



2014 STUDENT EQUITY DATA

Crafton Hills College

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Introduction

The purpose of this report is to provide Crafton Hills College with the data needed to inform the development of the Student Equity Plan supports the success of all Crafton students. The report is designed to fit with the [template](#) provided by the California Community College Chancellor's Office (CCCCO). Accordingly, each data section provided here can be copied and pasted into the CCCCCO Student Equity Plan Template.

The student equity data is based on the quantitative effectiveness indicators (QEI) found in the college's Educational master Plan and also meets the requirements specified by Title 5 Education Code [§ 55512(a)]: access, course success, basic skills completion, degree and certificate completion, and transfer. Each outcome area will be examined for disproportionate impact and a plan for correcting disproportionate impact will be developed in the Study Equity Plan, if applicable. According to Title 5 Education Code [§ 55502(a)], disproportionate impact occurs when

...the percentage of persons from a particular racial, ethnic, gender, age or disability group who are directed to a particular service or placement based on an assessment instrument, method, or procedure is significantly different from the representation of that group in the population of persons being assessed, and that discrepancy is not justified by empirical evidence demonstrating that the assessment instrument, method or procedure is a valid and reliable predictor of performance in the relevant educational setting.

Therefore, the following report examines access, course success, basic skills completion, degree and certificate completion, and transfer rate to determine if Crafton students were disproportionately impacted when analyzed by gender, ethnicity, age, disability status, economically disadvantaged status, foster youth status, or veteran status.

Executive Summary

Table 1 summarizes the results from the disproportionate impact study by protected status and outcome. The results indicated that African American, Hispanic, Native American, and students 20 years old or older are the groups most likely to be disproportionately impacted. African American and Hispanic students were more likely to have substantially lower math and English throughput rates and lower degree/certificate and transfer rates. In addition, Native American students were less likely to attend Crafton and more likely to have substantially lower degree/certificate completion rates. In general, students who were 20 years old or older were also less likely to earn a degree/certificate or transfer. Moreover, students 30 years old or older were also less likely to attend Crafton when compared to Crafton's primary service area population.

Table 1: Summary of Disproportionate Impact by Protected Status and Outcome.

	Access	Course Success	Throughput Rate		Deg/Cert Completion Rate	Transfer Rate	# DP	# RG
			Math	English				
Gender								
Female	No	RG	RG	RG	RG	RG	0	5
Male	No	No	No	No	Yes	No	1	0
Ethnicity								
Asian	No	No	RG	RG	RG	RG	0	4
African American	No	No	Yes	Yes	Yes	Yes	4	0
Hispanic	No	No	No	Yes	Yes	Yes	3	0
Native American	Yes	No	NA	NA	Yes	No	2	0
Caucasian	Yes	RG	No	No	No	No	1	1
Two or More Races	No	No	No	No			0	0
Missing	No	No	No	NA	No	No	0	0
Age								
19 or younger	No	No	No	RG	No	RG	0	2
20-24	No	No	RG	No	Yes	Yes	2	1
25-29	No	No	No	No	Yes	Yes	2	0
30-34	Yes	No	Yes	NA	Yes	Yes	4	0
35-39	Yes	No	NA	NA	RG	Yes	2	1
40-49	Yes	No	NA	NA	No	Yes	2	0
50 or older	Yes	No	NA	NA	Yes	Yes	3	0
Disability	Yes	RG	RG	No	No	Yes	2	2
Economically Disadvantaged	No	No	Yes	No	RG	No	1	1
Foster Youth	No	Yes	NA	NA	NA	NA	1	0
Veteran	Yes	RG	No	NA	NA	NA	1	1
Total DP	9	1	3	2	8	9		

Note: "DP" refers to Disproportionate Impact. "Yes" means that DP was present and "No" means that it was not present. "NA" refers to Not Applicable and refers to subgroups with the number of records below 30. The sub-group was not large enough for a methodological sound comparison. "RG" refers to the Reference Group, is the sub-group with the highest outcome rate, and the sub-group that all other sub-groups were compared to.

Possible Implications

Access, the transfer rate, the degree and certificate completion rate, and the math throughput rate were the four areas where disproportionate impact was most likely to occur. First, in order to increase the access of students who are 30 years old or older Crafton could offer sections and programs at non-traditional times: night, Friday, weekend, and online section offerings. In addition, Crafton can also use the information from the 2013 environmental scan to market to Espaniola and Urban Cliff-Climbers. Both psychographic groups contain people who are 30 years old or older. Another strategy would be for the Office of Institutional Effectiveness, Research, and Planning (OIERP) to complete a target marketing study and identify courses and programs that students 30 years old or older are most interested in and use the results from the study to direct a marketing message to these prospective students. To increase the number of Native American students attending Crafton, Crafton could work with local Nations and its grant partners to develop strategies to increase the number of Native American students attending Crafton.

The other outcome areas most likely to result in disproportionate impact were the degree/certificate and transfer rates. In addition, on a smaller scale, the math throughput rate was also an outcome where disproportionate impact occurred. Past [research](#) at Crafton, has strongly indicated that the degree/certificate and transfer rates are impacted the most by completing transfer level math, or the math throughput rate. Accordingly, Crafton needs to explore strategies for encouraging and/or requiring students to complete math and English first. For example, the Crafton Leading from the Middle group has developed possible strategies for increasing the number of students who complete math and English first. In addition, the SSEEM Committee has explored using priority registration as a strategy to encourage students to complete math and English first. The research conducted at Crafton has shown that completing transfer level math and transfer level English are the best predictors of transferring and earning a degree. Crafton needs to continue to explore and implement strategies that require students to complete transfer level English and math.

Methodology

Rather than using only one indicator to identify disproportionate impact, the OIERP used three indicators. In order to determine if disproportionate impact was present, two of the three measures had to substantially indicate that disproportionate impact occurred. The 80% Rule, proportionality index, and Cohen's d effect size were the three indices used to identify disproportionate impact. More than one measure was used to identify disproportionate impact because each measure has different strengths and weaknesses. For example, when a subgroup is compared to the reference group the subgroup may exceed the 80% threshold, but have a substantially large effect size and low proportionality index.

80% Rule

The 80% rule was used to identify disproportionate impact. The methodology is based on the Equal Employment Opportunity Commission (EEOC) 80% Rule and was used in Title VII enforcement by the US Equal Opportunity Commission, Department of Labor, and the Department of Justice (Michalowski, 2014). The 80% Rule states that:

A selection rate for any race, sex, or ethnic group which is less than four-fifths ($4/5$) (or eighty percent) of the rate for the group with the highest rate will generally be regarded by the Federal enforcement agencies as evidence of adverse impact, while a greater than four-fifths rate will generally not be regarded by Federal enforcement agencies as evidence of adverse impact. [Section 60-3, Uniform Guidelines on Employee Selection Procedure (1978); 43 FR 38295 (August 25, 1978)]

The 80% index is calculated by dividing the outcome rate (e.g.: success rate) of a non-reference subgroup into the outcome rate of the reference subgroup (Michalowski, 2014). A result of less than 80% is considered evidence of disproportionate impact. The subgroup with the highest outcome rate was chosen as the reference group. However, if the subgroup did not have the amount of cases needed for a statistically significant finding ($N = 30$), then the highest outcome rate with the amount of cases needed for a significant finding was selected as the reference group.

Proportionality Index

The proportionality index "...compares the percentage of a disaggregated subgroup in an initial cohort to its own percentage in the resultant outcome group" (Michalowski, 2014). The proportionality index is calculated by dividing the column percentage in the outcome group by the column percentage in the original cohort. A ratio of 1.0 indicates that the subgroup is present in the original cohort and in the outcome group at the same rate. A ratio less than 1.0 indicates that the subgroup is less prevalent in the outcome group, and a ratio greater than 1.0 indicates that the subgroup is more prevalent in the outcome group. Disproportionate impact may be present if the ratio is less than 1.0. Disproportionate impact was considered to be present if the ratio was less than .90.

Effect Size

The Cohen's d effect size statistic was used to indicate whether there was a substantial difference between the reference group and the subgroup being examined. The effect size is calculated by taking the difference in the rates divided by the pooled standard deviation. One method of interpreting effect size was developed by Jacob Cohen. Jacob Cohen defined "small," "medium," and "large" effect sizes. He explained that an effect size of .20 can be considered small, an effect size of .50 can be considered medium, and an effect size of .80 can be considered large. An effect size is considered to be meaningful if it is .20 or higher, which usually indicates that the difference in the outcome rate is 10% or greater.

Definitions

Economically Disadvantaged Status. The Student Scorecard methodology was used to identify students who were economically disadvantaged for the basic skills, degree and certificate completion, and transfer outcomes. Students who met any of the following criteria were identified as economically disadvantaged:

- Student is a participant in the Workforce Investment Act (WIA) – SB26 in the Student Basic (SB) Data Record is equal to "J" and is located in the ST referential file.
- The student is an eligible participant in CalWORKs which is determined by having their eligibility status verified by the local County Welfare Department – SC01 in the Student CalWORKs (CW) Data Record is equal to 1, 2, 3, 4, or 6 and is located in the CWA referential file.
- The student received financial aid – SF21 in the Student Financial (SF) Aid Data Record is equal to BA, B1, B2, B3, BB, BC, F1, F2, F3, F4, F5, WC, WE, WF, or WU and is located in the FA annual referential file.
- A vocational student was identified as being economically disadvantaged – SV03 in the Student VTEA Data Record is equal to 1, 2, 3, or 4 and is located in the SV referential file.

When examining course success, students were identified as economically disadvantaged if they received any form of financial aid at Crafton Hills College in Summer 2013, Fall 2013, or Spring 2014. The MIS referential files were not used for course success because the FA annual referential file was not available for the 2013-2014 academic year.

Foster Youth Status. Students identified as foster youth have, at one time, been in a court-ordered out-of-home placement. Crafton started tracking whether or not students were foster youth in 2012 and began reporting foster youth status to the CCCCCO in the Special Population (SG) Data Record MIS Referential file in the 2013-2014 academic year. Accordingly, the SG MIS Data Record was used to identify foster youth students for the access and course completion outcome measures. However, this was not possible for the basic skills throughput, degree and certificate completion, and transfer rate measures.

The following fields in Ellucian were used to identify foster youth status: S02.SSTU.FY.IND, S02.STU.FYC.IND, and S02.SSTU.FYM.IND. First, the field S02.SSTU.FY.IND indicates that the student is a documented foster youth student. Second, the S02.STU.FYC.IND field indicates that Crafton has identified the student as a foster youth student, but the student is not considered an official foster youth student. Finally, the S02.SSTU.FYM.IND field indicates that the State would consider the student a foster youth student, is based on the student application, but the student is also not considered an official foster youth student.

Access Methodology

For primary service area census data, 5-year 2012 American Community Survey (ACS) estimates were used. Primary service area cities were selected if a majority of community college students within a city enrolled at Crafton Hills College; the primary service area cities were determined to be Redlands, Yucaipa, Mentone, Calimesa, and Beaumont. For Crafton student population, an unduplicated headcount of students earning a grade on record in academic year 2013-2014 (Summer 2013, Fall 2013, and Spring 2014) was merged with CCCCCO MIS data.

Gender. Using ACS Table B01001, the primary service area adult population by gender was calculated for persons who are 18 years old or older.

Age. Using ACS Table B01001, the primary service area adult population by age was calculated for persons who are 18 years old or older. Age of Crafton students was calculated as of the beginning of academic year 2013-2014, which was 5/28/2013.

Ethnicity. Using ACS Table B03002, the primary service area population by ethnicity was calculated. Persons identifying with a Hispanic ethnicity, except those selecting two or more races, were combined into the Hispanic category. Asian, Native Hawaiian, and Pacific Islander races were combined in the Asian category. Two or more races from Hispanic and Not Hispanic categories were combined together.

Disability. Using ACS Table S1810, the primary service area adult population by ethnicity was calculated for persons who are 18 to 64 years old only.

Economically Disadvantaged. Using ACS Table B17024, the primary service area adult population was calculated for persons who are 18 years old or older and living at less than two (2) times the federal poverty level. Crafton students' economic status was calculated by determining whether a student received financial aid during academic year 2013-2014.

Foster Youth. Using ACS Table B09019, the primary service area foster youth population was calculated.

Veterans. Using ACS Table S2101, the primary service area adult population was calculated by military veteran status.

Campus-Based Research

A. ACCESS.

Compare the percentage of each population group that is enrolled to the percentage of each group in the adult population within the community served.

Table A1: 2013 – 2014 Course Enrollment and Primary Service Area Population by Gender.

Gender	CHC Student Population		Primary Service Area Adult Population (18+)		Proportionality Index
	#	%	#	%	
Female	3,919	52.1%	66,818	51.9%	1.004
Male	3,590	47.7%	61,862	48.1%	0.992
Unknown	12	0.2%	0	0.0%	
Total	7,521	100.0%	128,680	100.0%	

Table A2: 2013 – 2014 Course Enrollment and Primary Service Area Population by Ethnicity.

Ethnicity	CHC Student Population		Primary Service Area Adult Population		Proportionality Index
	#	%	#	%	
Asian	417	5.6%	10,755	6.2%	0.903
African American	343	4.6%	6,437	3.7%	1.243
Hispanic	3,209	42.7%	49,705	28.6%	1.493
Native American	18	0.2%	718	0.4%	0.500
Caucasian	3,140	41.7%	98,565	56.8%	0.734
Two or More Races	368	4.9%	6,961	4.0%	1.225
Missing/Other	26	0.3%	370	0.2%	1.500
Total	7,521	100.0%	173,511	100.0%	

Table A3: 2013 – 2014 Course Enrollment and Primary Service Area Population by Age.

Age	CHC Student Population		Primary Service Area Adult Population (18+)		Proportionality Index
	#	%	#	%	
18 – 19	2,653	35.3%	5,887	4.6%	7.674
20 – 24	2,727	36.3%	10,987	8.5%	4.271
25 – 29	949	12.6%	11,598	9.0%	1.400
30 – 34	458	6.1%	10,868	8.4%	0.726
35 – 39	245	3.3%	11,355	8.8%	0.375
40 – 49	310	4.1%	22,953	17.8%	0.230
50 or older	179	2.4%	55,032	42.8%	0.056
Total	7,521	100.0%	128,680	100.0%	

Table A4: 2013 – 2014 Course Enrollment and Primary Service Area Population by Disability.

Disability	CHC Student Population		Primary Service Area Adult Population (18-64)		Proportionality Index
	#	%	#	%	
No	7,186	95.5%	96,334	91.3%	1.046
Yes	335	4.5%	9,157	8.7%	0.517
Total	7,521	100.0%	128,680	100.0%	

Table A5: 2013 – 2014 Course Enrollment and Primary Service Area Population by Economic Status.

Economically Disadvantaged	CHC Student Population		Primary Service Area Adult Population (18+)		Proportionality Index
	#	%	#	%	
No	3,400	45.2%	99,673	79.1%	0.571
Yes	4,121	54.8%	26,286	20.9%	2.622
Total	7,521	100.0%	125,959	100.0%	

Table A6: 2013 – 2014 Course Enrollment and Primary Service Area Population by Foster Status.

Foster Youth	CHC Student Population		Primary Service Area Population		Proportionality Index
	#	%	#	%	
No	7,467	99.3%	173,388	99.9%	0.994
Yes	54	0.7%	123	0.01%	70.00
Total	7,521	100.0%	173,511	100.0%	

Table A7: 2013 – 2014 Course Enrollment and Primary Service Area Population by Veteran Status.

Veteran	CHC Student Population		Primary Service Area Adult Population (18+)		Proportionality Index
	#	%	#	%	
No	7,271	96.7%	118,191	91.9%	1.052
Yes	250	3.3%	10,348	8.1%	0.407
Total	7,521	100.0%	128,539	100.0%	

Analysis

Gender: Crafton Hills College (CHC) serves approximately the same proportion of females and males in comparison to the representation in the primary service area adult population.

Ethnicity: Crafton serves a higher proportion of Hispanic, African-American, and two or more race students in comparison to the representation in the primary service area population. Conversely, Crafton serves a lower proportion of Caucasian students in comparison to the representation in the primary service area population. In addition, CHC also serves a nominally lower percentage of Native American students in comparison to the representation in the primary service area population.

Age: Crafton Hills College serves a higher proportion of students who are 18-29 and a lower proportion of students who are 30 years old or older, which is expected in a college environment.

Disability: Crafton Hills College serves a lower proportion of students with disabilities in comparison to the representation in the primary service area population.

Economically Disadvantaged: Crafton Hills College serves a much higher proportion of students who are economically disadvantaged in comparison to the representation in the primary service area population.

Foster Youth: Crafton Hills College serves a nominally higher proportion of students who are foster youth in comparison to the representation in the primary service area population.

Veterans: Crafton Hills College serves a lower proportion of students who are military veterans in comparison to the representation in the primary service area population. Further analysis reveals that 77.7% of military veterans in the primary service area population are veterans of the Vietnam era, Korean War, and World War II, which is related to the proportional age differences analyzed above.

B. COURSE COMPLETION (SUCCESS).

Ratio of the number of credit courses that students by population group actually complete with an A, B, C, or P by the end of the term compared to the number of courses in which students in that group are enrolled (i.e. A, B, C, D, F, I, P, NP, or W) on the census day of the term.

Table B1: 2013 – 2014 Course Success by Gender, 80% Rule Ratio, and Effect Size.

Gender	# Successful	# GOR	Success Rate	80% Rule Ratio	Effect Size
Female	13,103	17,636	74.3%	Reference Group	
Male	11,468	15,923	72.0%	96.9	-.05
Unknown	39	49	79.6%		
Total	24,610	33,608	73.2%		

Table B1.A: 2013 – 2014 Proportion of Grades on Record and Successful Course Completions by Gender and Proportionality Index.

Gender	Grades on Record		Successful Course Completions		Proportionality Index
	#	Column %	#	Column %	
Female	17,636	52.5	13,103	53.2	1.013
Male	15,923	47.4	11,468	46.6	0.983
Unknown	49	0.1	39	0.2	
Total	33,608	100.0	24,610	100.0	

Table B2: 2013 – 2014 Course Success by Ethnicity, 80% Rule Ratio, and Effect Size.

Ethnicity	# Successful	# GOR	Success Rate	80% Rule Ratio	Effect Size
Asian	1,418	1,863	76.1%	99.0	-.02
African American	1,847	2,663	69.4%	90.2	-.18
Hispanic	10,096	14,436	69.9%	90.9	-.16
Native American	500	668	74.9%	97.4	-.05
Caucasian	10,677	13,879	76.9%	Reference Group	
Missing	72	99	72.7%	94.5	-.10
Total	24,610	33,608	73.2%		

Table B2.A: 2013 – 2014 Proportion of Grades on Record and Successful Course Completions by Ethnicity and Proportionality Index.

Ethnicity	Grades on Record		Successful Course Completions		Proportionality Index
	#	Column %	#	Column %	
Asian	1,863	5.5	1,418	5.8	1.055
African American	2,663	7.9	1,847	7.5	.949
Hispanic	14,436	43.0	10,096	41.0	.953
Native American	668	2.0	500	2.0	1.000
Caucasian	13,879	41.3	10,677	43.4	1.051
Missing	99	0.3	72	0.3	1.000
Total	33,608	100.0	24,610	100.0	

Table B3: 2013 – 2014 Course Success by Age, 80% Rule Ratio, and Effect Size.

Age	# Successful	# GOR	Success Rate	80% Rule Ratio	Effect Size
19 or younger	8,652	12,197	70.9%	83.8	-.30
20-24	9,936	13,667	72.7%	85.9	-.27
25-29	2,906	3,776	77.0%	91.0	-.18
30-34	1,243	1,635	76.0%	89.8	-.21
35-39	655	840	78.0%	92.2	-.17
40-49	762	954	79.9%	94.4	-.12
50 and above	456	539	84.6%	Reference Group	
Total	24,610	33,608	73.2%		

Table B3.A: 2013 – 2014 Proportion of Grades on Record and Successful Course Completions by Age and Proportionality Index.

Age	Grades on Record		Successful Course Completions		Proportionality Index
	#	Column %	#	Column %	
19 or younger	12,197	36.3	8,652	35.2	.970
20-24	13,667	40.7	9,936	40.4	.992
25-29	3,776	11.2	2,906	11.8	1.054
30-34	1,635	4.9	1,243	5.1	1.041
35-39	840	2.5	655	2.7	1.080
40-49	954	2.8	762	3.1	1.107
50 and above	539	1.6	456	1.9	1.188
Total	33,608	100.0	24,610	100.0	

Table B4: 2013 – 2014 Course Success by Disability Status, 80% Rule Ratio, and Effect Size.

Disability Status	# Successful	# GOR	Success Rate	80% Rule Ratio	Effect Size
No	23,558	32,195	73.2%	98.3	-.03
Yes	1,052	1,413	74.5%	Reference Group	
Total	24,610	33,608	73.2%		

Table B4.A: 2013 – 2014 Proportion of Grades on Record and Successful Course Completions by Disability Status and Proportionality Index.

Disability Status	Grades on Record		Successful Course Completions		Proportionality Index
	#	Column %	#	Column %	
No	32,195	95.8	23,558	95.7	1.0
Yes	1,413	4.2	1,052	4.3	1.0
Total	33,608	100.0	24,610	100.0	

Table B5: 2013 – 2014 Course Success by Economic Status, 80% Rule Ratio, and Effect Size.

Economically Disadvantaged	# Successful	# GOR	Success Rate	80% Rule Ratio	Effect Size
No	9,436	12,550	75.2	Reference Group	
Yes	15,174	21,058	72.1	95.9	-.07
Total	24,610	33,608	73.2		

Table B5.A: 2013 – 2014 Proportion of Grades on Record and Successful Course Completions by Economic Status and Proportionality Index.

Economically Disadvantaged	Grades on Record		Successful Course Completions		Proportionality Index
	#	Column %	#	Column %	
No	12,550	37.3	9,436	38.3	1.03
Yes	21,058	62.7	15,174	61.7	.98
Total	33,608	100.0	24,610	100.0	

Table B6: 2013 – 2014 Course Success by Foster Youth Status, 80% Rule Ratio, and Effect Size.

Foster Youth	# Successful	# GOR	Success Rate	80% Rule Ratio	Effect Size
No	24,490	33,363	73.4%	Reference Group	
Yes	120	245	49.0%	66.8	-.55
Total	24,610	33,608	73.2%		

Table B6.A: 2013 – 2014 Proportion of Grades on Record and Successful Course Completions by Foster Youth Status and Proportionality Index.

Foster Youth	Grades on Record		Successful Course Completions		Proportionality Index
	#	Column %	#	Column %	
No	33,363	99.3	24,490	99.5	1.00
Yes	245	0.7	120	0.5	.71
Total	33,608	100.0	24,610	100.0	

Table B7: 2013 – 2014 Course Success by Veteran Status, 80% Rule Ratio, and Effect Size.

Veteran	# Successful	# GOR	Success Rate	80% Rule Ratio	Effect Size
No	23,676	32,408	73.1	94.0	.11
Yes	934	1,200	77.8	Reference Group	
Total	24,610	33,608	73.2%		

Table B7.A: 2013 – 2014 Proportion of Grades on Record and Successful Course Completions by Veteran Status and Proportionality Index.

Veteran	Grades on Record		Successful Course Completions		Proportionality Index
	#	Column %	#	Column %	
No	32,408	96.4	23,676	96.2	1.0
Yes	1,200	3.6	934	3.8	1.1
Total	33,608	100.0	24,610	100.0	

Analysis

Gender: The course success rate was slightly higher for females (74%) than males (72%). However, the difference was not substantial as indicated by the 80% rule, effect size, and proportionality index.

Ethnicity: Caucasian students had the highest success rate (77%) and were the reference group. When comparing all of the other ethnic groups to Caucasians, none of the ethnic groups had a substantially lower success rate according to all three indices. Students are not disproportionately impacted on course success by ethnicity. At the same time, African American students almost had a substantially (Cohen's $d = -.18$) lower success rate (69%) than Caucasian (77%) students; however, both the 80% rule ratio and the proportionality index were above 90.

Age: Students 50 years old or older had the highest success rate (80%) and were the reference group. When comparing the age groups to students 50 years old or older, none of the age groups had a substantially lower success rate in two or more of the indices. Students are not disproportionately impacted on course success by age. At the same time, students 19 years old or younger (71%), 20 – 24 years old (73%), and 30 – 34 years old (76%) all had a substantially (Cohen's $d > -.20$) lower success rate than students 50 years old or older; however, none of the 80% rule ratios were below 80 and all of the proportionality indices were above 90.

Disability: The course success rate was slightly higher for students with a disability (75%) than for students not identified as having a disability (73%). However, the difference was not substantial as indicated by the 80% rule, effect size, and proportionality index.

Economically Disadvantaged: The course success rate was slightly higher for students who were not identified as being economically disadvantaged (75%) than for students who were economically disadvantaged (72%). However, the difference was not substantial as indicated by the 80% rule, effect size, and proportionality index.

Foster Youth: Foster youth students appear to be disproportionately impacted on course success. All three indices indicated that foster youth students are substantially less likely to complete their courses (49%) than students not identified as foster youth students (73%).

Veterans: The course success rate was higher for student veterans (78%) than for students who were not veterans (73%). However, the difference was not substantial as indicated by the 80% rule, effect size, and proportionality index.

C. BASIC SKILLS and DEVELOPMENTAL COMPLETION (THROUGHPUT RATE).

CCCCO Basic Skills Throughput Rate: Ratio of the number of students by population group who complete a transfer level course within three years after having completed their first developmental math or English course at Crafton compared to the number of those students who complete such a final course.

Math Basic Skills Throughput Rate

Table C1: 2011 – 2012 to 2013 – 2014 Basic Skills Three-Year Math Throughput Rate by Gender, 80% Rule Ratio, and Effect Size.

Gender	# Successful	Cohort #	Throughput Rate	80% Rule Ratio	Effect Size
Female	191	616	31.0	Reference Group	
Male	159	570	27.9	90.0	-.07
Total	350	1,186	29.5		

Table C1.A: 2011 – 2012 to 2013 – 2014 Proportion of the Number in the Math Cohort and Throughput Number by Gender and Proportionality Index.

Gender	Cohort		Throughput		Proportionality Index
	#	Column %	#	Column %	
Female	616	51.9	191	54.6	1.1
Male	570	48.1	159	45.4	.94
Total	1,186	100.0	350	100.0	

Table C2: 2011 – 2012 to 2013 – 2014 Basic Skills Three-Year Math Throughput Rate by Ethnicity, 80% Rule Ratio, and Effect Size.

Ethnicity	# Successful	Cohort #	Throughput Rate	80% Rule Ratio	Effect Size
Asian	19	54	35.2	Reference Group	
African American	6	43	14.0	39.8	-.48
Hispanic	144	533	27.0	76.7	-.18
Native American	2	9	22.2	63.1	-.27
Caucasian	154	488	31.6	89.8	-.08
Multi-Ethnicity	23	60	38.3		
Total	348	1,187	29.3		

Table C2.A: 2011 – 2012 to 2013 – 2014 Proportion of the Number in the Math Cohort and Throughput Number by Ethnicity and Proportionality Index.

Ethnicity	Cohort		Throughput		Proportionality Index
	#	Column %	#	Column %	
Asian	54	4.5	19	5.5	1.2
African American	43	3.6	6	1.7	.47
Hispanic	533	44.9	144	41.4	.92
Native American	9	0.8	2	0.6	.75
Caucasian	488	41.1	154	44.3	1.1
Multi-Ethnicity	60	5.1	23	6.6	1.3
Total	1,187	100.0	348	100.0	

Table C3: 2011 – 2012 to 2013 – 2014 Basic Skills Three-Year Math Throughput Rate by Age, 80% Rule Ratio, and Effect Size.

Age	# Successful	Cohort #	Throughput Rate	80% Rule Ratio	Effect Size
19 or younger	246	731	33.7	86.1	-.11
20-24	93	238	39.1	Reference Group	
25-29	32	88	36.4	93.1	-.06
30-34	5	39	12.8	32.7	-.55
35-39	3	18	16.7	42.7	-.46
40-49	8	29	27.6	70.6	-.24
50 and above	2	13	15.4	39.4	-.49
Total	389	1,156	33.7		

Table C3.A: 2011 – 2012 to 2013 – 2014 Proportion of the Number in the Math Cohort and Throughput Number by Age and Proportionality Index.

Age	Cohort		Throughput		Proportionality Index
	#	Column %	#	Column %	
19 or younger	731	63.2	246	63.2	1.0
20-24	238	20.6	93	23.9	1.2
25-29	88	7.6	32	8.2	1.1
30-34	39	3.4	5	1.3	.38
35-39	18	1.6	3	0.8	.50
40-49	29	2.5	8	2.1	.82
50 and above	13	1.1	2	0.5	.46
Total	1,156	100.0	389	100.0	

Table C4: 2011 – 2012 to 2013 – 2014 Basic Skills Three-Year Math Throughput Rate by Disability Status, 80% Rule Ratio, and Effect Size.

Disability Status	# Successful	Cohort #	Throughput Rate	80% Rule Ratio	Effect Size
No	332	1,097	30.3	72.3	-.25
Yes	39	93	41.9	Reference Group	
Total	371	1,190	31.2		

Table C4.A: 2011 – 2012 to 2013 – 2014 Proportion of the Number in the Math Cohort and Throughput Number by Disability Status and Proportionality Index.

Disability Status	Cohort		Throughput		Proportionality Index
	#	Column %	#	Column %	
No	1,097	92.2	332	89.5	.97
Yes	93	7.8	39	10.5	1.3
Total	1,190	100.0	371	100.0	

Table C5: 2011 – 2012 to 2013 – 2014 Basic Skills Three-Year Math Throughput Rate by Economically Disadvantaged Status (BOG Fee Waiver), 80% Rule Ratio, and Effect Size.

Economically Disadvantaged	# Successful	Cohort #	Throughput Rate	80% Rule Ratio	Effect Size
No	238	500	47.6	Reference Group	
Yes	177	510	34.7	72.9	-.26
Total	415	1,010	41.1		

Table C5.A: 2011 – 2012 to 2013 – 2014 Proportion of the Number in the Math Cohort and Throughput Number by Economically Disadvantaged Status (BOG Fee Waiver) and Proportionality Index.

Economically Disadvantaged	Cohort		Throughput		Proportionality Index
	#	Column %	#	Column %	
No	500	49.5	238	57.3	1.2
Yes	510	50.5	177	42.7	.85
Total	1,010	100.0	415	100.0	

Table C5.B: 2011 – 2012 to 2013 – 2014 Basic Skills Three-Year Math Throughput Rate by Economically Disadvantaged Status (Cal B or C, CARE, Pell, or SEOG), 80% Rule Ratio, and Effect Size.

Economically Disadvantaged	# Successful	Cohort #	Throughput Rate	80% Rule Ratio	Effect Size
No	238	500	47.6	Reference Group	
Yes	148	414	35.7	75.0	-.24
Total	386	914	42.2		

Table C5.C: 2011 – 2012 to 2013 – 2014 Proportion of the Number in the Math Cohort and Throughput Number by Economically Disadvantaged Status (Cal B or C, CARE, Pell, or SEOG) and Proportionality Index.

Economically Disadvantaged	Cohort		Throughput		Proportionality Index
	#	Column %	#	Column %	
No	500	54.7	238	61.7	1.1
Yes	414	45.3	148	38.3	.85
Total	914	100.0	386	100.0	

Table C5.D: 2011 – 2012 to 2013 – 2014 Basic Skills Three-Year Math Throughput Rate by Economically Disadvantaged Status (Scholarship), 80% Rule Ratio, and Effect Size.

Economically Disadvantaged	# Successful	Cohort #	Throughput Rate	80% Rule Ratio	Effect Size
No	238	500	47.6	54.4	-.80
Yes	7	8	87.5	Reference Group	
Total	245	508	48.2		

Table C5.E: 2011 – 2012 to 2013 – 2014 Proportion of the Number in the Math Cohort and Throughput Number by Economically Disadvantaged Status (Scholarship) and Proportionality Index.

Economically Disadvantaged	Cohort		Throughput		Proportionality Index
	#	Column %	#	Column %	
No	500	98.4	238	97.1	.99
Yes	8	1.6	7	2.9	1.8
Total	508	100.0	245	100.0	

Table C5.F: 2011 – 2012 to 2013 – 2014 Basic Skills Three-Year Math Throughput Rate by Economically Disadvantaged Status (Work Study Student), 80% Rule Ratio, and Effect Size.

Economically Disadvantaged	# Successful	Cohort #	Throughput Rate	80% Rule Ratio	Effect Size
No	238	500	47.6	87.3	-.14
Yes	6	11	54.5	Reference Group	
Total	244	511	47.7		

Table C5.G: 2011 – 2012 to 2013 – 2014 Proportion of the Number in the Math Cohort and Throughput Number by Economically Disadvantaged Status (Work Study Student) and Proportionality Index.

Economically Disadvantaged	Cohort		Throughput		Proportionality Index
	#	Column %	#	Column %	
No	500	97.8	238	97.5	1.0
Yes	11	2.2	6	2.5	1.1
Total	511	100.0	244	100.0	

Table C6: Fall 2013 to Spring 2014 Math Basic Skills Improvement Rate by Foster Youth Status, 80% Rule Ratio, and Effect Size.

Foster Youth	# Improved	Cohort #	Improvement Rate	80% Rule Ratio	Effect Size
No	350	853	41.0	NA	NA
Yes	0	3	0.0	NA	NA
Total	350	856	40.9		

Table C6.A: Fall 2013 to Spring 2014 Proportion of the Number in the Math Cohort and Basic Skills Improvement Number by Foster Youth Status and Proportionality Index.

Foster Youth	Cohort		Improvement		Proportionality Index
	#	Column %	#	Column %	
No	853	99.6	350	100.0	1.0
Yes	3	0.4	0	0.0	NA
Total	856	100.0	350	100.0	

Table C7: Fall 2013 to Spring 2014 Math Basic Skills Improvement Rate by Veteran Status, 80% Rule Ratio, and Effect Size.

Veteran	# Improved	Cohort #	Improvement Rate	80% Rule Ratio	Effect Size
No	340	827	41.1	Reference Group	
Yes	10	29	34.5	83.9	.13
Total	350	856	40.9		

Note: The math improvement rate refers to the number of students who successfully completed a developmental level math course in Fall 2013 and successfully completed the next highest level math course in Spring 2014.

Table C7.A: Fall 2013 to Spring 2014 Proportion of the Number in the Math Cohort and Basic Skills Improvement Number by Veteran Status and Proportionality Index.

Veteran	Cohort		Improvement		Proportionality Index
	#	Column %	#	Column %	
No	827	96.6	340	97.1	1.0
Yes	29	3.4	10	3.9	1.1
Total	856	100.0	350	100.0	

Note: The math improvement rate refers to the number of students who successfully completed a developmental level math course in Fall 2013 and successfully completed the next highest level math course in Spring 2014.

English Basic Skills Throughput Rate

Table C8: 2011 – 2012 to 2013 – 2014 Basic Skills Three-Year English Throughput Rate by Gender, 80% Rule Ratio, and Effect Size.

Gender	# Successful	Cohort #	Throughput Rate	80% Rule Ratio	Effect Size
Female	226	452	50.0	Reference Group	
Male	164	379	43.3	86.6	-.13
Total	390	831	46.9		

Table C8.A: 2011 – 2012 to 2013 – 2014 Proportion of the Number in the English Cohort and Throughput Number by Gender and Proportionality Index.

Gender	Cohort		Throughput		Proportionality Index
	#	Column %	#	Column %	
Female	452	54.4	226	57.9	1.1
Male	379	45.6	164	42.1	.92
Total	831	100.0	390	100.0	

Table C9: 2011 – 2012 to 2013 – 2014 Basic Skills Three-Year English Throughput Rate by Ethnicity, 80% Rule Ratio, and Effect Size.

Ethnicity	# Successful	Cohort #	Throughput Rate	80% Rule Ratio	Effect Size
Asian	26	46	56.5	Reference Group	
African American	11	34	32.4	57.3	-.48
Hispanic	182	405	44.9	79.5	-.23
Native American	1	2	50.0	88.5	-.13
Caucasian	146	300	48.7	86.2	-.16
Multi-Ethnicity	22	41	53.7	95.0	-.06
Total	388	828	46.9		

Note: Groups chosen as the reference group had to have 50 or more cases in the cohort and be the highest rate.

Table C9.A: 2011 – 2012 to 2013 – 2014 Proportion of the Number in the English Cohort and Throughput Number by Ethnicity and Proportionality Index.

Ethnicity	Cohort		Throughput		Proportionality Index
	#	Column %	#	Column %	
Asian	46	5.6	26	6.7	1.2
African American	34	4.1	11	2.8	.69
Hispanic	405	48.9	182	46.9	.96
Native American	2	0.2	1	0.3	1.1
Caucasian	300	36.2	146	37.6	1.0
Multi-Ethnicity	41	5.0	22	5.7	1.1
Total	828	100.0	388	100.0	

Table C10: 2011 – 2012 to 2013 – 2014 Basic Skills Three-Year English Throughput Rate by Age, 80% Rule Ratio, and Effect Size.

Age	# Successful	Cohort #	Throughput Rate	80% Rule Ratio	Effect Size
19 or younger	276	523	52.8	Reference Group	
20-24	67	128	52.3	99.1	-.01
25-29	26	57	45.6	86.4	-.14
30-34	8	23	34.8	65.9	-.36
35-39	3	14	21.4	40.5	-.63
40-49	7	24	29.2	55.3	-.47
50 and above	5	10	50.0	94.7	-.06
Total	392	779	50.3		

Table C10.A: 2011 – 2012 to 2013 – 2014 Proportion of the Number in the English Cohort and Throughput Number by Age and Proportionality Index.

Age	Cohort		Throughput		Proportionality Index
	#	Column %	#	Column %	
19 or younger	523	67.1	276	70.4	1.0
20-24	128	16.4	67	17.1	1.0
25-29	57	7.3	26	6.6	.91
30-34	23	3.0	8	2.0	.69
35-39	14	1.8	3	0.8	.43
40-49	24	3.1	7	1.8	.58
50 and above	10	1.3	5	1.3	.99
Total	779	100.0	392	100.0	

Table C11: 2011 – 2012 to 2013 – 2014 Basic Skills Three-Year English Throughput Rate by Disability Status, 80% Rule Ratio, and Effect Size.

Disability Status	# Successful	Cohort #	Throughput Rate	80% Rule Ratio	Effect Size
No	364	750	48.5	Reference Group	
Yes	28	69	40.6	83.7	-.16
Total	392	819	47.9		

Table C11.A: 2011 – 2012 to 2013 – 2014 Proportion of the Number in the English Cohort and Throughput Number by Disability Status and Proportionality Index.

Disability Status	Cohort		Throughput		Proportionality Index
	#	Column %	#	Column %	
No	750	91.6	364	92.9	1.1
Yes	69	8.4	28	7.1	.85
Total	819	100.0	392	100.0	

Table C12: 2011 – 2012 to 2013 – 2014 Basic Skills Three-Year English Throughput Rate by Economically Disadvantaged Status (BOG Fee Waiver), 80% Rule Ratio, and Effect Size.

Economically Disadvantaged	# Successful	Cohort #	Throughput Rate	80% Rule Ratio	Effect Size
No	190	393	48.3	Reference Group	
Yes	201	425	47.3	97.9	-.02
Total	391	818	47.8		

Table C12.A: 2011 – 2012 to 2013 – 2014 Proportion of the Number in the English Cohort and Throughput Number by Economically Disadvantaged Status (BOG Fee Waiver) and Proportionality Index.

Economically Disadvantaged	Cohort		Throughput		Proportionality Index
	#	Column %	#	Column %	
No	393	48.0	190	48.6	1.0
Yes	425	52.0	201	51.4	.99
Total	818	100.0	391	100.0	

Table C12.B: 2011 – 2012 to 2013 – 2014 Basic Skills Three-Year English Throughput Rate by Economically Disadvantaged Status (Cal B or C, CARE, Pell, or SEOG), 80% Rule Ratio, and Effect Size.

Economically Disadvantaged	# Successful	Cohort #	Throughput Rate	80% Rule Ratio	Effect Size
No	190	393	48.3	92.2	-.08
Yes	152	290	52.4	Reference Group	
Total	342	683	50.1		

Table C12.C: 2011 – 2012 to 2013 – 2014 Proportion of the Number in the English Cohort and Throughput Number by Economically Disadvantaged Status (Cal B or C, CARE, Pell, or SEOG) and Proportionality Index.

Economically Disadvantaged	Cohort		Throughput		Proportionality Index
	#	Column %	#	Column %	
No	393	57.5	190	55.6	.97
Yes	290	42.5	152	44.4	1.1
Total	683	100.0	342	100.0	

Table C12.D: 2011 – 2012 to 2013 – 2014 Basic Skills Three-Year English Throughput Rate by Economically Disadvantaged Status (Scholarship), 80% Rule Ratio, and Effect Size.

Economically Disadvantaged	# Successful	Cohort #	Throughput Rate	80% Rule Ratio	Effect Size
No	190	393	48.3	Reference Group	
Yes	2	5	40.0	82.8	-.17
Total	192	398	48.2		

Table C12.E: 2011 – 2012 to 2013 – 2014 Proportion of the Number in the English Cohort and Throughput Number by Economically Disadvantaged Status (Scholarship) and Proportionality Index.

Economically Disadvantaged	Cohort		Throughput		Proportionality Index
	#	Column %	#	Column %	
No	393	98.7	190	99.0	1.0
Yes	5	1.3	2	1.0	.83
Total	398	100.0	192	100.0	

Table C12.F: 2011 – 2012 to 2013 – 2014 Basic Skills Three-Year English Throughput Rate by Economically Disadvantaged Status (Work Study Student), 80% Rule Ratio, and Effect Size.

Economically Disadvantaged	# Successful	Cohort #	Throughput Rate	80% Rule Ratio	Effect Size
No	190	393	48.3	Reference Group	
Yes	4	10	40.0	82.8	-.17
Total	194	403	48.1		

Table C12.G: 2011 – 2012 to 2013 – 2014 Proportion of the Number in the English Cohort and Throughput Number by Economically Disadvantaged Status (Work Study Student) and Proportionality Index.

Economically Disadvantaged	Cohort		Throughput		Proportionality Index
	#	Column %	#	Column %	
No	393	97.5	190	97.9	1.0
Yes	10	2.5	4	2.1	.83
Total	403	100.0	194	100.0	

Table C13: Fall 2013 to Spring 2014 English Basic Skills Improvement Rate by Foster Youth Status, 80% Rule Ratio, and Effect Size.

Foster Youth	# Improved	Cohort #	Improvement Rate	80% Rule Ratio	Effect Size
No	351	548	64.1	96.1	-.05
Yes	2	3	66.7	Reference Group	
Total	353	551	64.1		

Table C13.A: Fall 2013 to Spring 2014 Proportion of the Number in the English Cohort and Basic Skills Improvement Number by Foster Youth Status and Proportionality Index.

Foster Youth	Cohort		Improvement		Proportionality Index
	#	Column %	#	Column %	
No	548	99.5	351	99.4	1.0
Yes	3	0.5	2	0.6	1.2
Total	551	100.0	353	100.0	

Table C14: Fall 2013 to Spring 2014 English Basic Skills Improvement Rate by Veteran Status, 80% Rule Ratio, and Effect Size.

Veteran	# Improved	Cohort #	Improvement Rate	80% Rule Ratio	Effect Size
No	349	544	64.2	Reference Group	
Yes	4	7	57.1	88.9	-.15
Total	353	561	62.9		

Note: The English improvement rate refers to the number of students who successfully completed a developmental level English course in Fall 2013 and successfully completed the next highest level English course in Spring 2014.

Table C14.A: Fall 2013 to Spring 2014 Proportion of the Number in the English Cohort and Basic Skills Improvement Number by Veteran Status and Proportionality Index.

Veteran	Cohort		Improvement		Proportionality Index
	#	Column %	#	Column %	
No	544	98.7	349	98.9	1.0
Yes	7	1.3	4	1.1	.85
Total	551	100.0	353	100.0	

Note: The English improvement rate refers to the number of students who successfully completed a developmental level English course in Fall 2013 and successfully completed the next highest level English course in Spring 2014.

Analysis

Gender: The math and English throughput rates were slightly higher for females (31% and 50%, respectively) than the male throughput rates (28% and 43% respectively). However, the differences were not substantial as indicated by the 80% rule, effect size, and proportionality index. At the same time, males had a lower (Cohen's $d = -.13$) English throughput rate (43%) than females (50%).

Ethnicity: The ethnic group with the highest math (35%) and English (57%) throughput rates were Asian students. African American students were disproportionately impacted for both the math (14%) and English (32%) throughput rates when compared to the Asian reference group. At the same time, Hispanic students almost had a substantially (Cohen's $d = -.18$) lower math throughput rate (27%) than Asian students (35%). In addition, Hispanic students had a substantially (Cohen's $d = -.23$) lower English throughput rate; however, both the 80% rule ratio and proportionality thresholds were met.

Age: Students 20 – 24 years old had the highest math throughput rate (39%) and were the reference group. Three of the age groups had less than 30 students and were excluded from the disproportionate impact analysis (35-39, 40-49 and 50 years or older). All three indices indicated that 30 – 34 year old students were disproportionately impacted on the math throughput rate. Specifically, 30 – 34 year old students (13%) had a substantially (Cohen's $d = -.55$) lower success rate than the 20 – 24 year old students (39%).

Students 19 years old or younger had the highest English throughput rate (53%) and were the reference group. Four of the age groups had less than 30 students and were excluded from the disproportionate impact analysis (30-34, 35-39, 40-49 and 50 years or older). None of the other age groups were disproportionately impacted.

Disability: The math throughput rate was substantially (Cohen's $d = .25$) higher for students with a disability (42%) than for students not identified as having a disability (30%). Students identified as having a disability were not disproportionately impacted on the math throughput rate.

Only the proportionality index (.85) indicated that students identified with a disability were disproportionately impacted on the English throughput rate. Specifically, students not identified as having a disability had a higher English throughput rate (49%) than students who were identified as having a disability (41%).

Economically Disadvantaged: The number of students in each economically disadvantaged cohort was large enough to examine disproportionate impact for students who received a BOG Fee Waiver or students who received a Cal B or C, CARE, Pell, or SEOG financial aid award. All three indices indicated that students who received a BOG Fee Waiver were disproportionately impacted on the math throughput rate. Specifically, students who received a BOG Fee Waiver had a substantially (Cohen's $d = -.26$) lower math throughput rate (35%) than students who were not identified as being economically disadvantaged (48%). All three indices also indicated that students who

received a Cal B or C, CARE, Pell, or SEOG financial aid award were disproportionately impacted on the math throughput rate. Students who received a Cal B or C, CARE, Pell, or SEOG financial aid award had a substantially (Cohen's $d = -.24$) lower math throughput rate (36%) than students who were not identified as being economically disadvantaged (48%).

All three indices indicated that disproportionate impact did not occur for the English throughput rate by economically disadvantaged status.

Foster Youth: There were not enough foster youth identified to examine disproportionate impact. Foster youth students have only been tracked since 2012 and only three foster youth students had taken a developmental math or English course in Fall 2013.

Veterans: Since Veteran student status was not identified in the CCCCCO Basic Skills Throughput Rate Data Mart, the basic skills improvement rate from Fall 2013 to Spring 2014 was examined for CHC student veterans. The results indicated that disproportionate impact did not occur for veterans for both the math and English improvement rates. However, students not identified as veterans had a higher math improvement rate (41%) than veterans (35%). In addition, students not identified as veterans also had a higher English improvement rate (64%) than veterans (57%).

D. DEGREE and CERTIFICATE COMPLETION.

Student Scorecard Measure: The percentage of first-time degree and/or transfer-seeking students (i.e. minimum of 6 units earned who attempted any math or English in the first three years) tracked for six years from 2007-08 to 2012-13 who completed a degree or certificate.

Table D1: 2007 – 2008 To 2012 - 2013 Six Year Degree/Certificate Completion Rate by Gender, 80% Rule Ratio, and Effect Size.

Gender	# Earned Deg/Cert	# in Cohort	Completion Rate	80% Rule Ratio	Effect Size
Female	500	2,569	19.5	Reference Group	
Male	323	2,211	14.6	74.9	-.13
Unknown	45	263	17.1	87.7	-.06
Total	868	5,043	17.2		

Table D1.A: 2007 – 2008 to 2012 - 2013 Proportion of Students in the Degree/Certificate Completion Cohort and Degree/Certificate Completions by Gender and Proportionality Index.

Gender	Degree/Certificate Cohort		Earned Degree/Certificate		Proportionality Index
	#	Column %	#	Column %	
Female	2,569	50.9	500	57.6	1.1
Male	2,211	43.8	323	37.2	.85
Unknown	263	5.2	45	5.2	.99
Total	5,043	100.0	868	100.0	

Table D2: 2007 – 2008 To 2012 - 2013 Six Year Degree/Certificate Completion Rate by Ethnicity, 80% Rule Ratio, and Effect Size.

Ethnicity	# Earned Deg/Cert	# in Cohort	Completion Rate	80% Rule Ratio	Effect Size
Asian	56	272	20.6	Reference Group	
African American	22	166	13.3	64.6	-.19
Hispanic	174	1,232	14.1	68.4	-.18
Native American	9	64	14.1	68.4	-.16
Caucasian	524	2,857	18.3	88.8	-.06
Missing	83	452	18.4	89.3	-.06
Total	868	5,043	17.2		

Table D2.A: 2007 – 2008 to 2012 - 2013 Proportion of Students in the Degree/Certificate Completion Cohort and Degree/Certificate Completions by Ethnicity and Proportionality Index.

Ethnicity	Degree/Certificate Cohort		Earned Degree/Certificate		Proportionality Index
	#	Column %	#	Column %	
Asian	272	5.4	56	6.5	1.2
African American	166	3.3	22	2.5	.77
Hispanic	1,232	24.4	174	20.0	.82
Native American	64	1.3	9	1.0	.82
Caucasian	2,857	56.7	524	60.4	1.1
Missing	452	9.0	83	9.6	1.1
Total	5,043	100.0	868	100.0	

Table D3: 2007 – 2008 To 2012 - 2013 Six Year Degree/Certificate Completion Rate by Age, 80% Rule Ratio, and Effect Size.

Age	# Earned Deg/Cert	# in Cohort	Completion Rate	80% Rule Ratio	Effect Size
19 or younger	722	4,004	18.0	80.0	-.12
20-24	49	478	10.3	45.8	-.37
25-29	23	161	14.3	63.6	-.22
30-34	12	84	14.3	63.6	-.21
35-39	20	89	22.5	Reference Group	
40-49	31	144	21.5	95.6	-.02
50 and above	4	33	12.1	53.8	-.26
Total	861	4,993	17.2		

Table D3.A: 2007 – 2008 To 2012 - 2013 Proportion of Students in the Degree/Certificate Completion Cohort and Degree/Certificate Completions by Age and Proportionality Index.

Age	Degree/Certificate Cohort		Earned Degree/Certificate		Proportionality Index
	#	Column %	#	Column %	
19 or younger	4,004	80.2	722	83.9	1.0
20-24	478	9.6	49	5.7	.59
25-29	161	3.2	23	2.7	.83
30-34	84	1.7	12	1.4	.83
35-39	89	1.8	20	2.3	1.3
40-49	144	2.9	31	3.6	1.2
50 and above	33	0.7	4	0.5	.70
Total	4,993	100.0	861	100.0	

Table D4: 2007 – 2008 To 2012 - 2013 Six Year Degree/Certificate Completion Rate by Disability Status, 80% Rule Ratio, and Effect Size.

Disability Status	# Earned Deg/Cert	# in Cohort	Completion Rate	80% Rule Ratio	Effect Size
No	824	4,762	17.3	Reference Group	
Yes	44	281	15.7	90.8	-.04
Total	868	5,043	17.2		

Table D4.A: 2007 – 2008 To 2012 - 2013 Proportion of Students in the Degree/Certificate Completion Cohort and Degree/Certificate Completions by Disability Status and Proportionality Index.

Disability Status	Degree/Certificate Cohort		Earned Degree/Certificate		Proportionality Index
	#	Column %	#	Column %	
No	4,762	94.4	824	94.9	1.0
Yes	281	5.6	44	5.1	.91
Total	5,043	100.0	868	100.0	

Table D5: 2007 – 2008 To 2012 - 2013 Six Year Degree/Certificate Completion Rate by Economic Status, 80% Rule Ratio, and Effect Size.

Economically Disadvantaged	# Earned Deg/Cert	# in Cohort	Completion Rate	80% Rule Ratio	Effect Size
No	421	2,674	15.7	83.1	-.08
Yes	447	2,369	18.9	Reference Group	
Total	868	5,043	17.2		

Table D5.A: 2007 – 2008 To 2012 - 2013 Proportion of Students in the Degree/Certificate Completion Cohort and Degree/Certificate Completions by Economic Status and Proportionality Index.

Economically Disadvantaged	Degree/Certificate Cohort		Earned Degree/Certificate		Proportionality Index
	#	Column %	#	Column %	
No	2,674	53.0	421	48.5	.92
Yes	2,369	47.0	447	51.5	1.1
Total	5,043	100.0	868	100.0	

Table D6: 2007 – 2008 To 2012 - 2013 Six Year Degree/Certificate Completion Rate by Veteran Status, 80% Rule Ratio, and Effect Size.

Veteran	# Earned Deg/Cert	# in Cohort	Completion Rate	80% Rule Ratio	Effect Size
No	864	5,027	17.2	68.8	-.21
Yes	4	16	25.0	Reference Group	
Total	868	5,043	17.2		

Table D6.A: 2007 – 2008 To 2012 - 2013 Proportion of Students in the Degree/Certificate Completion Cohort and Degree/Certificate Completions by Veteran Status and Proportionality Index.

Veteran	Degree/Certificate Cohort		Earned Degree/Certificate		Proportionality Index
	#	Column %	#	Column %	
No	5,027	99.7	864	99.5	1.0
Yes	16	0.3	4	0.5	1.5
Total	5,043	100.0	868	100.0	

Analysis

Gender: The degree and certificate completion rate was higher for females (20%) than males (15%). Both the 80% rule ratio and the proportionality index indicated that males were disproportionately impacted on the degree and certificate completion rate when compared to females. Namely, the male completion rate is less than 75% of the female completion rate and male students are proportionately less likely to earn a degree or certificate than in the original cohort population.

Ethnicity: Asian students had the highest degree and certificate completion rate (21%) and were the reference group. When comparing all of the other ethnic groups to Asians, African American (13%), Hispanic (14%), and Native American (14%) students appear to be disproportionately impacted. Both the 80% rule ratio and the proportionality index indicated that African American, Hispanic, and Native American students were disproportionately impacted on the degree and certificate completion rate when compared to Asian students.

Age: Students 35 – 39 years old had the highest degree and certificate completion rate (23%) and were the reference group. When comparing the age groups to students 35 – 39 years old (23%), 20 – 24 (10%), 25 – 29 (14%), 30 – 34 (14%), and students 50 years old or older (12%) had all three indices indicate that these students were disproportionately impacted when compared to students 35 – 39 years old.

Disability: The degree and certificate completion rate was slightly higher for students not identified as having a disability (17%) than for students identified as having a disability (16%). However, the difference was not substantial as indicated by the 80% rule, effect size, and proportionality index.

Economically Disadvantaged: The degree and certificate completion rate was slightly higher for students who were identified as being economically disadvantaged (19%) than for students who were not identified as being economically disadvantaged (16%). However, the difference was not substantial as indicated by the 80% rule, effect size, and proportionality index.

Foster Youth: It wasn't possible to identify a large enough sample of foster youth students to analyze disproportionate impact on the degree and certificate completion rate outcome.

Veterans: The degree and certificate completion rate was substantially (Cohen's $d = .21$) higher for students identified as veterans (25%) than for students who were not identified veterans (17%). However, only 16 veterans were included in the cohort.

E. TRANSFER

Student Scorecard Measure: The percentage of first-time degree and/or transfer-seeking students (i.e. minimum of 6 units earned who attempted any math or English in the first three years) tracked for six years from 2007-08 to 2012-13 who transferred to a four-year institution.

Table E1: 2007 – 2008 To 2012 - 2013 Six Year Transfer Rate by Gender, 80% Rule Ratio, and Effect Size.

Gender	# Transferred	# in Cohort	Transfer Rate	80% Rule Ratio	Effect Size
Female	802	2,569	31.2	Reference Group	
Male	622	2,211	28.1	90.1	-.07
Unknown	77	263	29.3	93.9	-.04
Total	1,501	5,043	29.8		

Table E1.A: 2007 – 2008 to 2012 - 2013 Proportion of Students in the Transfer Cohort and Transfers by Gender and Proportionality Index.

Gender	Transfer Cohort		Transferred		Proportionality Index
	#	Column %	#	Column %	
Female	2,569	50.9	802	53.4	1.0
Male	2,211	43.8	622	41.4	.95
Unknown	263	5.2	77	5.1	.98
Total	5,043	100.0	1,501	100.0	

Table E2: 2007 – 2008 To 2012 - 2013 Six Year Transfer Rate by Ethnicity, 80% Rule Ratio, and Effect Size.

Ethnicity	# Transferred	# in Cohort	Transfer Rate	80% Rule Ratio	Effect Size
Asian	97	272	35.7	Reference Group	
African American	43	166	25.9	72.6	-.21
Hispanic	274	1,232	22.2	62.3	-.31
Native American	21	64	32.8	91.9	-.06
Caucasian	916	2,857	32.1	89.8	-.08
Missing	150	452	33.2	93.0	-.05
Total	1,501	5,043	29.8		

Table E2.A: 2007 – 2008 to 2012 - 2013 Proportion of Students in the Transfer Cohort and Transfers by Ethnicity and Proportionality Index.

Ethnicity	Transfer Cohort		Transferred		Proportionality Index
	#	Column %	#	Column %	
Asian	97	6.5	272	5.4	.84
African American	43	2.9	166	3.3	1.1
Hispanic	274	18.3	1,232	24.4	1.3
Native American	21	1.4	64	1.3	.91
Caucasian	916	61.0	2,857	56.7	.93
Missing	150	10.0	452	9.0	.90
Total	1,501	100.0	5,043	100.0	

Table E3: 2007 – 2008 To 2012 - 2013 Six Year Transfer Rate by Age, 80% Rule Ratio, and Effect Size.

Age	# Transferred	# in Cohort	Transfer Rate	80% Rule Ratio	Effect Size
19 or younger	1,290	4,004	32.2	Reference Group	
20-24	110	478	23.0	71.5	-.20
25-29	30	161	18.6	57.9	-.29
30-34	19	84	22.6	70.2	-.21
35-39	19	89	21.3	66.3	-.23
40-49	19	144	13.2	41.0	-.41
50 and above	1	33	3.0	9.4	-.63
Total	1,488	4,993	29.8		

Table E3.A: 2007 – 2008 To 2012 - 2013 Proportion of Students in the Transfer Cohort and Transfers by Age and Proportionality Index.

Age	Transfer Cohort		Transferred		Proportionality Index
	#	Column %	#	Column %	
19 or younger	4,004	80.2	1,290	86.7	1.1
20-24	478	9.6	110	7.4	.77
25-29	161	3.2	30	2.0	.63
30-34	84	1.7	19	1.3	.76
35-39	89	1.8	19	1.3	.72
40-49	144	2.9	19	1.3	.44
50 and above	33	0.7	1	0.1	.14
Total	4,993	100.0	1,488	100.0	

Table E4: 2007 – 2008 To 2012 - 2013 Six Year Transfer Rate by Disability Status, 80% Rule Ratio, and Effect Size.

Disability Status	# Transferred	# in Cohort	Transfer Rate	80% Rule Ratio	Effect Size
No	1,449	4,762	30.4	Reference Group	
Yes	52	281	18.5	60.9	-.26
Total	1,501	5,043	29.8		

Table E4.A: 2007 – 2008 To 2012 - 2013 Proportion of Students in the Transfer Cohort and Transfers by Disability Status and Proportionality Index.

Disability Status	Transfer Cohort		Transferred		Proportionality Index
	#	Column %	#	Column %	
No	4,762	94.4	1,449	96.5	1.0
Yes	281	5.6	52	3.5	.62
Total	5,043	100.0	1,501	100.0	

Table E5: 2007 – 2008 To 2012 - 2013 Six Year Transfer Rate by Economic Status, 80% Rule Ratio, and Effect Size.

Economically Disadvantaged	# Transferred	# in Cohort	Transfer Rate	80% Rule Ratio	Effect Size
No	856	2,674	32.0	Reference Group	
Yes	645	2,369	27.2	85.1	-.10
Total	1,501	5,043	29.8		

Table E5.A: 2007 – 2008 To 2012 - 2013 Proportion of Students in the Transfer Cohort and Transfers by Economic Status and Proportionality Index.

Economically Disadvantaged	Transfer Cohort		Transferred		Proportionality Index
	#	Column %	#	Column %	
No	2,674	53.0	856	57.0	1.1
Yes	2,369	47.0	645	43.0	.92
Total	5,043	100.0	1,501	100.0	

Table E6: 2007 – 2008 To 2012 - 2013 Six Year Transfer Rate by Veteran Status, 80% Rule Ratio, and Effect Size.

Veteran	# Transferred	# in Cohort	Transfer Rate	80% Rule Ratio	Effect Size
No	1,496	5,027	29.8	95.2	-.03
Yes	5	16	31.3	Reference Group	
Total	1,501	5,043	29.8		

Table E6.A: 2007 – 2008 To 2012 - 2013 Proportion of Students in the Transfer Cohort and Transfers by Veteran Status and Proportionality Index.

Veteran	Transfer Cohort		Transferred		Proportionality Index
	#	Column %	#	Column %	
No	5,027	99.7	1,496	99.7	1.0
Yes	16	0.3	5	0.3	1.1
Total	5,043	100.0	1,501	100.0	

Analysis

Gender: The transfer rate was higher for females (31%) than males (28%). However, the difference was not substantial as indicated by the 80% rule, effect size, and proportionality index.

Ethnicity: Asian students had the highest transfer rate (26%) and were the reference group. When comparing all of the other ethnic groups to Asians, African American (26%) and Hispanic (22%) students appear to be disproportionately impacted according to both the 80% rule ratio and the effect size index.

Age: Students 19 years old or younger had the highest transfer rate (32%) and were the reference group. When comparing the other age groups every student 20 years old or older appeared to be disproportionately impacted when their transfer rate was compared to students who were 19 years old or younger. All three indices indicated that students who were 20 years old or older were disproportionately impacted when compared to students 19 years old or younger. However, students 19 years old or younger may be more likely to have an educational goal of transfer than students who are 20 years old or older.

Disability: The transfer rate was substantially higher for students not identified as having a disability (30%) than for students identified as having a disability (18%). All three indices indicated that the difference was substantial.

Economically Disadvantaged: The transfer rate was slightly higher for students who were not identified as being economically disadvantaged (32%) than for students who were identified as being economically disadvantaged (27%). However, the difference was not substantial as indicated by the 80% rule, effect size, and proportionality index.

Foster Youth: It wasn't possible to identify a large enough sample of foster youth students to analyze disproportionate impact on the transfer rate outcome.

Veterans: The transfer rate was slightly higher for students who were identified as veterans (31%) than for students who were identified as not being a veteran (30%). However, the difference was not substantial as indicated by the 80% rule, effect size, and proportionality index.

Any questions regarding this report can be directed to the Office of Institutional Effectiveness, Research, and Planning at (909) 389-#### or you may send an email to xxxxx@craftonhills.edu: 2014_StudentEquityData3.doc; Grades_CHC_GOR_20140605_FiveYears_1314_NoLRC900.sav.

References

Michalowski, L. (2014). *Updated student equity plan*. California Community Colleges Chancellor's Office (CCCCO).