

IRP@FHDA

To: Laureen Balducci, Dean of Counseling and Matriculation, Foothill College
From: Lourdes Del Rio-Parent, PhD, Sr. Research Analyst/Data Warehouse Coordinator FHDA
Date: November 27, 2013
Re: Education plan status for students enrolled in CNSL 5 at Foothill College, summer 2013

This document provides descriptive statistics for students enrolled in CNSL 5¹ in the summer of 2013 at Foothill College segregated by Degree Works² activity (i.e., whether they had an active and approved education plan in this degree audit system). In the attached tables, figures for demographics (e.g., age, race/ethnicity, gender) and academic factors (e.g., student type, educational goal, fall 2013 enrollment status) are provided and segregated by Degree Works activity/education plan status³ to (a) identify the extent to which CNSL 5 students have used this tool, and (b) explore whether these factors can help predict student use of this type of technology. The analyses also began exploring the extent to which data on student education plan status, as documented by this system, can help predict student retention (e.g., summer to fall). Finally, in order to have a better understanding on how these factors or variables correlated and could bias the observed relationships, correlation and regression analyses were performed to find the factor(s) that best accounted for students' use of Degree Works to develop an education plan.

A total of 672 students enrolled in CNSL 5 in the summer of 2013, and 256 (about 38%) had at least one active and approved education plan⁴ in Degree Works (see Table 1). About 67% of the education plans were approved between the months of July and September of 2013, and 30% between October and November of 2013. The average age for the students was 19 (73% were 18 or younger), and 67%

¹ CNSL, Introduction to College, is a 1 unit course designed to provide students with an orientation on academic policies, resources, programs and services at the college; introduction to California systems of higher education; and help in the formulation of education plan.

² Ellucian web-based degree audit system

³ Dichotomous variable: having or not having at least one preliminary education plan that is active and has been approved by a counselor. Data extracted on November 20, 2013.

⁴ The education plans were assumed to be preliminary, given that students are just beginning their higher education. Also, at this point, we have not found or determined how to identify comprehensive plans within Degree Works.

graduated from high school in 2013⁵ (see age group figures in Table 2). Students were primarily first-time students, 74% (see Table 3). The data showed no significant gender differences (see Table 4). Regarding ethnic/racial group composition, White students were the majority, about 34%; followed by Hispanics, 30%; and Asians, 23% (see Table 5)⁶. The data only showed five international students. Results in Table 7 and Table 8 indicated that students with an education plan in Degree Works and a transfer goal were somewhat more likely to enroll from summer to fall than students without a plan in this system and other educational goals, respectively.

With respect to factors that could help predict students' use of Degree Works for the development and approval of an education plan, descriptive statistics suggested a possible relationship between race/ethnicity and educational goal—Hispanics and students who reported the goal to transfer after obtaining a degree showed a slightly overrepresentation in the group of students with approved education plans in Degree Works, when compared to their respective groups. (See Table 5 and Table 6.) To explore reasons that could better explain these findings, correlation and regression analyses were conducted that included these two factors (Hispanic ethnicity and transfer as educational goal) and a third one, the level of Degree Works activity in the section in which the student enrolled. The purpose of this analysis was to test whether students' use of Degree Works was better explained by the section. In other words, whether students who were most likely to have an approved and active education plan in Degree Works were those who enrolled in sections in which this activity was emphasized or reinforced. The level to which Degree Works was emphasized within a section was based on the percentage (decimal value) of students with Degree Works activity for the class, independently of plan approval status. Dichotomized variables were used for Hispanic status (Hispanic students, 1; others, 0) and transfer goal (transfer with or without degree, 1; other goals, 0).

Correlation coefficients in Table 10 showed that Hispanic students were more likely (a) to have an approved and active education plan in Degree Works than students from other ethnic groups, and (b) enrolled in sections in which this system was emphasized. Students with a transfer educational goal were also more likely to enroll in sections that showed higher levels of Degree Works activity. On the other hand, results for the regression analyses showed that when taking into account students' ethnicity

⁵ High school with the largest representation in the group included Mountain View High, 53 (7.9%); Los Altos High, 42 (6.3%); Homestead High, 35 (5.2%); Henry M Gunn High, 25 (3.7%); Palo Alto High, 20 (2.9%); Evergreen Valley High, 19 (2.8%); Menlo-Atherton High, 17 (2.5%); and, Piedmont Hills High, 15 (2.2%).

⁶ College level data (MIS summer 2013) showed the following percentages for students' race/ethnicity: White, 35%; Asian, 28%; and, Hispanic, 18%.

(Hispanic), educational goal (transfer), and level of Degree Works activity within the section in which the enrolled altogether, the only significant factor for predicting students' use of this system for the development of an educational was the level of Degree Works activity in the section (see Table 11). Figures in Table 12 show clear differences regarding use of Degree Works (activity) across sections and instructors.

In conclusion, results suggest that the extent to which CNSL 5 students will use Degree Works is highly dependent on to the extent to which this is emphasized or reinforced by the instructor in the section in which the students enrolled. The data showed a strong support for the thesis that the involvement of instructors, counselors, and advisors will be the most important factor for the successful implementation and development of this system as an effective tool for students for the development of their education plan.

Table 1.

CNSL 5 Student Head Count and Degree Works Activity Level

<i>Degree Works Activity Level</i>	Count	Percent
Activity-Approved Ed Plan	256	38%
Activity-Not Approved Ed Plan	130	19%
No Degree Works Activity	286	43%
Total	672	100%

Notes:

Includes students registered by daily census date (enrollment status with apportionment indicator flag) on CNSL 5, summer 2013 at Foothill College

Activity-Approved Ed Plan: CNSL 5 students who, based on Degree Works data, had an approved, locked, and active plan as of November 20, 2013.

Activity-Not Approved Ed Plan: Degree Works data show that the student has at least begun developing an educational plan, but it has not been approved.

No Degree Work Activity: CNSL 5 students who did not have a record in Degree Works as of November 20, 2013.

Due to lack of valid documentation on how data is processed and stored within the Degree Works system currently working at FHDA, including data extracted from the Banner, details on the educational plan were not taking into account in this study.

Table 2.

CNSL 5 Student Head Count by Age Group and Educational Plan Status

<i>Age Group</i>	DW Ed Plan		No DW Ed Plan		CNSL 5 Total	
	Count	Percent	Count	Percent	Count	Percent
18 or Younger	184	71.9%	306	73.6%	490	72.9%
Older than 18	72	28.1%	110	26.4%	182	27.1%
Total	256	100.0%	416	100.0%	672	100.0%

Notes:

DW Ed Plan: CNSL 5 students who, based on Degree Works data, had an approved and active educational plan as of November 20, 2013.

No DW Ed Plan: Students without an approved and active educational in the Degree Works system, as of November 20, 2013, independently of Degree Works activity/usage.

Age refers to student age at the beginning of summer term, 01-JUL-13

Table 3.**CNSL 5 Student Head Count by Student Type and Educational Plan Status**

<i>Student Type</i>	DW Ed Plan		No DW Ed Plan		CNSL 5 Total	
	Count	Percent	Count	Percent	Count	Percent
First Time	205	80.1%	290	69.7%	495	73.7%
First Time-Transfer	25	9.8%	36	8.7%	61	9.1%
Returning	6	2.3%	12	2.9%	18	2.7%
Continuing	19	7.4%	34	8.2%	53	7.9%
Special admit	1	0.4%	44	10.6%	45	6.7%
Total	256	100.0%	416	100.0%	672	100.0%

Table 4.**CNSL 5 Student Head Count by Gender and Educational Plan Status**

<i>Gender</i>	DW Ed Plan		No DW Ed Plan		CNSL 5 Total	
	Count	Percent	Count	Percent	Count	Percent
Female	128	50.2%	203	49.2%	331	49.6%
Male	127	49.8%	210	50.8%	337	50.4%
Total	255	100.0%	413	100.0%	668	100.0%

Notes:

Missing gender data, 4 students.

Table 5.**CNSL 5 Student Head Count by Ethnic/Race Group and Educational Plan Status**

<i>Ethnic/Race Group</i>	DW Ed Plan		No DW Ed Plan		CNSL 5 Total	
	Count	Percent	Count	Percent	Count	Percent
White	71	27.7%	155	37.3%	226	33.6%
Asian	51	19.9%	106	25.5%	157	23.4%
Multiple Race	18	7.0%	33	7.9%	51	7.6%
Hispanic	96	37.5%	105	25.2%	201	29.9%
Black/African-American	12	4.7%	11	2.6%	23	3.4%
Unknown	3	1.2%	2	0.5%	5	0.7%
Pacific Islander	5	2.0%	4	1.0%	9	1.3%
Total	256	100.0%	416	100.0%	672	

Notes:

Hispanics include students who classified themselves as Hispanic, independently of race; multiple race includes students who identified more than one race/ethnic group, excluding Hispanic.

Table 6.**CNSL 5 Student Head Count by Educational Goal and Educational Plan Status**

<i>Educational Goal</i>	DW Ed Plan		No DW Ed Plan		CNSL 5 Total	
	Count	Percent	Count	Percent	Count	Percent
Obtain AA, transfer to 4 yr	147	57.6%	200	48.1%	347	51.7%
Transfer to a 4 year w/o AA	58	22.7%	106	25.5%	164	24.4%
Undecided on goal	15	5.9%	29	7.0%	44	6.6%
Obtain a 2 year AA/AS w/o tran	16	6.3%	25	6.0%	41	6.1%
4 yr student taking 4 yr reqs	5	2.0%	13	3.1%	18	2.7%
Complete high school credits	0	0.0%	18	4.3%	18	2.7%
Prepare for a new career	5	2.0%	5	1.2%	10	1.5%
Earn a vocational certificate	2	0.8%	5	1.2%	7	1.0%
Educational development	0	0.0%	5	1.2%	5	0.7%
Formulate career plans, goals	1	0.4%	4	1.0%	5	0.7%
Obtain a 2 year vocational deg	4	1.6%	1	0.2%	5	0.7%
Maintain certificate/license	1	0.4%	3	0.7%	4	0.6%
Improve Basic Skills	1	0.4%	1	0.2%	2	0.3%
Advance in current job/career	0	0.0%	1	0.2%	1	0.1%
Total	255	100.0%	416	100.0%	671	100.0%

Notes:

Missing educational goal data, 1 student.

Table 7.**CNSL 5 Student Head Count by Fall Enrollment and Educational Plan Status**

<i>Fall Enrollment Status</i>	DW Ed Plan		No DW Ed Plan		CNSL 5 Total	
	Count	Percent	Count	Percent	Count	Percent
Enrolled in Fall	242	94.5%	370	88.9%	612	91.1%
Not enrolled in Fall	14	5.5%	46	11.1%	60	8.9%
Total	256	100.0%	416	100.0%	672	100.0%

Notes:

Fall enrollment is defines as enrolled by first census date at either De Anza or Foothill College

Table 8.

CNSL 5 Student Head Count by Educational Goal and Fall 2013 Enrollment Status within Enrollment Status

<i>Educational Goal</i>	Did not Enroll		Enrolled	
	Count	Percent	Count	Percent
Obtain AA, transfer to 4 yr	29	48.3%	318	52.0%
Transfer to a 4 year w/o AA	9	15.0%	155	25.4%
Obtain a 2 year AA/AS w/o tran	7	11.7%	34	5.6%
Undecided on goal	3	5.0%	41	6.7%
Formulate career plans, goals	0	0.0%	5	0.8%
Prepare for a new career	1	1.7%	9	1.5%
Earn a vocational certificate	0	0.0%	7	1.1%
Educational development	1	1.7%	4	0.7%
Maintain certificate/license	2	3.3%	2	0.3%
4 yr student taking 4 yr reqs	6	10.0%	12	2.0%
Advance in current job/career	1	1.7%	0	0.0%
Complete high school credits	1	1.7%	17	2.8%
Improve Basic Skills	0	0.0%	2	0.3%
Obtain a 2 year vocational deg	0	0.0%	5	0.8%
Total	60	100.0%	611	100.0%

Notes:

Fall enrollment relates to enrollment by census date at either De Anza or Foothill College
 Missing, 1 student missing ed goal from the group of student enrolled in fall 2013

Table 9.**CNSL 5 Student Head Count by Student Type and Fall 2013 Enrollment Status within the District**

<i>Student Type</i>	Enrollment Status					
	Did not Enroll		Enrolled		CNSL 5 Total	
	Count	Percent	Count	Percent	Count	Percent
First Time	26	43.3%	457	74.7%	495	73.7%
First Time-Transfer	16	26.7%	52	8.5%	61	9.1%
Returning	10	16.7%	36	5.9%	18	2.7%
Continuing	6	10.0%	24	3.9%	53	7.9%
Special admit	2	3.3%	43	7.0%	45	6.7%
Total	60	100.0%	612	100.0%	672	100.0%

Table 10.**Means, Standard Deviations, Intercorrelations, and Standardized Coefficient Alpha Reliability Estimates**

<i>Variable</i>	Mean	Standard Deviation	Intercorrelations			
			Degree Works Ed Plan	Transfer Ed Goal	Hispanic	Section Degree Works Act Pct
Degree Works Ed Plan	0.38	0.49	(0.24)			
Transfer Ed Goal	0.76	0.43	0.07	(0.51)		
Hispanic	0.30	0.46	0.13*	-0.02	(0.48)	
Section Degree Works Act Pct	0.57	0.32	0.48*	0.15*	0.15*	(0.16)

Notes:

N= 672

Degree Works Ed Plan, Transfer Ed Goal, and Hispanic Group were dichotomized; students were classified into two groups for each variable.

Degree Works Ed Plan: students with an approved and active plan, 1; others, 0.

Transfer Ed Goal: students who reported an educational goal related to transfer (transfer with or without degree), 1; others, 0.

Hispanic; students of Hispanic race or ethnicity, 1; others, 0.

Section Degree Works Act Pct: The percentage (decimal) of students in the section with Degree Work activity, independently of plan approval status.

Alpha reliability estimates, a measure of internal consistency, appear on the diagonal.

*p < .001

Table 11.

**Beta Weights and Uniqueness Indices Obtained in Multiple Regression Analyses
Predicting Educational Plan in Degree Works**

<i>Predictor</i>	Beta Weights		Uniqueness Indices	
	Beta	<i>t</i>	Unique Index	<i>F</i>
Transfer Ed Goal	0.01	0.1	0.00	-
Hispanic	0.06	1.6	0.00	-
Section Degree Works Act Pct	0.47	13.6*	0.21	183.7*

Notes:

N= 672

Degree Works Ed Plan, Transfer Ed Goal, and Hispanic Group were dichotomized; students were classified into two groups for each variable.

Degree Works Ed Plan: students with an approved and active plan, 1; others, 0.

Transfer Ed Goal: students who reported an educational goal related to transfer (transfer with or without degree), 1; others, 0.

Hispanic; students of Hispanic race or ethnicity, 1; others, 0.

Section Degree Works Act Pct: The percentage (decimal) of students in the section with Degree Work activity, independently of plan approval status.

Beta weights are standardized multiple regression coefficients obtained when 'Degree Works Ed Plan' was regressed on all three predictors.

Uniqueness indices indicate the percentage of variance in 'Degree Works Ed Plan' accounted for the predictor beyond the variance accounted by all other predictors in the regression equation.

Statistical significance of Beta and uniqueness indices were tested with t test (df=668) and F test (df= 1, 668), respectively.

*p < .001

Table 12.**Level of Degree Works Activity by Section and Instructor**

Section CRN	Percent Degree Works Activity	Student Head Count	Instructor Proxy ID	Instructor Average Degree Works Activity
11191	100.0%	14	303727	86.7%
11020	88.0%	24	303727	
10847	72.0%	18	303727	
11007	63.0%	32	302659	54.3%
10845	59.0%	22	302659	
10842	41.0%	22	302659	
10827	100.0%	19	301946	100.0%
10814	92.0%	24	300863	81.7%
10809	89.0%	19	300863	
10808	64.0%	28	300863	
10807	58.0%	24	299981	58.0%
10828	96.0%	23	295126	93.8%
10823	95.0%	21	295126	
10829	94.0%	17	295126	
10835	90.0%	20	295126	
10844	15.0%	26	292236	
11108	87.0%	31	289196	46.5%
11107	6.0%	17	289196	
10826	14.0%	28	287486	13.5%
10815	13.0%	23	287486	
10830	88.0%	24	283977	57.0%
10833	83.0%	18	283977	
10834	0.0%	19	283977	
10816	32.0%	22	277999	25.0%
10817	31.0%	16	277999	
10820	24.0%	25	277999	
10803	19.0%	27	277999	
10805	19.0%	26	277999	
10800	65.0%	26	275815	
10811	59.0%	17	275815	