Program are completing courses at an equitable rate in comparison to African American students at LMC.

3. One of our college goals as stated in our Integrated Plan is to "Increase successful course completion, and term to term persistence," and our Equity Plan identifies African- American students as significantly disproportionally impacted in terms of successful course completion. Please specifically address how well African American students are succeeding and indicate any opportunities for improvement.

Summarize and analyze any additional data relevant to this section. This may include data from the Cohort Tracker Tool on "Course Success" and "Course Completion" or any additional data that your program collects that relates to this area.

The completion rates for students remains between 76% - 88% which means a significant number of students are not dropping their classes. There needs to be further investigation and intrusiveness to explore what students need who are staying in the class but not being successful.

2. Transfer & Degree/Certificate Outcomes
Review the Section 2.3 Data Handout for your program and answer the following questions:

1. Are the overall Transfer Readiness numbers for students in your program meeting your program goals/expectations?
   The Umoja Scholars Program began as a Basic Skills program, seeing students through Englsih 100 and Math 30, and later added transfer-level English and Math. The program wasn't established as a transfer program and intentional expectations and goals have not been set, but students are guided on that pathway if that is their personal goal.
   The Transfer Readiness numbers show a slight increase in the past five years, but remain low. As a program we do aim to increase these numbers relative to the students who want to transfer.

2. Are students equitably achieving Transfer Readiness? If not, which groups are frequently over-represented/under-represented?
   In comparison to the African American students at LMC the percentage appears to be similar.

3. Specifically indicate how well African American students are achieving Transfer Readiness in your program.
   Transfer Readiness numbers show 6.9% in the Fall 2013 and 12.1% in Fall 2014 as compared to A.A. students 7.9% in 2013 and 7.9% in 2014. In 4 years, Umoja Scholars Transfer Ready was 12. 5% and the A.A. students outside of the program was 14.3%. There is a slight fluctuation but appears to be more or less similar.

Summarize and analyze any additional data relevant to this section. This may include data from the Cohort Tracker Tool on "Transfer Directed Status," "Transfer Ready Status," "Degree/Certificate Completion," or any additional data that your program collects that relates to this area.
The number of Transfer Directed students in the Umoja Scholars Program in the last five years ranges from 9 – 16 students. Degrees/Certificates earned appear to show a slight increase.

3. Additional Data Analysis (OPTIONAL)
Summarize and analyze any additional data that your program collects. Note key trends as applicable.

4. Research & Data Needs (OPTIONAL)
Describe any additional data or research needs that your program would benefit from.
Our program would benefit from comparison data on success and completion rates of English, ACS, and Math courses (since these are the courses that are program specifically offers), as well as age and gender.

Disaggregated data around African Americans and African students (nationality/country of origin) would also be helpful.

8.1 In looking at disaggregated data on success/retention, is there anything else that stands out?

Administration of Justice

African-American students' completion rates show promise; they are higher than those of all students in the program on average. However, we need to be cognizant of the below average low-income student completion rate as well as African-American and low-income student success rates.

Anthropology

I have noticed through the data that African-American student's success rate is lower than the low income student's success rate. Bringing to my attention that some new strategies may have to be implemented focusing more on African American student success in my program.

Appliance Service Technology

I know our program has a lot to offer disadvantaged people. Whether they are African-American, foster youth or low income single parents or immigrants, there are good paying jobs available with the training we offer. The challenge is making them aware that our program is here and that we have a clear path to a job that is recession proof and can't be sent overseas.

Arts/Graphic Communications/Humanities

The success rate for the following populations are concerning:
Total Average 73.4%
Foster youth = 51.7%
Black or African American = 60.2%
Veterans = 65.2% (which are the next-lowest demographics achieving success along with African-Americans)
Latino = 71.4%
Disabilities = 71.6%

Astronomy

African-American students are within a few percent (a few percent lower) than the entire student population, but their success rates are around 10% lower.

Automotive Technology

In nearly all categories success rates have trended up with a few areas that have had minor downward trends. Only one year stands out as an anomaly, Fall of 2015 had a dip in success rates the immediately returned to normal in the following semester. The cause for this is unknown, the semester was a normal semester in terms of schedule and instructors were teaching their normally assigned courses.

Biological Sciences

So, what do the success and retention numbers we were provided indicate about equitable outcomes in the biology department? Probably not very much. One serious issue with this sort of data analysis is

that we were not given success and retention numbers broken down by course title, section number, or course type, so it is not possible to conclude from the global data set if apparent equity issues are evenly distributed throughout all biology courses and instructors, or if these issues are concentrated in just certain courses or sections. Our department would need to be provided with a far more complete success and retention data set to answer this critical question.

Given the limited data set we have we can make a few generalizations: For the most part student success and retention in regular biology courses does not seem to be terribly unevenly distributed among self-identified student groups. The major exceptions are students who selfidentify as African American, students who refuse to state their ethnicity (these students have the poorest success and retention outcomes), and students who self-identify as Caucasian. Those are the obvious and consistent statistical "outlier" groups over the past five semesters. Overall students who identify as African American have lower than average retention and successful completion percentages in both regular Biology and Nutrition courses. In regular biology courses self-identified Caucasian students consistently have the highest retention and success rates. Asian, Hispanic and Filipino students have consistent success and retention rates that mirror the departmental averages over the past five semesters. Also over the past five semesters there has not been a lot of variance in overall success or retention rates for the biology department as a whole, nor for specific self-identified ethnic student groups, excluding our nutrition courses (this is discussed below).

An interesting statistical anomaly is that success and retention data for our nutrition course indicates a surprisingly large semester to semester variance. This large variance exists both for the overall course data and for the data provided for self-identified ethnic groups. We do not have an explanation for this statistical anomaly, except that the total student numbers of students enrolled in all sections of our nutrition course is significantly smaller than the total number of all students enrolled in all other biology courses. Smaller numbers can increase statistical variance, but the semester to semester changes in our nutrition course data are still higher than one would expect, even given the smaller sample size. Another interesting statistical oddity is that self-identified Caucasian students perform significantly less well in nutrition courses than they do in regular biology courses, while low income students tend to perform as well or better than higher income students in our nutrition courses. Again, we can determine no obvious explanation for these results.

Analysis of the success and retention data for Low Income and African American groups: Low income students have slightly lower than average retention and success compared to the overall department average. An important question to answer when analyzing success and retention data is to try to disentangle the students who drop a course due to external factors ("life issues") vs students who drop or fail a course due to problems with the course content or instruction ("academic issues"). The reason it is important to distinguish between these two types of student failure is that effective instructor interventions that might significantly improve student retention or success are quite different depending on the ultimate cause. For example, a student who drops out of a course due to financial or health issues requires different sorts of interventions than a student who drops or fails due to frustration with their inability to master course content.

Using success and retention statistics alone it is difficult to determine with accuracy WHY students might not succeed in a course or program or department, yet this determination is critical to improving student success. However there may be one statistical metric we can use to help us distinguish these two different impediments to student success: If we divide the percentage of students who succeeded in the department by the percentage of students retained in the department we get a metric that I will

call successful retention. Successful retention is the percentage of students who completed a course who actually passed the course. In the Biology department the average successful retention is about 88%. That means on average nearly 90% of all students who finished a biology course passed the biology course.

The reason successful retention is an important metric is that it can indicate difficulties enrolled students had with the course content rather than with other life issues. In our experience students with major life issues that come up during a semester tend to drop a course, or be dropped by the instructor for non-attendance. In other words, they don't officially complete the course and so are not retained. These students are indicated in the retention statistics. Lower than average retention often indicates a student or group of students with major life issues that are interfering with their academic work. But, conversely, a lower than average successful retention percentage often indicates a student or group of students who had difficulty mastering the subject matter or completing assignments. For these students life issues weren't serious enough to stop them from finishing the class, so their lack of successful retention most likely indicates their struggle with the academic assignments. Obviously there can be overlap between these two issues (for example life issues can prevent students from completing some class assignments or maintaining regular attendance), but we still believe successful retention is a useful metric for parsing the CAUSES of low success for a group of students.   Using retention, success, and successful retention metrics we evaluated four different selfidentified groups of students in our regular biology courses during the Spring 2017 semester: Low Income students, Higher Income Students, African American students and Caucasian students, and compared their percentages to the overall departmental percentages. The numbers are reproduced below:

Self-Identified Student Group	Retention	Success	Successful Retention
African American	78.6%	64.6%	82.2%
Caucasian	89.3%	82.5%	92.4%
Low Income	82.8%	72.6%	87.7%
Not Low Income	88.9%	79.3%	89.2%
Department Average	84.9%	74.9%	88.2%

Based on the assumptions provided above, these numbers suggest a few conclusions:

First, the modestly lower course success of low income students is probably due in large part to life issues related to income and not to particular problems with comprehension of the course material. Notice that although these students have lower success and retention numbers than the departmental average (by a little more than 2%), their successful retention percentage is very close to the departmental average (87.7% vs 88.2%). This indicates that when low income students are able to remain in a biology course until the end they are nearly as successful as most other self-identified groups of students. Thus the lower than average success rates of low income students are due almost entirely to lower than average retention (indicating life issue difficulties), rather than problems understanding the course material or completing assignments.

Comparing the analysis of low income students with self-identified African American students is instructive. Notice that self-identified African American students have significantly lower retention than other student groups, indicating significantly a higher amount of external issues that can derail their academic progress. But they also have a significantly lower than average successful retention percentage, indicating some higher than average difficulties with comprehension or assignment completion in biology courses. Of course, it is also possible that the reason for the lower than average successful retention of self-identified African American students is lower assignment scores given them

unfairly by racially biased or racist instructors. There have been studies indicating that some instructors do bias their grading of student work to favor certain ethnicities over others. It would take a fairly sophisticated analysis of student work previously graded by our teachers to determine if that is happening to a significant extent in our department.

Having said all this, we would like to make the following critical point that is often overlooked in campus discussions of equity issues: The whole concept of human "races" is scientifically bogus and has no biological validity. Biologically there is only one human species: Homo Sapien, and there is only one human subspecies: Homo Sapien Sapien. Biology recognizes no scientifically valid categorization of large human groups other than gender. Therefore, many of us find the whole concept of asking students to self-identify with an ethnic group, as if there were some sort of scientific validity to that identification, to be an offense against science and humanity. Requesting or requiring students to engage in this type of self-identification actually validates and perpetuates the racist ideologies that gave rise to these mythical human categories in the first place. We aggravate this problem further when we pre-identify a group of students as potential failures, or in need of special help, based on superficial physical characteristics. When we do this we risk inadvertently turning our statistical "knowledge" into self-fulfilling prophecy. For example, when we publicly identify a group of people such as African Americans as academically at risk we are actually publicly disrespecting that entire group of students, and that disrespect can negatively affect how we treat certain students in our classes and ultimately how these students view themselves. Let's keep in mind that many self-identified African American students are not struggling in our classes, many are high academic achievers, and on average nearly two thirds who enroll in a biology class succeed in that class.

Business
We currently have a low success rate for African American students.   We also have a gap in other areas for completion versus success.

Child Development
We realize that despite our efforts, we still have an equity gap for our African American students.

Chemistry
Yes, the African-American students have similar completion rates as other groups, but their success rates are significantly lower.

Computer Science
Completion Rate: We have had an overall 3.7% drop, a low-income drop rate of 3.2% and an African-American drop of 0.5% since 2014. So, our completion rate for these targeted groups are higher relative to the overall groups.

Success Rate: We have had an overall 2.5% drop, a low-income drop rate of 3.2% and an African-American **increase** of 4.9% since 2014. So, our completion rate for these targeted groups are higher relative to the overall groups.

Cooperative Education
Blank

Dramatic Arts
Our numbers look consistent but we see that there is room for improvement.

Economics
The completion rates for African American students in Economics for FA 16 are 4 percentage points higher that completion rates for All Students in the discipline. For SP17 the percentages are comparable.

The completion rates for Low Income students in Economics for FA 16 are 1.3 % lower compared to the completion rates for All Students in the discipline. For SP17 the percentages are 0.5% higher than the completion rates for All Students in the discipline.

The success rates for African American students in Economics for FA 16 are 1.2 percentage points lower than the success rates for All Students in the discipline. For SP17 the percentages are comparable.

The success rates for Low Income students in Economics for FA 16 are 0.8 % lower compared to the success rates for All Students in the discipline. For SP17 the percentages are 0.5% higher than the success rates for All Students in the discipline.

Based on the above data, there does not appear to be a statistically significant variation in either the completion or the success rates in Economics for African American and Low Income students when compared to All Students in the discipline.

Electrical/Instrument Technology
We have low enrollment and low success rates for African-American students and Low Income Students. Previously we have had low enrollment for female students however, over the last few semesters our success rate for female students has increased slightly.

Emergency Medical Services
Approximately three (3) years ago the number of students completing the EMT program was 200 however, the number of students attempting to take the NREMT exam was approximately only 80-100. Over the past two (2) years this number has nearly doubled meaning, out of 180 students graduating from the EMT program approximately 140-145 students are taking and passing the NREMT exam on their first attempt.

Data Packet – Success Rate. Note rise in success of Hispanic and Low-Income students 2014fa-2017sp

We have succeeded attracting more women in this profession which is underrepresented. Our head count for Spring 2017 was 50% women, we are hoping this influx of qualified women will continue on and join our thriving FIRE Academy and Fire programs.

Engineering/Physics
These numbers do not vary significantly from year to year and from semester to semester for African-American students. On the other hand, Foster youth success rate varies significantly.

English – Transfer & Developmental
After analyzing the data, two major things stand out. Firstly, the success rates of African-Americans and lower income students are significantly lower than the groups that they are juxtaposed with. For instance, whereas African-American students had a 57.4% success rate, Asian students had a 79.5% success rate and white students a 76.4% success rate. Similarly, the success rate for lower income was also lower than that of non-lower income. Secondly, it was also evident that since 2014, the success rates, for both African-American and low-income students, have not dramatically changed.

English as a Second Language
The FA14 – SP17 data show that our Hispanic student population – which was our largest ethnicity group comprising an averaged 56.1% of our headcount and 53.9% of our seat count – completed and succeeded at a six-semester average rate of 90.71% and 78.9% respectively. Assuming I am calculating correctly, this equates to completion and success achievement gaps of -1.11% and -3.33%.

The FA14 – SP17 data show that our Asian student population (not including Filipino) – which was our second largest ethnicity group comprising an averaged 29.3% of our headcount and 28.7% of our seat count – completed and succeeded at a six-semester average rate of 91.3% and 82% respectively. Again, assuming I am doing this calculation correctly, this gives us completion and success achievement gaps of -.52% and -.23%.

As a Hispanic Serving Institution, with our large Hispanic ESL student population and with an ever-increasing population of "Asian" ESL students, I would like support to understand how we can find out more about these students, their needs, and how we can work to help them achieve.

Fire Technology
It is noted that the course success rates for African-American and Low-Income students in our program increased from 2016FA to 2017SP. We would like to begin dialog to move towards implementing strategies that may increase the course success rates for all students in our program.

History
Yes, in the averages listed above were taken from the last six years of data provided in the SQL data. The averages actually hide the data regarding some of the aggregate groups. African-American success rates fell to 49.4% in 2016 Fall and then increased to 63.6% in Spring 2017 semester (the latter number being the "norm.") What caused this dip in success rates, followed by an increase that brought the average back into the norm?

Humanities

The success rate for the following populations are concerning:

Total Average 73.4%

Foster youth = 51.7%

Black or African American = 60.2%

Veterans = 65.2% (which are the next-lowest demographics achieving success along with African-Americans)

Latino = 71.4%

Disabilities = 71.6%

Journalism

I note an interesting pattern in the data but don't know if it is unique to Journalism or is a college-wide phenomenon: In each academic year, there is both a higher completion rate and a higher success rate in the spring semester than in fall. That same pattern does not hold up, however, when you look at the data using the" successful completion" metric. I can't say what this means.

Law Enforcement Academy

Recruitment active and on-going with the intention of a diverse workforce. The college and Sheriff's Office, in collaboration with the Chiefs Association, value and make a concerted effort to recruit a community of officers that is reflective of the communities they serve. The difficulty of the data is that it is aggregated with the overall ADJUS program and not disaggregate to delineate the Law Academy from the ADJUS course. For future reviews, this will be necessary.

Licensed Vocational Nursing

We have given a lot of support to our underrepresented students in the past year and I believe the success rate of our students are reflected on the support that they have received. This support has included referrals to DSPS and other academic, financial and social support services and intensive tutoring by designated faculty.

Math – Transfer

Pittsburg analysis:

- Overall our data from 2014 – 2017 is consistent with the exception of Fall 2016. In this semester we started offering Math 28, a Developmental course that serves as a co-requisite for Math 34, Statistics. In Fall 2016 we saw an increase in the number of students taking Statistics as well as a small increase in math completion and success rates for African American students and for all students. It is important to note that the more than half of the transfer level students in each semester are in Statistics. Looking at the success data in Statistics, we can see that success increased after the introduction of Math 28:

Fall 2014	61.4%
Spring 2015	57.8%
Fall 2015	63.6%
Spring 2016	63.7%
Fall 2016	**68.6%**
Spring 2017	66.6%

This data indicates that the widening of access to Math 34 has not decreased success in Math 34 but possibly increased it slightly. The addition of Math 28 to our course offerings is discussed in the Developmental Math program review.

Additionally, about 2/3 of the students in transfer level math course are designated as low income. About 40% of students are identified as Latina/o and about 15% are identified as African American. These numbers align with the demographics of the college.

Brentwood Completion:

There is little difference between low income Completion and the completion rates for All Brentwood Students. In two of the past semesters (Fall 2015 and Spring 2017) there is a difference between African American completion rates and overall completion rates (although the sample size is low). In the other semesters the completion rates for African American students are comparable to overall success rates.

Brentwood Success:

The sample indicates little difference between average success rates overall and those among low income students. Success among low income students is most likely largely due to a number of factors including, but not limited to, our semester loan calculator program for Math 34 students sponsored by an Equity mini grant and other availability of free resources in the math lab. Brentwood also moved to an open textbook for Math 40, and hopes to do the same for other transfer level courses. The sample size is very small for African American Students taking transfer level math in Brentwood. This small sample size indicates a 5-10% lower success rate for African American Students compared to the average success rates for all students.

Math – Developmental
Brentwood Completion:

We believe several factors are contributing to a decreasing overall number of completions in developmental math classes at the Brentwood Center from Fall 2014 to Spring 2017. First the economy has continued to improve, following the last economic downturn, resulting in more students going back to work and students taking fewer courses. Secondly, the math department has modernized our developmental math curriculum and placement process, resulting in more students taking transfer level math upon entry to college and more students completing developmental course work in a shorter period. This is great for students. Brentwood began offering Math 29 in Spring 2016 and Math 28 in Fall 2016. The edition of both of the courses has helped decrease the number of students taking developmental math in recent years at the Brentwood Center. We expect to see a similar increase in the number of completions of transfer level classes.

Additionally, in recent years the completion rates have also decreased. There are several possible explanations for this decrease. First, over the last 2 to 3 years, the department has lost a number of good adjunct instructors due to either retirement or full-time employment elsewhere. This has resulted in the necessity to hire new, less experienced faculty that are still learning and improving. Further professional development and seasoning should help improve instruction in the years to come. Second, as a result of the changes described above in placement and developmental course sequences, there are

less students that are unnecessarily enrolling in developmental classes. Prior to this, under-placed students may have contributed to an artificial bump in success rates for lower level developmental courses.

Brentwood Success:

The sample indicates little difference between average success rates overall and those among low income students. The sample size is very small for African American Students taking transfer level math in Brentwood. This small sample size indicates significantly lower success rates for African American Students compared to the average success rates for all students.

The parabolic pattern is pretty clear for African American, Low Income and All students. There seems to no statistical significance between the low income students and the students overall. (paired t test p = .13). However, there is an average of over ten percent gap between the African American and overall percentages. Their success rates in general are hovering around 50%.

There is a very clear trend in terms of numbers of students taking courses. Fall semester is definitely more popular with Developmental Math students than Spring, and the trend for numbers of students in just the last three years in Math DE in Pittsburg is way down across the board. This can probably be explained by the very significant increase in the number of students enrolled in the Transfer level courses. The sum of the transfer and DE student count is 1291, 1207, 1265 for consecutive fall semesters and 1057, 1029, 1064 for consecutive Spring semesters. So overall, totals are approximately steady. Rebalancing toward Transfer instead of Developmental courses, with comparable success rates, is great for students.

Management & Supervision
Foster youth tend to have lower rates.

Music
In the Completion Rate, nothing stands out. The Africa-American and Low Income Students have very similar results to all students in the completion rate. The difference is negligible. While the African American student scored 0.20% less than all students, the Low Income Students scored almost 0.20% higher than all students.

In the Success Rate, African-American students did about 10% lower than all students while Low Income Students did a little better than all students.

On a separate note, Pacific Islander's results were significantly lower than either African-American or Low Income Students. However, their numbers are small and like foster youth, their numbers are too small to disaggregate by discipline/program

Physical Education/Kinesiology
Low income students are in line with all students in Completion and Success Rates. African American students Completion and Success rates have steadily increased over the past 2 years. The Kines degree is 3 ½ years old.

Philosophy

Our overall course success rate is low; but we have also seen an influx of Veteran seat counts. The numbers doubled from 2014 to 2017. The headcount of unknown gendered students also saw an increase from 2014 to 2015, withy the growth remaining linear, as well as the students with disabilities have shown a higher completion rate today, and consistent growth, since 2014. We are unsure of the reason for the trends, but we will continue to monitor and record these trends, so to better understand the cause and expectations it may indicate for future success rates for all students.

Physics

These numbers vary significantly from year to year and from semester to semester. African-American students had a higher than average course completion rate in the fall of 2014, the spring of 2015, and in the spring of 2016. The course success rate of African-Americans, however, has been lower than the school average for all semesters given, except for the fall of 2014. Part of the variability is probably due to the relatively small number of African-Americans who are currently going through the Physics program.

Political Science

- Yes, the lowest levels for both the completion rates and success rates for African American students as well as low income students happened during the earliest semester (Fall of 2014) for which data was provided.
- For both of these groups, typically, their best performance was during the most recent semester (Spring of 2017) that data was provided.
- The exception to this last statement is the course completion rates for African American students which was at its highest in the Spring of 2016.
- Typically, student success is higher during Spring semesters but not always.
- Over the last five years success/retention rates generally increased.

Psychology

- African American students are 6.5% behind the completion rate for all students in the Psychology
- Program.
- Low income students are .95% behind the completion rate for all students in the Psychology
- Program.
- African American students are 13.5% behind the success rate for all students in the Psychology Program.
- Low income students are 1.85% behind the success rate for all students in the Psychology Program.
- The data indicates that African-American student's success is lower than the low income student's success rate. This brings to my awareness that some new strategies may have to be developed to focus on African American student success and completion.

Process Technology

Yes, our Spring classes have fewer students and the completion and success rates are higher for all students.

Recording Arts
Low completion rates for African American students and women

Registered Nursing
It is noted that the course success rates for African-American and Low-Income students in our program increased from 2015FA to 2014SP. In comparison to the course completion rate, it is still lower. We would like to begin dialog to move towards implementing strategies that may increase the course success rates for all students in our program.

Sociology
- African-American students are 6.1% behind the completion rate for all students in the Sociology Program.
- Low Incomes students are 1.4% behind the completion rate for all students in the Sociology
- Program.
- African-American students are 11% behind the success rate for all students in the Sociology
- Program.
- Low Income students are 1.9% behind the success rate for all students in the Sociology Program.
- The data for the Sociology Program, suggest that I consider some new strategies to improve both student completion rate and student success rate for African-American and low income students.

Speech/Communications
The overall size of our course success achievement gaps in the speech department is very small. Our largest gap exists between White students and Hispanic students at 8.1%.

Travel Marketing
- Retention/completion rates are very good for all categories above.
- Success rates are not as good and have room for improvement.

Welding Technology
For the total course completion (retention) rate, it illustrates that the majority ~75% of students do not withdraw and receive a valid grade. However in regards to success rate, only ~55% of the total students are successful in earning a passing grade.

World Languages

Hispanic Students are the highest completers in the Spanish courses.

8.2 What are some strategies that might help students, particularly African-American, foster youth, and low income students successfully complete courses in your discipline? What resources would be needed to implement these strategies?

Administration of Justice

I am a proponent of a get out there; get your hands on it style of education. This especially effective approach to keep student engaged and our program relevant. Exposure to the administration of justice, in action, through increased field trips or a program of speakers from the field, i.e., judges, district attorneys etc. could excite students to succeed, especially if we can encourage professional women and persons of color to participate.

We should also talk to student organizations representing women and students of color regarding our program and determine what they expect of it. It would be beneficial if we could establish a mentor program with student organizations representing African-American students.

Anthropology

In order to attend to student's needs and for them to become success in their learning experiences and the completion of their academic goals, three components are necessary; plan for success, initiate success, and sustain success at the college. The segments of these components are in place; assessment and placement, orientation, educational plans, student success courses, career development courses, fast track developmental education, learning communities, early alert and intervention, and tutoring. In addition, the following is only a small list of the college's support services: CARE/CALWORKS, Center for Academic Support, Child Care Services, DSP&S, Employment Center, and LGBT Resources Center Q*Spot, Financial Aid, Career Services, Assessment Center, Student Retention and Support Services, Transfer and Support Services. There are many support practices/strategies within these services that Los Medanos College has in place to help students successfully complete their courses. The 3SP plan is integrated planning. It includes a collective vision; planning, resources, and reporting. With research and data collection we will be able to determine the success of students. Self-efficacy, the importance that a student believes they have the ability to be successful, is important as well. Students, however, need to know how to navigate the complex organization of student services.

Also my own teaching strategies have to be current and updated for student success. Always keeping up with the new and current anthropology data will help me teach my students effectively for their success. In addition, at the beginning of each semester I will tell the students of all the services available at LMC. I may ask some representatives of these services to come in and speak with the students about these services so we can develop an effective and cohesive plan for student success.

Appliance Service Technology

Helping students to become aware of the fact that if they work hard and develop the proper skills they can succeed in the appliance and HVAC industry which is in dire need of well trained

technicians.

Arts/Graphic Communications/Humanities

Within the department faculty and staff can explore or expand on these strategies:

- Competency Based Ed – Possible flex workshops or departmental discussions on CSLO mastery and not hours in class or lab as a method of measuring mastery.
- Building relationships – incorporate FAM (Faculty Advising and Mentoring program) techniques, allows the personal touch to each students' needs, degree planning and goal setting, seeing the student as a whole person beyond the classroom content and measurements, ability to work with at risk intervention points, physically hand off students to other college departments/resources.
- Art tutoring –Bring the students tutors to the Art Appreciation and Art History courses and Studio Practice (Art 3).

Some existing practices and resources on campus:

- Counseling – EOPs has offered financial assistance with book and classroom materials/tools that are required to complete the course.
- Face to Face Interventions - Many faculty are using face to face interventions as a method to work with any students that are at risk. This varies from one to one meetings, tutoring and connecting students with services on campus.
- Art tutoring – Existing collaborations with the Center for Academic Success for Art Appreciation and Art History. (Ken Alexander has initiated a required assignment to use the Center for Academic Support, other instructors for art appreciation/history have assigned extra credit for tutoring.) Within the department, students are able to work with instructors outside of class, with instructional aides, and with staff.
- STARFISH student alert system, efforts existing through supplemental programs such as learning communities, the Student Equity Plan and Student Success and Support Program. At the Spring 2018 department meeting, all faculty were encouraged to begin working with Starfish as an early alert tool along with personal communication to the student at risk.

Some outside of LMC resources are:

- SparkPoint and Opportunity Junction, Burton Book fund look into resources for the populations in need. (Foster Youth Low Income)

Astronomy

The faculty would favor required study halls for the LMC athletes. The majority of African American astronomy students tell me that they are athletes; and, required study hall sessions each week would induce athletes to learn the course content, do well on the homeworks, and get good grades on their oral reports and unit tests. Obviously, this idea would also benefit non–African American athletes.

It might also help the African American students to infuse more African American studies and perspectives into the astronomy curriculum. Traditional astronomy classes never include anything that African Americans would relate to culturally. When Scott Cabral taught PHYS 15 in Sp17, that section was picked by the GE Committee to assess diverse multicultural perspectives; so, Scott included several readings about African American and African astronauts, scientists, and scientific achievements. Tilting

the ASTRO 10 curriculum more in a direction that that is more relevant to African American students might help with the motivation problem that was addressed in section 7.1.4 above.

Automotive Technology

The faculty and staff has attempted but has largely been unable to identify the specific issues causing lower success rates in our African American category. Current resources appear to be equally accessed by all students. Additional new resources are likely needed to specifically target this group, however research that provides missing data will be needed to identify their specific needs.

Biological Sciences

Biology Department Recommendations: Recognizing that many of our students struggle with life issues that adversely affect their course retention and success, and that many students also struggle with content in classes such as science and mathematics that deal with complex abstract concepts, and further recognizing that none of these struggles is unique to one particular skin tone or ethnicity, and further recognizing that skin tone does not correlate to intellectual abilities or potential, despite what both racists and well-intentioned but condescending liberals would have people believe, we the faculty of the LMC biology department recommend the following:

That LMC establish more on-campus support for students struggling with life issues that adversely affect their academic attendance or performance. This support can take many forms, including: An on-campus health center that includes a nurse practitioner and a mental health counselor to provide immediate help for students dealing with serious physical or mental health issues. Better and more frequent local public transportation and ride-sharing services to and from both of our campuses. An on-campus social service worker to help students dealing with serious life issues such as homelessness and poverty. More student financial aid, possibly in the form of additional student scholarships. More academic counselors and earlier recognition of, and intervention with, struggling students using a coordinated communication
and alert system shared by instructors and counselors (the Starfish system may eventually play this role).

As far as help for students struggling with academic issues in our biology classes our recommendations are the same for all groups of students: Instructors need to identify academically struggling students early in the semester (ideally not later than the sixth week of class), and talk to these students face to face or by email to try to identify their academic issues and suggest new academic strategies for each struggling student. These strategies can include anything from LD testing to tutoring or group study work. The instructor should follow up with these students to see if the suggestions were followed and if the interventions were successful. It would also be helpful if our faculty were given regular opportunities to talk with expert science-trained teaching/learning faculty to discuss effective learning/study strategies for our struggling students. Finally, we recognize that sometimes just getting to know our struggling students a little bit and offering some timely words of recognition and encouragement can make a surprisingly large and positive difference in their academic success. As conscientious teachers, we are all committed to helping our students succeed in our courses, but ultimately it does take a college-wide as well as a societal commitment to educate all students who truly want and education. No teacher or department is an island in the noble endeavor of higher education.

Business

We will explore opportunities to increase one on one student contact, personal counseling, financial counseling, academic counseling, and faculty training covering implicit bias to better serve the populations.

Child Development
Some strategies for improving rates include the strategies for Universal Design. One resource we would like to employ is a Lecture Translator. We would also like to review our course maximums. Smaller class sizes would enable more contact with students. Through our experience with FAM, we realize the value of faculty advising, mentoring and supporting our students. We would like more professional development and time (possibly factored into load) for this type of contact. We are interested in focusing on building community within our classrooms.

Chemistry
(Answer to 8.2) Because the data indicates African-American students stay in our courses to the end (same completion rates as other populations), but have lower success rates, teachers have opportunities to intervene one-on-one with these students. If we reach out to them more, perhaps we can help each student identify and address the factors that are limiting their academic success.

The SQL Reports did not reveal achievement gaps for foster youth and low income students, so our department should focus on strategies that assist African-American students as well as strategies that assist all students. As described in the response to 7.2.3, our department needs resources to properly equip our laboratories so that students have access to effective learning experiences. More effective laboratories with a properly supplied chemistry stockroom should contribute to higher completion and success rates for all students.

We are hopeful that the Chem 25 Prep Workshop held on a Saturday before the start of each semester not only serves to prepare all students for Chem 25, but may also work to close achievement gaps. Perhaps a Physical Sciences-Specific ACS-10 course may be useful in this regard and is under consideration.

Funded by LMC equity funds, the Chemistry Stockroom and an LMC student are undertaking a project to mount portraits and descriptions of a multiculturally diverse group of scientists to be displayed at the fume hoods in both teaching laboratories. The portraiture project ties in to 8.2 by providing concrete, successful and diverse examples of professionals. This ties in to providing a vision (goal) for students to relate to and for them to move toward. The portraiture project should be completed by Spring 2018.

Julie Hubbard, LMC part-time instructor and Liberty High School teacher in Brentwood, is working to set up a Dual Enrollment program so that high school students can take Chem 6 at Liberty HS. This will prepare students for college-level chemistry as well as enable them to earn college credits while still in high school. It will be interesting to see if this program can address equity gaps.

Computer Science
Don't know at this time. It would require more thought and discussion.

Cooperative Education

Dedicated faculty to oversee the growth of the sections and support of the students. In some disciplines there is capacity offer dedicated support given the faculty overseeing the section, ex welding, PTEC. Many sections, ex CHDEV 170, EDUC 170, ETEC 170/180 fall on full-time faculty with full loads who are then expected to support 2-10 students (currently) with site-visits, objective development and more. Underserved students require more support, specifically with an independent style course with limited meeting. Additionally, this population needs more support with profession development, and the current staffing within *some* of the disciplines may not be allowing for that .

Dramatic Arts

Our strategies are to include more texts or plays highlighting artists and figures from these groups. Also each of these groups respond most to community learning. We are currently working on creating more activity and community based methods of pedagogy.

Economics

- Continue to motivate, support, and engage our students both in and outside the class room.
- Follow the FAIM model working closely with the adjunct faculty.
- Work with UMOJA and build relationships with student services that target disadvantaged students.
- Continue with "soft" intervention to encourage students to stay with the program and develop their self-esteem. Remind them that education is an investment in their future.
- Explicitly incorporating socially diverse and inclusive examples in the curriculum.
- Getting to know the students' individual situations.

Electrical/Instrument Technology

Implementation of a prerequisite requirement for English and Math assessment with a minimum of ENGL-090 and MATH-025 or ETEC-009, prior to enrollment in the program would better inform the student of their level of learning required to successfully complete the program. We first would need to know if it is possible to make this a prerequisite requirement for the ETEC Program. We would need to collaborate with the Assessment Center, Curriculum Committee, Office of Instruction and Admissions & Records. Currently, students are scheduled during the first semester of the program to take MATH-029 or ETEC-009 however, during the first semester our students are already working with and requiring a calculations at a MATH-029 level. As this is currently not a prerequisite requirement, we find we lose a significant number of students during the first semester due to this hurdle in learning. By implementing this English and Math assessment prerequisite this would help ensure the students know and can properly perform the calculations required during the first semester thus leading to student success and retention.

Emergency Medical Services

We created a healthcare career pathway that begins in the 10th grade of high school. Additional release time is needed for the full-time faculty to coordinate this growing pathway in order to accommodate more students wanting to join this experience. In addition, we refer low-income students to the Foundation for emergency funding to assist with the costs of the program. We also have partnered with

Opportunity Junction who funds uniforms, testing, supplies, gas cards, parking passes, food and weekly counselor/advisor meetings to help the students to stay on track.

Engineering/Physics

We believe the first step is to promote MESA and any other organization on campus focused on creating a sense of community for those students. Also, we believe that target academic support throughout Math classes would drastically improve those student success rate.

English – Transfer & Developmental

Striving, as a department, to become more culturally competent will enable us to meet these groups of students where they are more effectively. In "Culturally Relevant Pedagogy: Ingredients for Critical Teacher Reflection" (2010), Tyrone Howard stresses the importance of critical reflection as a way to develop culturally competent instructional strategies. Resources, such as workshops and conference, that will help us to develop these strategies might be a good place to start. Additionally, developing effective ways to record student progress could also be an effective measure. Our institution has developed resources such as Starfish; comparable resources could help to improve success rates at Los Medanos College.

English as a Second Language

African-American and low-income students are completing and succeeding at higher rates than the overall student population in the ESL courses. We have very few foster-youth ESL students. The data actually show that our non-low-income ESL students have a completion and success achievement gaps of -10.64% and -7.87%; thus, I am interested and concerned about these students and learning more about them.

Fire Technology

Utilizing Starfish for early alerts, support different learning styles by designing individualized student success plans based on their neurodiversity. In addition, refer students to various areas of support such as DSP&S, JFK, therapeutic support services, Financial Aid, Scholarship opportunities and EOP&S. Develop a mentor program that would acquire and utilize mentors of color

History

I would like to know if offering the African-American history courses has had any impact on the success rate of our African-American students. If so, I think it would be beneficial to create more classes that reflect the diverse identities of our students.

Also, participating in the open educational resource initiative could help all these targeted groups. I have agreed to convert one section of a history class to OER in the upcoming year. Depending on the outcome, I may encourage other history instructors to do the same.

Humanities

Within the department faculty and staff can explore or expand on these strategies:

- Competency Based Ed – Possible flex workshops or departmental discussions on CSLO mastery and not hours in class or lab as a method of measuring mastery.
- Building relationships – incorporate FAM (Faculty Advising and Mentoring program) techniques, allows the personal touch to each students' needs, degree planning and goal setting, seeing the student as a whole person beyond the classroom content and measurements, ability to work with at risk intervention points, physically hand off students to other college departments/resources.
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- STARFISH student alert system, efforts existing through supplemental programs such as learning communities, the Student Equity Plan and Student Success and Support Program. At the Spring 2018 department meeting, all faculty were encouraged to begin working with Starfish as an early alert tool along with personal communication to the student at risk.

Some outside of LMC resources are:

- SparkPoint and Opportunity Junction, Burton Book fund look into resources for the populations in need. (Foster Youth Low Income)

<u>Journalism</u>
Before I can identify strategies to help close success gaps, I first need to gather more information that points to why there is a gap in the first place. It would help a lot if the college collected data when students drop a class about why they are dropping it. We used to regularly collect this data on paper drop slips, but have not done so since we went to an electronic enrollment system. One of the best resources for all of us is for the college to reinstate such a process in an electronic format. In addition, I can start logging attendance more regularly and comparing it with course grades and then try to pair that data with demographic information. I can also survey students and document who has access to the course textbook and who doesn't. Once I have this additional information, I can identify possible successful strategies. Past pedagogical strategies have included adding mastery quizzes that all students can retake as needed to improve their performance, as well as guided note-taking. Although I added these approaches to my course to bolster the success rate of students at risk, I offer the opportunity to all students. I have not done a formal assessment of these strategies recently, but I have

noted anecdotally that they have done more to improve the grades of already successful students and that some at risk students do not take advantage of the opportunities.

Law Enforcement Academy
Early intervention (pathways) in middle and high school to ensure they meet the background requirements.

Licensed Vocational Nursing
Continue to support our students as mentioned above by referring them to DSPS and other financial, academic and social support services and to provide intensive tutoring by designated faculty.

Would need a stipend or some sort of funding to compensate faculty for tutoring time.

Math – Transfer
Pittsburg: We aim to use strategies cited in the CCCES report Aspirations to Achievement: Men of Color and Community Colleges:
- Creating classroom environments that foster a sense of belonging;
- Setting and maintaining high expectations through effective pedagogy;
- Engaging students in meaningful contextualized learning experiences;
- Communicating through interaction, class policies and materials that the instructor believes in each student's ability to succeed.

Additionally:
- We support the Umoja scholars program by providing the program with space and with designated Statistics sections
- Statistics faculty are working on identifying open source textbooks that align with our courses. Such texts provide students with a low cost option. One need is for funding to create online homework for My Open Math for Statistics. We need homework aligned with the COOR.
- To support students in Statistics we need designated support for math instructors who do not have a background in statistics or statistics pedagogy. A statistics teaching community, apart from the Math 28/34 group in the Developmental math program, is needed.
- Additional computer classrooms would further support statistics students in completing computer based work. With the increased capabilities of phones, more students are buying phones and not computers. We cannot assume that students have computers at home to complete online or software based assignments and projects.

Brentwood math would like to continue to move towards adopting open source texts for transfer level math courses. An open source text was already adopted for Math 40 in Fall 2016 and we would like to used funding from ZTC grant to work on finding more texts that align with the other transfer level courses. We are planning to convert Math 80 to an open text for Fall 2018.

Brentwood also looks forward to the completion of the new Brentwood Center in Spring/Summer of 2020. While there are currently many resources for students in Brentwood, the new center will give students better access to library resources, technology, and much more. Additionally, more science classes will be offered in Brentwood, reducing time students spend driving back and forth between the two campuses.

Math – Developmental

Brentwood math would like to move towards adopting open source texts for developmental math courses. We would like to use funding from the ZTC grant to work on finding texts that align with developmental math COORS. We would also like to improve professional development for new instructors teaching developmental math courses. Brentwood also looks forward to the completion of the new Brentwood Center in Spring/Summer of 2020. While there are currently many resources for students in Brentwood, the new center will give students better access to library resources, technology, and much more.

Success, Pittsburg:

Afr Am students **success**	Number	Percent		Low income students **success**	Number	Percent		All students **success**	Number	Percent
Fall 2014	237	51.4%		Fall 2014	595	57.2%		Fall 2014	792	56.1%
Spring 2015	175	43.2%		Spring 2015	482	51.7%		Spring 2015	626	52.9%
Fall 2015	165	45.6%		Fall 2015	492	50.4%		Fall 2015	687	51.8%
Spring 2016	127	46.5%		Spring 2016	419	54.4%		Spring 2016	562	55.1%
Fall 2016	113	42.5%		Fall 2016	400	54.2%		Fall 2016	605	57.2%
Spring 2017	113	50.7%		Spring 2017	349	60.6%		Spring 2017	497	60.0%

We aim to use strategies cited in the CCCES report Aspirations to Achievement: Men of Color and Community Colleges:
- Creating classroom environments that foster a sense of belonging;
- Setting and maintaining high expectations through effective pedagogy;
- Engaging students in meaningful contextualized learning experiences;
- Communicating through interaction, class policies and materials that the instructor believes in each student's ability to succeed.

Useful resources would be the continuation of teaching community money, the modernization of the furniture and computer equipment in MA-202, the expansion of tutor training funds to help our tutors help others students with the technology and activity packets that, and the continued updating of activity packets, instructor teaching resources, and solution manuals.

Management & Supervision

We will explore opportunities to increase one on one student contact, personal counseling, financial counseling, academic counseling, and faculty training covering implicit bias to better serve the populations

Music

Low income students did better than the average student in the music program and thus do not warrant any special resource based on this study. We have no data on foster youth to determine a comparison. African American are also generally in line with the average student in the music program, however, their success rate can be better when compared with the average student. Thus, perhaps promoting

African American students to participate in performing ensembles (for example, Gospel choir, Jazz ensemble, Band etc.) and giving them the encouragement and support needed to succeed in these courses, the numbers will improve and these improvement may serve as a catalyst for their success in other more general courses.

Physical Education/Kinesiology

The biggest resource we have in our department is our Faculty. No matter what resource is available to students, when they do not "feel connected" they do not perform as well. We have personal connection in our classes with students. We move, and participate with our students. We engage and encourage out students to set personal goals and accept self responsibility for meeting those goals (health and fitness) outside of class. We feel that if students start to practice commitment to self…through choosing healthy lifestyles and benefitting from the results that self esteem is elevated. When people have esteem, they are able to better "try" activities that are uncomfortable for them…Reading, Writing, Math, etc. Practicing self responsibility for mental and physical health creates this avenue for development as a "student". Why we would like to see all students at LMC involved in regular exercise on campus.

Philosophy

Considering that the overall success is low, we could do more to discuss the measure of success that we, as philosophy faculty, set for our students overall. Focusing on low income students (which will intersect with African-American and foster youth students), offering affordable textbook options will help students past the financial barriers. For this reason, the Philosophy department is participating in the Zero Textbook Cost Degree grant. The department could use an increased department budget so that the department can print copies of Open textbooks from outside publishers.

For students who are African-American, it would be useful to work more black or African philosophies into our courses as well as issues/discussions around race. This dovetails nicely with the textbook issue, because if the textbook offered more philosophy from outside the traditional canon discussing more current issues students might engage with the material more. However, acquiring that material will take time and copyrights, which will cost the department money. An equity mini-grant might be a great solution.

Physics

We so not claim to be experts in solving these problems. We would like to see more FLEX workshops with experts who understand the perspective of African-Americans and foster youth. Low-income by itself does not appear to be as large of an issue in the Physics program. That may well be because of the excellent results brought about by the MESA program and the STEM Scholars initiative. MESA will undoubtedly also be a part of the solutions to the problems identified above.

Political Science

- Lecturing and presenting content that is relevant to your targeted populations.
- Building relationships with learning communities or other student services that target these populations(e.g. Puente and Umoja)

- Make sure that student services for these populations are included in the syllabus
- Encourage adjunct faculty to take advantage of the equity hour initiative(FAIM)
- Establishing educational enrichment project, programs, and/or materials that supplement the classroom learning experience for full-time as well as adjunct faculty.

Psychology

In order to attend to students' needs and for them to become successful in their learning experiences and the completion of their academic goal, three components are necessary; plan for success, initiate success, and sustain success at the college. The segments of these components are in place; assessment and placement, orientation educational plans student success courses, career development courses, fast-track developmental education, learning communities, early alert and intervention, and tutoring. In addition, the following is only a small list of the college's support services: Care/CalWORKs, Center for Academic Support, Child Care Services, DSP&S, Employment Center, LGBT Resources Center Q*Spot, Financial Aid, Career Services, Assessment Center, Student Retention and Support Services, Transfer and Sup[port Serviced. There are many support practices/strategies within these services that Los Medanos College has in place to help students successfully complete their courses. The 3SP plan (BSI/SEP/SSP) is integrated planning. It includes a collective vision; planning, resources, and reporting. With research and data collection we will be able to determine the success of students. Self-efficacy, the importance that a student believes they have the ability to be successful, is important as well. Students however, need to know how to navigate the complex organization of student services.

Strategy: An effective and cohesive plan will be developed and implemented to disseminate student support service information to assist students in meeting their academic goal.

Process Technology

Reduce the maximum size of introductory classes from 40 to 30 students. Smaller classes encourage students to ask questions, participate, and to form networking relationships. Fund our supervised tutorial, this is where students get hands-on instruction in small groups (3 to 5). These small groups bond and help each other succeed.

Recording Arts

Establishing a reading aptitude requirement for entry into the RA program

Registered Nursing

Utilizing Starfish for early alerts, support different learning styles by designing individualized student success plans based on their neurodiversity. In addition, refer students to various areas of support such as DSP&S, JFK, therapeutic support services, Financial Aid, Scholarship opportunities and EOP&S. Through grant funding we have been able to offer opportunities for students to apply for gas cards and uniform vouchers to help offset their clinical expenses. We have also utilized emergency funding through the Foundation to help students needing immediate financial assistance. We have also worked towards starting a summer 2017 course titled Spanish for Healthcare Professionals.

Sociology

I think that the greatest resource would be college resources. African-American, foster youth, and low income students would profit from student services such as: Financial Aid and Scholarships, EOPS, Counseling Services, CalWORKs, Career Services, Center for Academic Support, Tutoring Services, Transfer Center, etc.
Strategies: An effective and cohesive plan will be developed and implemented to provide information about student support services. These student support resources can assist students in meeting their academic goals.

Speech/Communications

Since the African American and Foster Youth completion/success gaps are non-existent in this data, the response here will focus on low income students.

Strategy One – Reduce the costs of textbook. Department-wide adoptions of low cost texts have brought the median cost of textbooks in the department to $80 dollars per class. We could lower the costs more by working with the college's new open educational resources (ZTD) grant.

Strategy Two – Increasing funding for the library to put a copy of all books used by the department on reserve. They do an incredible job now with the resources they have.

Strategy Three – Continue to grow the number of sections of the critical SPCH 110 course so that low income students have to choose less often between enrolling in a critical section and working necessary hours or childcare.

Travel Marketing

Typically, the success rates for online courses are not as high as for face-to-face courses, however there has been improvement. There may be several reasons for a lower success rate for online students: some students take online courses thinking they are easier, students do not have the skills required to be successful online (organizational skills, self-discipline, attention to detail), or they have other responsibilities and priorities that take time away from their classes.

We have tried various approaches to increase success: providing online orientation information about readiness for online classes, contacting students that are missing assignments or falling behind, encouraging attendance at online office hours, providing examples of successful assignments, etc. Students that attend online office hours are usually successful, but getting students to attend this extra hour is a challenge.

The district DE Committee is looking at providing a readiness tool for online students. It is called Quest for Success. It is designed to help students self-assess whether they are ready to take online classes. Often skills that are required for online success, such as self-discipline, organization, etc., are weak in students that are less successful. Hopefully, setting expectations and assessing readiness will pinpoint specific needs and help students be more successful.

Welding Technology

Creating a guided-pathway for them. Having them take the Advisory courses prior to the desired course to better prepare them for success.   Meeting with a Counselor or faculty to develop a course pathway/map for going thru a program. Assess students prior to enrollment and those that score below proficiency should be encouraged to enroll in Counseling courses such as COUNS-34 College Success where they can learn about note taking, study skills and test anxiety.

World Languages

Tutoring, Online Coaching, Field Trips, Curricular infusion such as African Caribbean studies, mentoring, Community Service Opportunities would help our at-risk students within the department.

Free Textbooks and Online Homework Websites would be extremely helpful!!
Many of these services are available except for free textbooks and online homework codes.