Analysis of Student Performance for Students utilizing CHC Disabled Student Programs & Services in the 2012-2013 Academic Year Prepared by Benjamin Gamboa

Purpose of Brief

This brief analyzes student performance measurements, such as term-to-term retention, course completion, and course success, for students utilizing CHC DSPS in the 2012-2013 academic year.

Institutional Effectiveness,

Research & Planning

Summary of Findings

- DSPS provided service to 339 students in the 2012-2013 academic year.
- DSPS students were substantially (ES = 0.30) and statistically significantly (p < 0.001) more likely to be retained from the Fall 2012 to the Spring 2013 term (85%) than students earning a GOR in the same course sections (71%).

Figure 1: Student Performance Measures



<u>Overview</u>

CHC Disabled Student Programs & Services (DSPS) facilitates equal opportunities for an education commensurate with a student's abilities, interests, goals and needs. DSPS provides support services, specialized equipment and educational accommodation to students with disabilities so they can participate fully and benefit equitably from the college experience. To qualify for support services, a student must be enrolled at CHC, have a verifiable disability that results in an educational limitation that inhibits the student's ability to participate in the general offerings of the college without additional specialized services and must have the ability to benefit from instruction.

Methodology

Students who were registered with DSPS and met the requisite four or more contacts with DSPS staff in an academic year were identified as DSPS students. In order to control for various factors that influence student performance, students were identified for comparison if they earned a grade on record (GOR) in the same course section as a DSPS student. There are limitations to this comparison because DSPS students have an identified disability whereas students in the comparison group may or may not have a disability and may or may not by at the same skill level.

Table 1 illustrates the unduplicated headcount of DSPS students and students earning a grade on record in the same course sections. DSPS provided service to 339 students in the 2012-2013 academic year.

Table 1: Unduplicated headcount by student group

Population	N	%
Comparison Group	5,684	94.4%
DSPS Students	339	5.6%
Total	6,023	100.0%

Note: "N" is the number of students, and "%" is the percentage of students in each group.

A GOR is defined as earning a grade of A, B, C, D, F, P, NP, I or W. Course completion is defined as earning a grade of A, B, C, D, F, P, NP, or I. Course success is defined as earning a grade of A, B, C, or P. Termto-term retention is determined by earning a GOR in a primary term after earning a GOR in the previous primary term.

The effect size statistic was used to indicate the size of the difference on student performance between DSPS students and students earning a GOR in the same sections. A method of interpreting effect size was developed by Jacob Cohen, a renowned statistician and psychologist.

Jacob Cohen defined "small", "medium", and "large" effect sizes. He explained that an effect size of .20, .50, and .80 can be small, medium, and large, respectively. An effect size of .20 or higher is considered meaningful. 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 2 illustrates the demographics of DSPS students and students earning a GOR in the same course sections. DSPS students were more likely to be Caucasian (54%) and 40-49 years old (11%) than those earning a GOR in the same course sections (43% and 4%, respectively). DSPS students were less likely to be Hispanic (31%) than those earning a GOR in the same course sections (41%).

Domographia	Cohort	Student	DSPS Student		
Demographic	Ν	%	Ν	%	
Asian	343	6.0%	12	3.5%	
African American	402	7.1%	25	7.4%	
Hispanic	2,340	41.2%	104	30.7%	
Native American	107	1.9%	12	3.5%	
Caucasian	2,461	43.3%	183	54.0%	
Other/Unknown	31	.5%	3	.9%	
Female	2,965	52.2%	174	51.3%	
Male	2,708	47.6%	162	47.8%	
Missing	11	.2%	3	.9%	
19 or younger	1,917	33.7%	115	33.9%	
20-24	2,224	39.1%	102	30.1%	
25-29	693	12.2%	33	9.7%	
30-34	304	5.3%	20	5.9%	
35-39	171	3.0%	19	5.6%	
40-49	236	4.2%	36	10.6%	
50 and above	139	2.4%	14	4.1%	

Table 2: Demographics by student group

Table 3 analyzes the course completion rates, success rates, and term-to-term retention of DSPS students and students earning a GOR in the same course sections. DSPS students were substantially (ES = 0.30) and statistically significantly (p < 0.001) more likely to be retained from the Fall 2012 term to the Spring 2013 term (85%) than students earning a GOR in the same course sections (71%). In addition, DSPS students were also statistically significantly (p = 0.017) more likely to complete their course (93%) than students earning a GOR in the same course sections (92%). DSPS students were statistically significantly (p = 0.006) less likely to successfully complete their course (70%) than students earning a GOR in the same course sections (73%).

Table 3: Student performance by student group

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Measurement	#	Ν	%	#	Ν	%	ES	p-value
Course Completion	23,365	25505	91.6%	1,831	1,968	93.0%	0.05	0.017
Success	18,653	25505	73.1%	1,382	1,968	70.2%	-0.07	0.006
Term Persistence	3,124	4394	71.1%	242	286	84.6%	0.30	<0.001

Any questions regarding this brief can be directed to the Office of Institutional Effectiveness, Research, and Planning at (909) 389-3390 or you may send an email to <u>bgamboa@craftonhills.edu</u>: Research_Brief_381.docx; Grades_CHC_GOR_20130625_1213.sav.