



Research Briefs from the Office of Institutional Research Placement Results and Student Outcomes by Ethnicity

Purpose: The purpose of generating the student equity data with a focus on ethnicity presented in this report is to help inform the development and improvement of strategies and services that can help all of Crafton Hills College students succeed. The student equity data presented here is based on the quantitative effectiveness indicators (QEIs) found in the college's Educational Master Plan (retention and success rates by basic skills and transfer course status, graduation rate, transfer rate, and persistence rate). The data illustrated here also includes the levels at which prospective students assess into English, reading, and math by Ethnicity.

Summary of Findings:

Assessment (see Tables 1 – 3)

- Asian (59%), African American (50%), Hispanic (45%), and Native American (44%) students are more likely to assess into basic skills English than Caucasian students (26%)
- Asian (57%), African American (47%), Hispanic (42%), and Native American (40%) students are more likely to assess into basic skills reading than Caucasian students (25%)
- Overall, students are more likely to assess into developmental (54%) math than basic skills (41%) or transfer level (6%) math
- African American (51%) students are more likely to assess into basic skills math than Asian (23%), Hispanic (45%), Native American (37%), and Caucasian (37%) students

2009 – 2010 Success and Retention Rates

- The basic skills course success rate of Hispanic (61%) students was substantially lower than the course success rates of Asian (76%) students (see Figure 1 and Table 4)
- The basic skills course success rates of African American (67%), Native American (67%), and Hispanic (67%) students were substantially lower than the non-basic skills course success rates of Caucasian (72%) and Asian (77%) students (see Figure 3 and Table 6)
- Asian (77%) students exhibited a substantially higher non-basic skills course success rate than Caucasian (72%) students (see Figure 3 and Table 6)
- The non-basic skills course retention rates of Native American (85%) students was substantially lower than the non-basic skills course retention rate of Asian (90%) students (see Figure 4 and Table 7)
- The transfer course success rates of African American (67%) and Hispanic (67%) students was substantially lower than the transfer course success rates of Asian (74%) and Caucasian (72%) students (see Figure 5 and Table 8)

Persistence, Graduation, and Transfer Rates (see Figures 6 – 8 and Tables 9 – 11)

- Caucasian (71%) students had a substantially higher persistence rate than Asian (58%), African American (64%), and Hispanic (58%) students
- Caucasian (26%) students had a substantially higher graduation rate than Hispanic (15%) students
- Caucasian (35%) students had a substantially higher transfer rate than Hispanic (20%) students

Methodology: **Success rate** is defined as students earning a grade of A, B, C, or P divided by the number of grades on record (GOR): A, B, C, D, F, P, NP, I, or W. **Retention rate** is defined as students earning a grade of A, B, C, D, F, P, NP, or I divided by the number of GOR.

Basic skills courses are 900 level credit courses that are not degree applicable. For instance ENGL-914 (Basic English Skills) is a basic skills course. **Non-basic skills courses** include degree applicable and transfer level courses. For example, ENGL-015 (Preparation for College Writing), ENGL-101 (Freshman Composition), and PHIL-103 (Introduction to Logic: Argument and Evidence) are non-basic skills courses. Non-basic skills courses include every course that is not a basic skills course. **Transfer courses** are courses that are transferable to a UC (University of California) and/or CSU (California State University). Any course that is a 100 level course or higher is a transfer level course; for instance, HIST-171 (Word Civilizations) is a transfer level course.

Fall to Fall Persistence, Graduation Rate, and Transfer Rate were all identified using the ARCC (Accountability Reporting for the Community Colleges) definitions and database. **Persistence** is defined as the percent of first-time CHC students with a minimum of six units earned in a Fall term and who returned and enrolled in a credit course the subsequent Fall term anywhere in the California Community College system. Students who transferred to a four-year institution or received a degree or certificate prior to the subsequent Fall term are removed from the cohort, so they do not affect the rates. **Graduation rate** is defined as the percentage of cohort of first-time CHC students with minimum of 12 units earned who attempted a degree/certificate/transfer course within six years and who are shown to have earned any AA/AS or certificate of 18 or more units within six years of entry. **Transfer rate** is defined as the percentage of first-time CHC students with minimum of 12 units earned who attempted a degree/certificate/transfer course within six years and who are shown to have transferred to a four-year institution after enrolling at Crafton Hills College within six years of entry.

Effect Size. The effect size statistic was used to indicate the size of the difference between different groups on each of the outcome measures presented in this report. 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 .10 or higher, which corresponds to a Pearson r of .05. The effect size represents the magnitude of the difference between the target and the baseline measure. Using an effect size increases the likelihood that the difference is not only statistically significant but practical as well. It is important to mention that the number of students in each group does not influence Effect Size; whereas, when statistical significance is calculated, the number of students in each group does influence the significance level (i.e. "p" value being lower than .05).

Findings:

Table 1: Students who completed the CHC Accuplacer Assessment in 2009 – 2010 by English Placement and Ethnicity.

Ethnicity	Assessed 2009 – 2010*	Assessed into Basic Skills English**		Assessed into Developmental English***		Assessed into Transfer English ****	
		#	Row %	#	Row %	#	Row %
Asian	119	70	58.8	22	18.5	27	22.7
African American	187	94	50.3	57	30.5	36	19.3
Hispanic	1,237	558	45.1	384	31.0	295	23.8
Native American	25	11	44.0	7	28.0	7	28.0
Other / Unknown	35	14	40.0	6	17.1	15	42.9
Caucasian	1,673	437	26.1	548	32.8	688	41.1
Total	3,276	1,184	36.1	1,024	31.3	1,068	32.6

*Prospective students who completed the Accuplacer Assessment Test from June 1st, 2009 to July 31st, 2010.

**Prospective students who assessed into basic skills English: READ-925(Introduction to Reading), and ENGL-914(Basic Skills English).

***Prospective students who assessed into developmental English: ENGL-015 (Preparation for College Writing).

****Prospective students who assessed into ENGL-101 (Freshman Composition) which is transferable to the California State University (CSU) or the University of California (UC).

Note. The **bold font** illustrates the level prospective students were most likely to assess.

Table 2: Students who completed the CHC Accuplacer Assessment in 2009 – 2010 by Reading Placement and Ethnicity.

Ethnicity	Assessed 2009 – 2010*	Assessed into Basic Skills Reading**		Assessed into Developmental Reading***		Assessed into Transfer Reading ****	
		#	Row %	#	Row %	#	Row %
Asian	119	68	57.1	16	13.4	35	29.4
African American	187	87	46.5	45	24.1	55	29.4
Hispanic	1,267	528	41.7	331	26.1	378	29.8
Native American	25	10	40.0	6	24.0	9	36.0
Other / Unknown	35	13	37.1	8	22.9	14	40.0
Caucasian	1,673	425	25.4	388	23.2	860	51.4
Total	3,276	1,131	34.5	794	24.2	1,351	41.2

*Prospective students who completed the Accuplacer Assessment Test from June 1st, 2009 to July 31st, 2010.

**Prospective students who assessed into basic skills reading: READ-925(Introduction to Reading) or READ-956 (Intermediate Reading).

***Prospective students who assessed into developmental reading: READ-078 (Advanced Reading).

****Prospective students who assessed into READ-100 (College Academic Reading) which is transferable to the California State University (CSU) or the University of California (UC). This also includes prospective students who met the reading requirement.

Note. The **bold font** illustrates the level prospective students were most likely to assess.

Table 3: Students who completed the CHC Accuplacer Assessment in 2009 – 2010 by Math Placement and Ethnicity.

Ethnicity	Assessed 2009 – 2010*	Assessed into Basic Skills Math**		Assessed into Developmental Math ***		Assessed into Transfer Math ****	
		#	Row %	#	Row %	#	Row %
Asian	117	27	23.1	69	59.0	21	17.9
African American	182	92	50.5	83	45.6	7	3.8
Hispanic	1,236	561	45.4	625	50.6	50	4.0
Native American	27	10	37.0	15	55.6	2	7.4
Other / Unknown	37	18	48.6	15	40.5	4	10.8
Caucasian	1,701	632	37.2	957	56.3	112	6.6
Total	3,300	1,340	40.6	1,764	53.5	196	5.9

*Prospective students who completed the Accuplacer Assessment Test from June 1st, 2009 to July 31st, 2010.

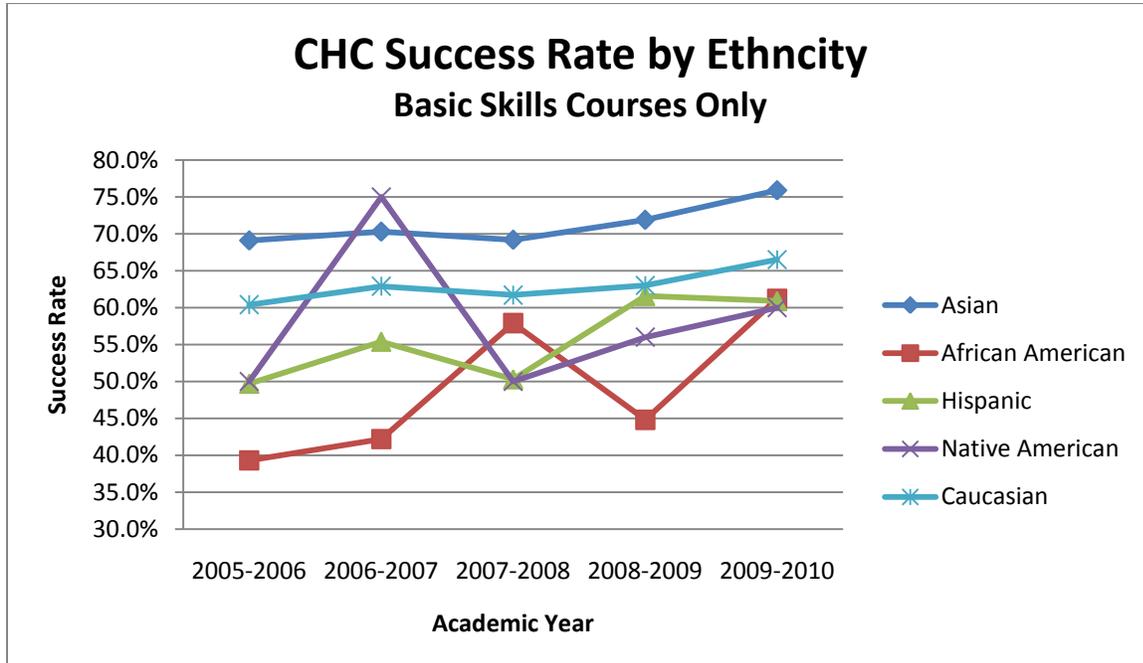
**Prospective students who assessed into basic skills math: MATH-942 (Arithmetic), MATH-943 (Review Arithmetic Topics), MATH-952 (Prealgebra), or MATH-953 (Review of Selected Prealgebra Topics).

***Prospective students who assessed into developmental math: MATH-090 (Elementary Algebra), and MATH-095 (Intermediate Algebra).

****Prospective students who assessed into MATH-108 (Statistics), MATH-115 (The Ideas of Mathematics), MATH-102 (College Algebra), MATH-103 (Plane Trigonometry), MATH-151 (Precalculus), or MATH-250 (Single Variable Calculus I) which are transferable to the California State University (CSU) or the University of California (UC).

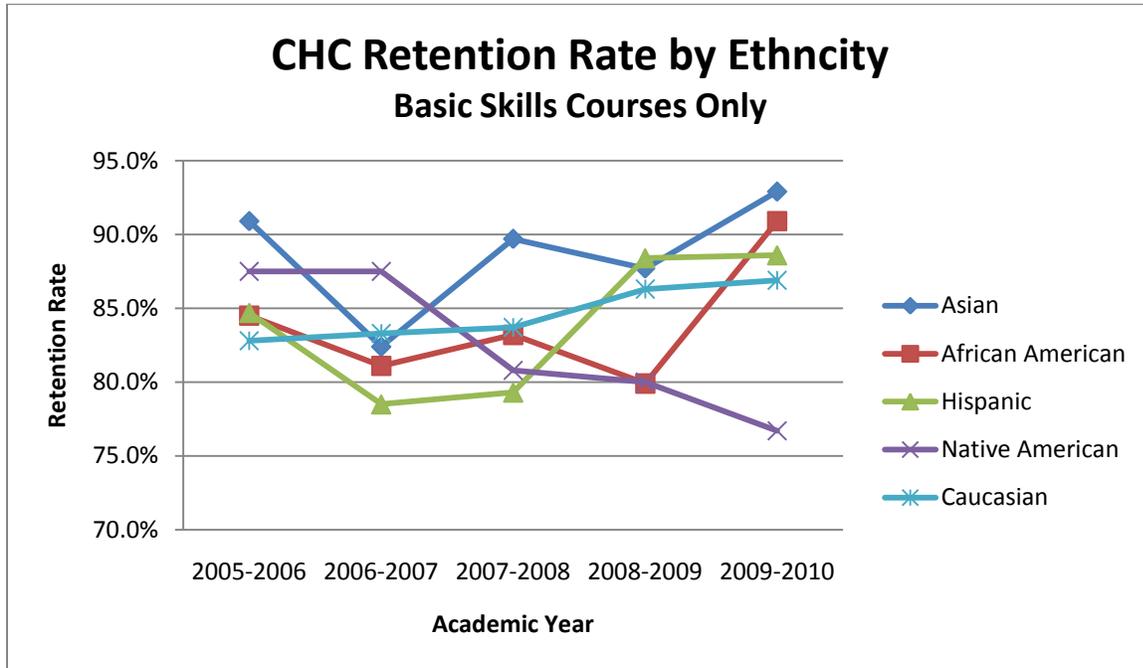
Note. The **bold font** illustrates the level prospective students were most likely to assess.

Figure 1: Success Rates in Basic Skills Courses from 2005 – 2006 to 2009 – 2010 by Ethnicity.



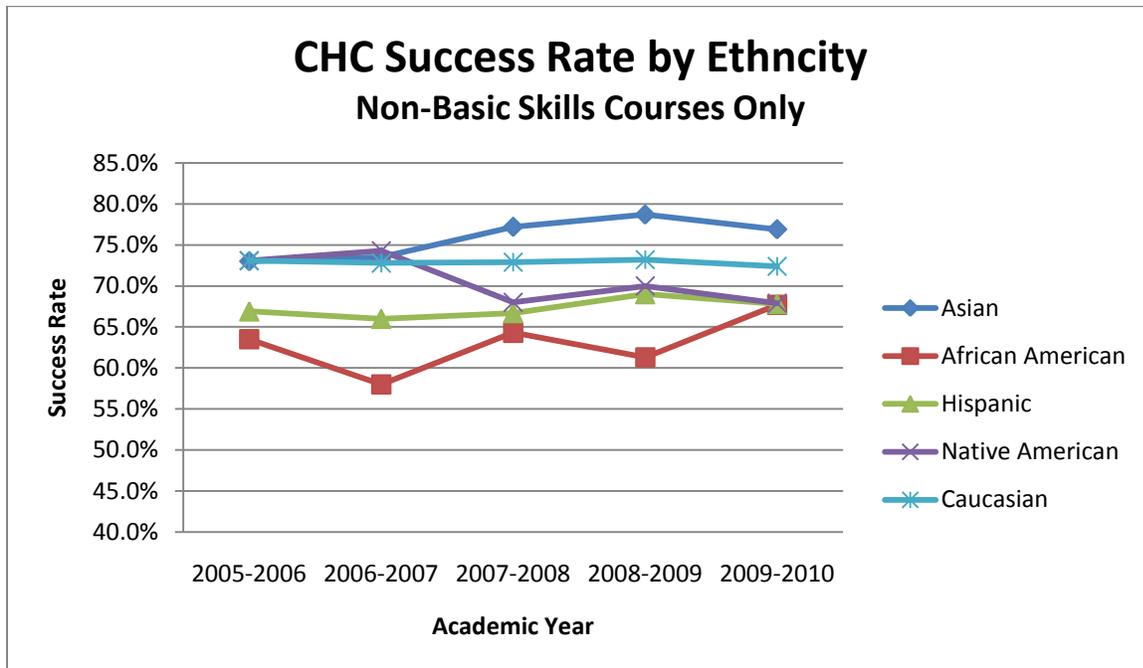
Note: In 2009-2010 the course success rates of Hispanic (61%) students was substantially (ES = .31) lower than the course success rates of Asian (76%) students.

Figure 2: Retention Rates in Basic Skills Courses from 2005 – 2006 to 2009 – 2010 by Ethnicity.



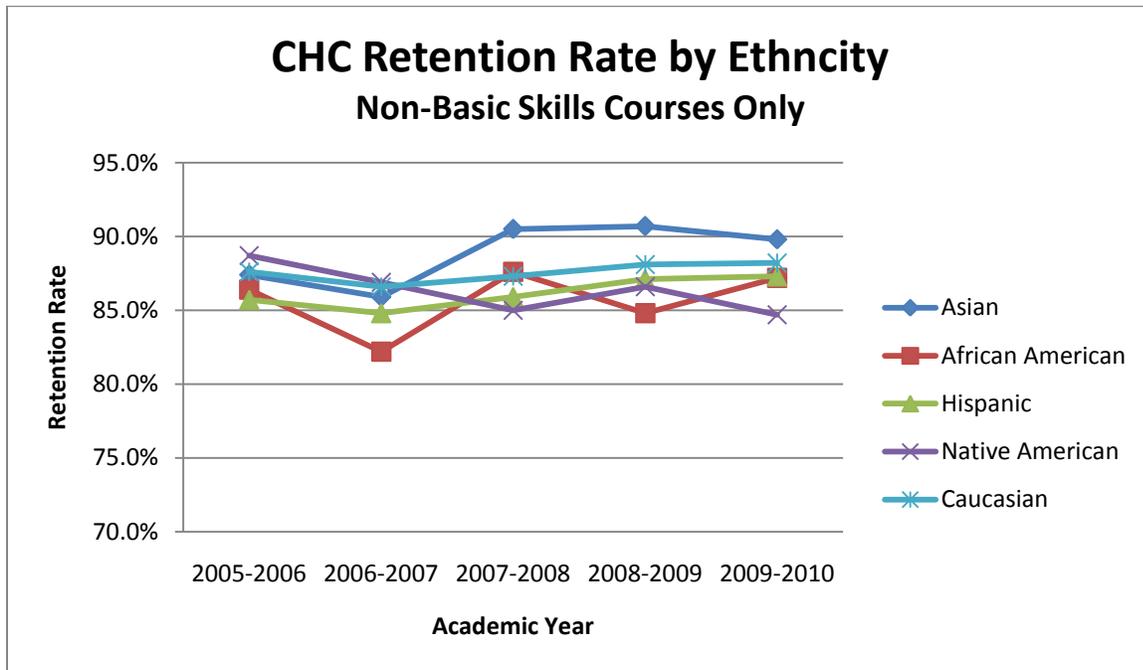
Note: In 2009-2010 none of the retention rates were substantially different from each other.

Figure 3: Success Rates in Non-Basic Skills Courses from 2005 – 2006 to 2009 – 2010 by Ethnicity.



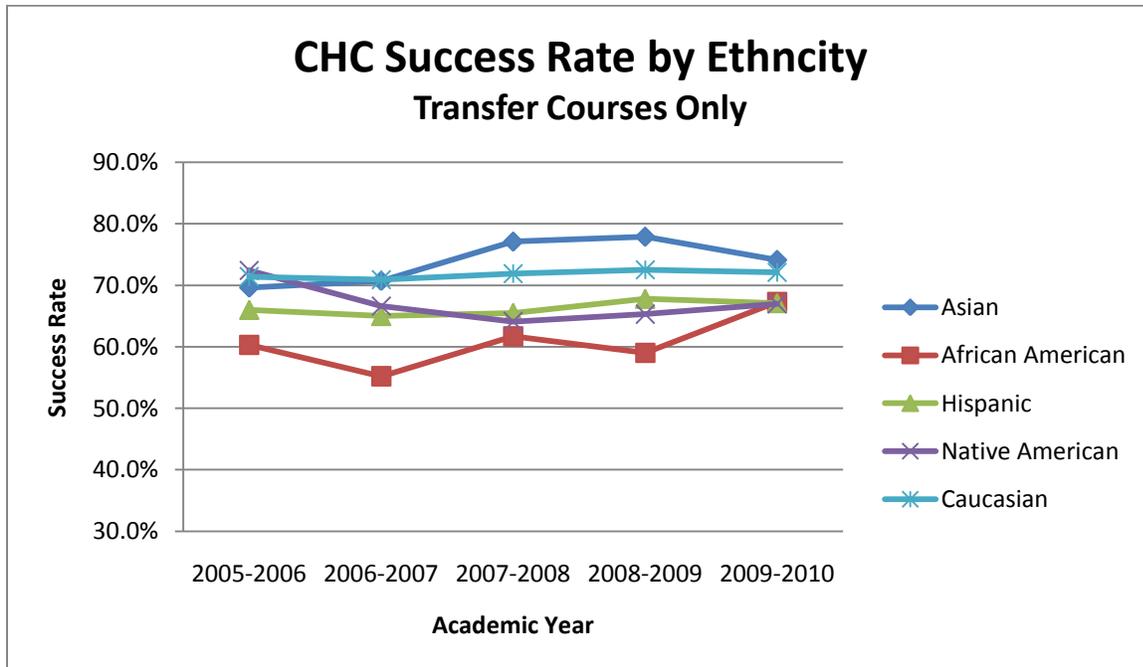
Note: In 2009-2010 the course success rates of African American (67%), Native American (67%), and Hispanic (67%) students were substantially (ES ranged from .10 to .21) lower than the course success rates of Caucasian (72%) and Asian (77%) students. Asian students exhibited a substantially (ES = .10) higher course success rate than Caucasian students.

Figure 4: Retention Rates in Non-Basic Skills Courses from 2005 – 2006 to 2009 – 2010 by Ethnicity.



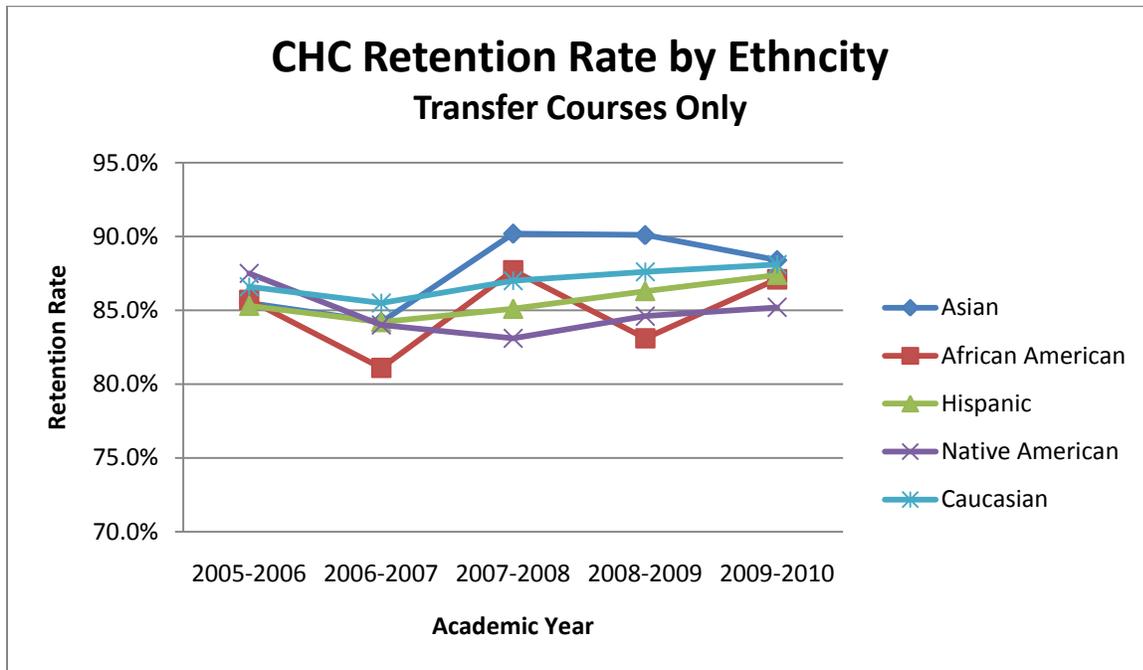
Note: In 2009-2010 the course retention rate of Native American (85%) students was substantially (ES = .17) lower than the course retention rate of Asian (90%) students.

Figure 5: Success Rates in Transfer Courses from 2005 – 2006 to 2009 – 2010 by Ethnicity.



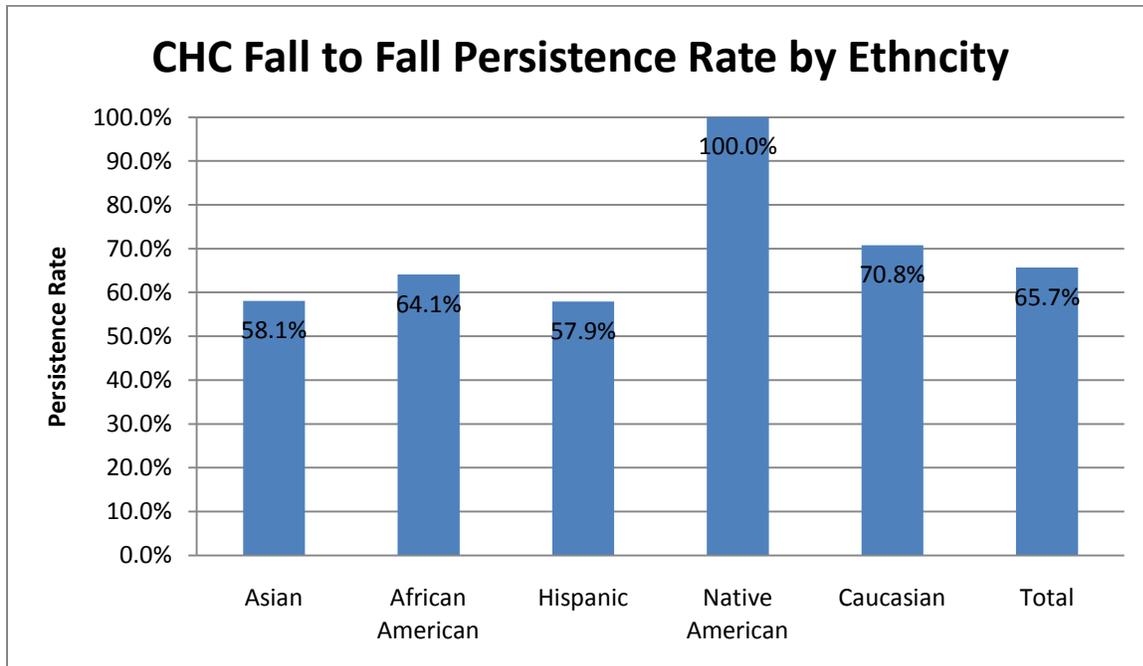
Note: In 2009-2010 the course success rates of African American (67%) and Hispanic (67%) students were substantially (ES ranged from .11 to .15) lower than the course success rates of Caucasian (72%) and Asian (74%) students.

Figure 5: Retention Rates in Transfer Courses from 2005 – 2006 to 2009 – 2010 by Ethnicity.



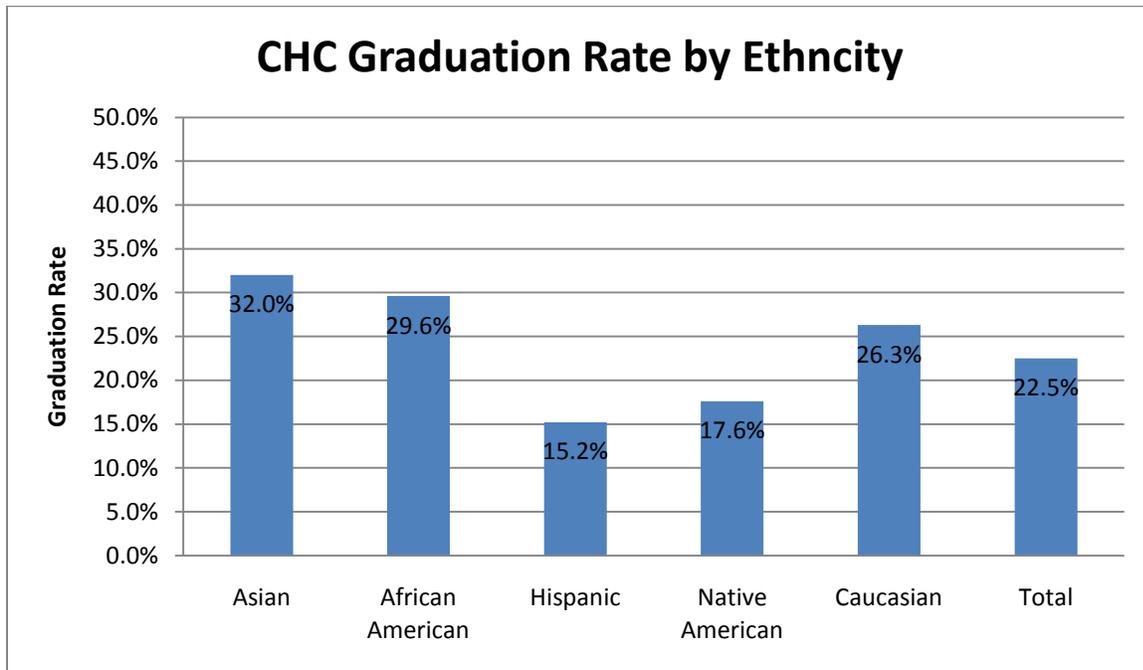
Note: In 2009-2010 none of the retention rates were substantially different from each other.

Figure 6: CHC Fall 2007 to Fall 2008 Persistence Rate by Ethnicity.



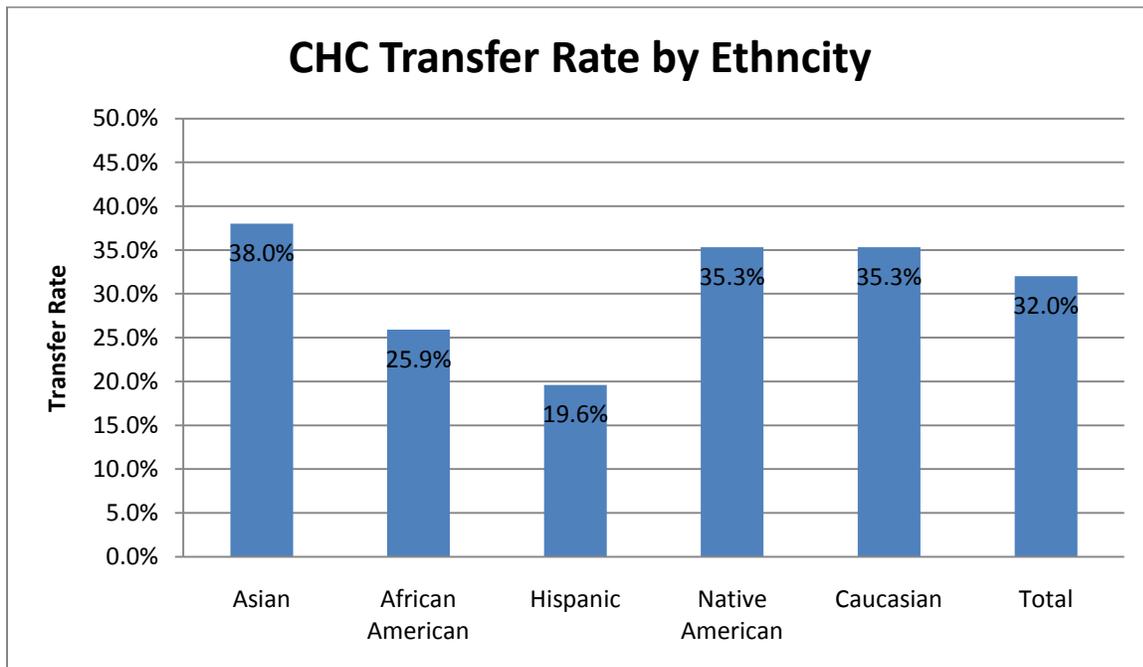
Note: Caucasian students (71%) had a substantially (ES ranged from .15 to .27) higher persistence rate than Asian (58%), African American (64%), and Hispanic (58%) students.

Figure 7: Graduation Rate for the CHC ARCC Cohort from 2003 – 2004 to 2008 - 2009 by Ethnicity.



Note: Caucasian (26%) students had a substantially (ES = .26) higher graduation rate than Hispanic (15%) students.

Figure 8: Transfer Rate for the CHC ARCC Cohort from 2003 – 2004 to 2008 - 2009 by Ethnicity.



Note: Caucasian (35%) students had a substantially (ES ranges from .34 to .43) higher transfer rate than Hispanic (20%) students.

Table 4: Success Rate in Basic Skills Courses from 2005 – 2006 to 2009 – 2010 by Ethnicity.

	2005-2006			2006-2007			2007-2008			2008-2009			2009-2010		
	#	N	%	#	N	%	#	N	%	#	N	%	#	N	%
Asian	38	55	69.1	64	91	70.3	74	107	69.2	82	114	71.9	85	112	75.9
African American	33	84	39.3	38	90	42.2	62	107	57.9	60	134	44.8	74	121	61.2
Hispanic	230	463	49.7	278	502	55.4	330	656	50.3	467	758	61.6	487	800	60.9
Native American	8	16	50.0	12	16	75.0	13	26	50.0	14	25	56.0	18	30	60.0
Caucasian	326	540	60.4	447	711	62.9	492	798	61.7	498	791	63.0	512	770	66.5
Other/Unknown	44	78	56.4	61	97	62.9	51	91	56.0	55	103	53.4	88	138	63.8
Total	679	1,236	54.9	900	1,507	59.7	1,022	1,785	57.3	1,176	1,925	61.1	1,264	1,971	64.1

Note: In 2009-2010 the course success rates of Hispanic (61%) students was substantially (ES = .31) lower than the course success rates of Asian (76%) students.

Table 5: Retention Rate in Basic Skills Courses from 2005 – 2006 to 2009 – 2010 by Ethnicity.

	2005-2006			2006-2007			2007-2008			2008-2009			2009-2010		
	#	N	%	#	N	%	#	N	%	#	N	%	#	N	%
Asian	50	55	90.9	75	91	82.4	96	107	89.7	100	114	87.7	104	112	92.9
African American	71	84	84.5	73	90	81.1	89	107	83.2	107	134	79.9	110	121	90.9
Hispanic	392	463	84.7	394	502	78.5	520	656	79.3	670	758	88.4	709	800	88.6
Native American	14	16	87.5	14	16	87.5	21	26	80.8	20	25	80.0	23	30	76.7
Caucasian	447	540	82.8	592	711	83.3	668	798	83.7	683	791	86.3	669	770	86.9
Other/Unknown	60	78	76.9	81	97	83.5	75	91	82.4	89	103	86.4	121	138	87.7
Total	1034	1,236	83.7	1,229	1,507	81.6	1,469	1,785	82.3	1,669	1,925	86.7	1,736	1,971	88.1

Note: In 2009-2010 none of the retention rates were substantially different from each other.

Table 6: Success Rate in Non-Basic Skills Courses from 2005 – 2006 to 2009 – 2010 by Ethnicity.

	2005-2006			2006-2007			2007-2008			2008-2009			2009-2010		
	#	N	%	#	N	%	#	N	%	#	N	%	#	N	%
Asian	1,180	1,616	73.0	1,332	1,812	73.5	1,368	1,772	77.2	1,665	2,116	78.7	1,534	1,996	76.9
African American	743	1,170	63.5	638	1,100	58.0	765	1,189	64.3	920	1,500	61.3	1,088	1,607	67.7
Hispanic	4,621	6,906	66.9	5,161	7,749	66.6	5,312	7,961	66.7	6,571	9,524	69.0	6,518	9,609	67.8
Native American	286	391	73.1	335	451	74.3	313	460	68.0	261	373	70.0	283	417	67.9
Caucasian	12,531	17,133	73.1	12,938	17,766	72.8	13,300	18,235	72.9	14,645	19,998	73.2	13,830	19,106	72.4
Other/Unknown	1,425	2,000	71.3	1,496	2,112	70.8	1,414	1,958	72.2	1,669	2,270	73.5	1,280	1,826	70.1
Total	20,786	29,216	71.1	21,900	30,990	70.7	22,472	31,575	71.2	25,731	35,781	71.9	24,533	34,561	71.0

Note: In 2009-2010 the course success rates of African American (67%), Native American (67%), and Hispanic (67%) students were substantially (ES ranged from .10 to .21) lower than the course success rates of Caucasian (72%) and Asian (77%) students. Asian students exhibited a substantially (ES = .10) higher course success rate than Caucasian students.

Table 7: Retention Rate in Non-Basic Skills Courses from 2005 – 2006 to 2009 – 2010 by Ethnicity.

	2005-2006			2006-2007			2007-2008			2008-2009			2009-2010		
	#	N	%	#	N	%	#	N	%	#	N	%	#	N	%
Asian	1,413	1,616	87.4	1,556	1,812	85.9	1,604	1,772	90.5	1,919	2,116	90.7	1,793	1,996	89.8
African American	1,011	1,170	86.4	904	1,100	82.2	1,042	1,189	87.6	1,272	1,500	84.8	1,402	1,607	87.2
Hispanic	5,915	6,906	85.7	6,570	7,749	84.8	6,840	7,961	85.9	8,297	9,524	87.1	8,388	9,609	87.3
Native American	347	391	88.7	392	451	86.9	391	460	85.0	323	373	86.6	353	417	84.7
Caucasian	15,007	17,133	87.6	15,378	17,766	86.6	15,921	18,235	87.3	17,610	19,998	88.1	16,845	19,106	88.2
Other/Unknown	1,744	2,000	87.2	1,822	2,112	86.3	1,725	1,958	88.1	2,025	2,270	89.2	1,618	1,826	88.6
Total	25,437	29,216	87.1	26,622	30,990	85.9	27,523	31,575	87.2	31,446	35,781	87.9	30,399	34,561	88.0

Note: In 2009-2010 the course retention rate of Native American (85%) students substantially (ES = .17) lower than the course retention rate of Asian (90%) students.

Table 8: Success Rate in Transfer Level Courses from 2005 – 2006 to 2009 – 2010 by Ethnicity.

	2005-2006			2006-2007			2007-2008			2008-2009			2009-2010		
	#	N	%	#	N	%	#	N	%	#	N	%	#	N	%
Asian	819	1,176	69.6	923	1,305	70.7	984	1,277	77.1	1,197	1,537	77.9	1,101	1,486	74.1
African American	473	785	60.3	400	725	55.2	490	794	61.7	620	1,051	59.0	821	1,220	67.3
Hispanic	3,303	5,003	66.0	3,607	5,547	65.0	3,721	5,683	65.5	4,703	6,932	67.8	4,922	7,331	67.1
Native American	215	297	72.4	195	293	66.6	209	326	64.1	169	259	65.3	221	330	67.0
Caucasian	9,131	12,785	71.4	9,226	13,020	70.9	9,763	13,572	71.9	11,188	15,434	72.5	11,272	15,644	72.1
Other/Unknown	960	1,410	68.1	1,000	1,482	67.5	1,032	1,447	71.3	1,283	1,772	72.4	1,035	1,490	69.5
Total	14,901	21,456	69.4	15,351	22,372	68.6	16,199	23,099	70.1	19,160	26,985	71.0	19,372	27,501	70.4

Note: In 2009-2010 the course success rates of African American (67%) and Hispanic (67%) students were substantially (ES ranged from .11 to .15) lower than the course success rates of Caucasian (72%) and Asian (74%) students.

Table 9: Retention Rate in Transfer Level Courses from 2005 – 2006 to 2009 – 2010 by Ethnicity.

	2005-2006			2006-2007			2007-2008			2008-2009			2009-2010		
	#	N	%	#	N	%	#	N	%	#	N	%	#	N	%
Asian	1,005	1,176	85.5	1,099	1,305	84.2	1,152	1,277	90.2	1,385	1,537	90.1	1,314	1,486	88.4
African American	673	785	85.7	588	725	81.1	696	794	87.7	873	1,051	83.1	1,063	1,220	87.1
Hispanic	4,268	5,003	85.3	4,672	5,547	84.2	4,838	5,683	85.1	5,982	6,932	86.3	6,404	7,331	87.4
Native American	260	297	87.5	246	293	84.0	271	326	83.1	219	259	84.6	281	330	85.2
Caucasian	11,071	12,785	86.6	11,127	13,020	85.5	11,807	13,572	87.0	13,515	15,434	87.6	13,782	15,644	88.1
Other/Unknown	1,208	1,410	85.7	1,249	1,482	84.3	1,266	1,447	87.5	1,564	1,772	88.3	1,321	1,490	88.7
Total	18,485	21,456	86.2	18,981	22,372	84.8	20,030	23,099	86.7	23,538	26,985	87.2	24,165	27,501	87.9

Note: In 2009-2010 none of the retention rates were substantially different from each other.

Table 10: ARCC Fall to Fall Persistence Rate from 2007 to 2008 by Ethnicity.

Ethnicity	First-Time Student Cohort		Persisted from Fall 2007 to Fall 2008		Persistence Rate
	#	Column %	#	Column %	
Asian	43	5.3	25	4.7	58.1
African American	39	4.8	25	4.7	64.1
Hispanic	242	29.7	140	26.2	57.9
Native American	7	0.9	7	1.3	100.0
Other / Unknown	59	7.2	38	7.1	64.4
Caucasian	424	52.1	300	56.1	70.8
Total	814	100.0	535	100.0	65.7

Note: Caucasian students (71%) had a substantially (ES ranged from .15 to .27) higher persistence rate than Asian (58%), African American (64%), and Hispanic (58%) students.

Table 11: ARCC Graduation Rate from 2003 – 2004 to 2008 – 2009 by Ethnicity.

Ethnicity	First-Time Student Cohort		Earned Certificate (18+)		Earned Degree		Earned Certificate or Degree		Graduation Rate
	#	Column %	#	Column %	#	Column %	#	Column %	
Asian	50	5.3	4	13.8	15	7.5	16	7.5	32.0
African American	27	2.9	1	3.4	8	4.0	8	3.8	29.6
Hispanic	184	19.6	0	0.0	28	14.1	28	13.2	15.2
Native American	17	1.8	0	0.0	3	1.5	3	1.4	17.6
Other / Unknown	133	14.1	6	20.7	33	16.6	35	16.5	23.0
Caucasian	530	56.3	18	62.1	112	56.3	122	57.5	26.3
Total	941	100.0	29	100.0	199	100.0	212	100.0	22.5

Note: Caucasian (26%) students had a substantially (ES = .26) higher graduation rate than Hispanic (15%) students.

Table 12: ARCC Transfer Rate from 2003 – 2004 to 2008 – 2009 by Ethnicity.

Ethnicity	First-Time Student Cohort		Transfer Directed		Transfer Prepared		Transfer to Four-Year University		Transfer Rate
	#	Column %	#	Column %	#	Column %	#	Column %	
Asian	50	5.3	24	6.7	14	6.3	19	6.3	38.0
African American	27	2.9	17	2.8	5	2.3	7	2.3	25.9
Hispanic	184	19.6	129	15.4	24	10.9	36	12.0	19.6
Native American	17	1.8	12	1.4	0	0.0	6	2.0	35.3
Other / Unknown	133	14.1	83	14.0	39	17.6	46	15.3	34.6
Caucasian	530	56.3	316	59.8	139	62.9	187	62.1	35.3
Total	941	100.0	583	100.0	221	100.0	301	100.0	32.0

Note: Caucasian (35%) students had a substantially (ES ranges from .34 to .43) higher transfer rate than Hispanic (20%) students.

Any questions regarding this report can be requested from the Office of Institutional Research at: (909) 389-3206 or you may send an e-mail request to kwurtz@craftonhills.edu. (Datatel_Placements_20110203_CoursesOnly_0910_CHC.sav; 1011_CHC_Equity_Assessment.docx).