CLA MIGRATION PROJECT – PROGRESS UPDATE
CLA Migration Patterns

WEDNESDAY, MARCH 6, 2019

Table 1

Why does migration matter?

Since 2012, CLA has typically gotten about 1,800-2,000 incoming freshmen and transfer students annually through direct admissions to CLA (approximately 500-600 freshmen and 1,200-1,600 transfers) (See Table 1). However, this fails to capture the amount of in-migration that occurs when students from other colleges and from undeclared migrate to CLA programs. Even after accounting for outflow from CLA (i.e. students leaving university or migrating to other colleges), CLA is still primarily an inflow

CLA Students at Entry - Cohort Sizes

B. COHORT YEAR TERM
(Multiple values)

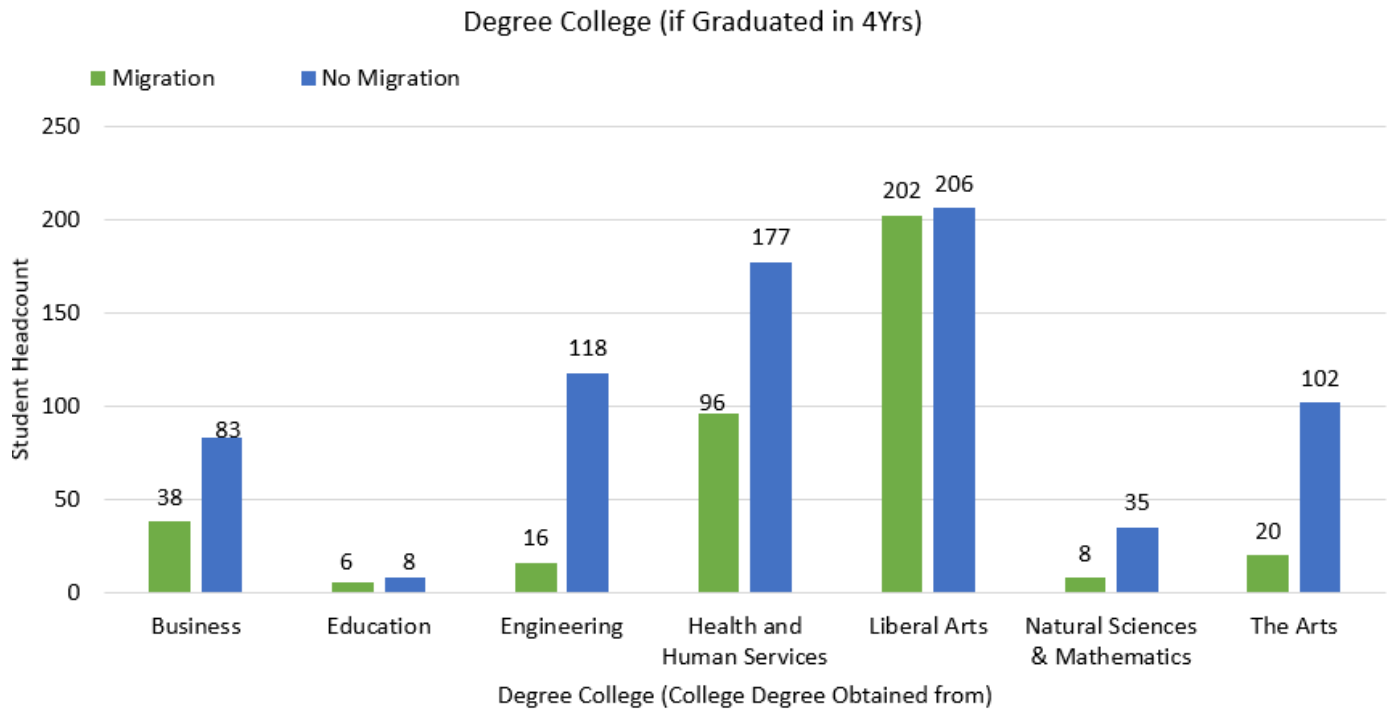| B. COHORT ..	FRESHMEN	TRANSFER
FALL 12	621	1,597
FALL 13	528	1,235
FALL 14	660	1,461
FALL 15	693	1,346
FALL 16	685	1,353
FALL 17	561	1,242
FALL 18	533	1,274

Table 2

CLA First-Time Freshmen Enrollment

COHORT YEAR TERM	COHORT COLLEGE	SEMESTER 1	SEMESTER 2	SEMESTER 3 / 1 YEAR METRIC	SEMESTER 4	SEMESTER 5 / 2 YEAR METRIC	SEMESTER 6	SEMESTER 7 / 3 YEAR METRIC	SEMESTER 8
FALL 13	Business		3	10	22	29	36	40	43
FALL 13	Education		1	2	1	1	4	6	6
FALL 13	Engineering			10	13	27	36	47	47
FALL 13	Health and Human Services		21	46	69	98	117	133	128
FALL 13	Liberal Arts	528	462	405	394	376	368	358	340
FALL 13	Natural Sciences & Mathematics		5	14	33	62	74	86	86
FALL 13	The Arts		5	11	13	22	24	24	24
FALL 13	University Programs		46	73	126	200	239	278	282
FALL 13	Total	528	543	571	671	815	898	972	956
FALL 13	Percent change over time		3%	8%	27%	54%	70%	84%	81%
FALL 14	Business		10	19	33	43	51	56	59
FALL 14	Education		2	6	6	9	9	11	12
FALL 14	Engineering		3	11	13	27	39	47	45
FALL 14	Health and Human Services		21	37	51	93	124	134	141
FALL 14	Liberal Arts	660	578	492	467	453	432	423	391
FALL 14	Natural Sciences & Mathematics		12	24	44	63	72	79	78
FALL 14	The Arts		6	10	15	24	25	26	25
FALL 14	University Programs		21	60	89	126	150	166	168
FALL 14	Total	660	653	659	718	838	902	942	919
FALL 14	Percent change over time		-1%	0%	9%	27%	37%	43%	39%
FALL 15	Business		14	24	41	51	55	59	
FALL 15	Education			2	3	3	4	4	
FALL 15	Engineering		5	12	16	26	28	33	
FALL 15	Health and Human Services		24	44	72	103	108	115	
FALL 15	Liberal Arts	693	613	550	516	491	468	464	
FALL 15	Natural Sciences & Mathematics		8	15	33	46	53	62	
FALL 15	The Arts		2	10	15	22	20	20	
FALL 15	University Programs		27	61	107	148	163	176	
FALL 15	Total	693	693	718	803	890	899	933	
FALL 15	Percent change over time		0%	4%	16%	28%	30%	35%	
FALL 16	Business		9	29	31	41			
FALL 16	Education			1	3	1			
FALL 16	Engineering		3	7	10	19			
FALL 16	Health and Human Services		16	43	61	76			
FALL 16	Liberal Arts	685	584	498	469	450			
FALL 16	Natural Sciences & Mathematics		8	17	18	25			
FALL 16	The Arts		5	7	15	17			
FALL 16	University Programs		10	50	108	142			
FALL 16	Total	685	635	652	715	771			
FALL 16	Percent change over time		-7%	-5%	4%	13%			
FALL 17	Business		8	20					
FALL 17	Education		2	5					
FALL 17	Engineering		3	9					
FALL 17	Health and Human Services		10	32					
FALL 17	Liberal Arts	561	502	427					
FALL 17	Natural Sciences & Mathematics		11	30					
FALL 17	The Arts		5	12					
FALL 17	University Programs		18	41					
FALL 17	Total	561	559	576					
FALL 17	Percent change over time		0%	3%					

college, meaning that CLA has to be able to serve hundreds of additional students from each incoming freshmen cohort due to migration (See Table 2).

In addition, as seen in Figure 1, out of the total number of students from the Fall 2013 cohort that graduated in four years, almost half of the students graduating from CLA migrated from somewhere else (202 of migrating students graduated, as compared to 206 from the original CLA entry cohort). Compared

Figure 1

Degree College (if Graduated in 4Yrs)

to number of migrating students that graduate in four years from other colleges, CLA still has the largest group.

In order to ensure that CLA is adequately prepared to receive these students – both in terms of enrollment management as well as in the wide array of services necessary to help them make a smooth transition – it is necessary for us to better be able to identify patterns of major switching. Our aim is thus to analyze migration for the Fall 2013 first-time freshmen (FTF) cohort, develop predictive models of migration and attrition, and better understand how the timing of migration affects outcomes such as 4-year graduation.

In addition, there is value to the university having a better understanding of the student population that migrates. As seen is Figure 2, about 38% of students migrate colleges sometime during their undergraduate degrees. Having a better understanding of migration patterns, including where students are migrating to and when they are migrating, as well as how these different migration patterns can impact time to degree, will be beneficial in our efforts to improving four-year graduation. As seen in Figure 3, 42% of Fall 2013 FTF students that did not migrate graduated in four years, as compared to 23% of Fall 2013 FTF students that did migrate colleges (at any point in time).

Figure 2

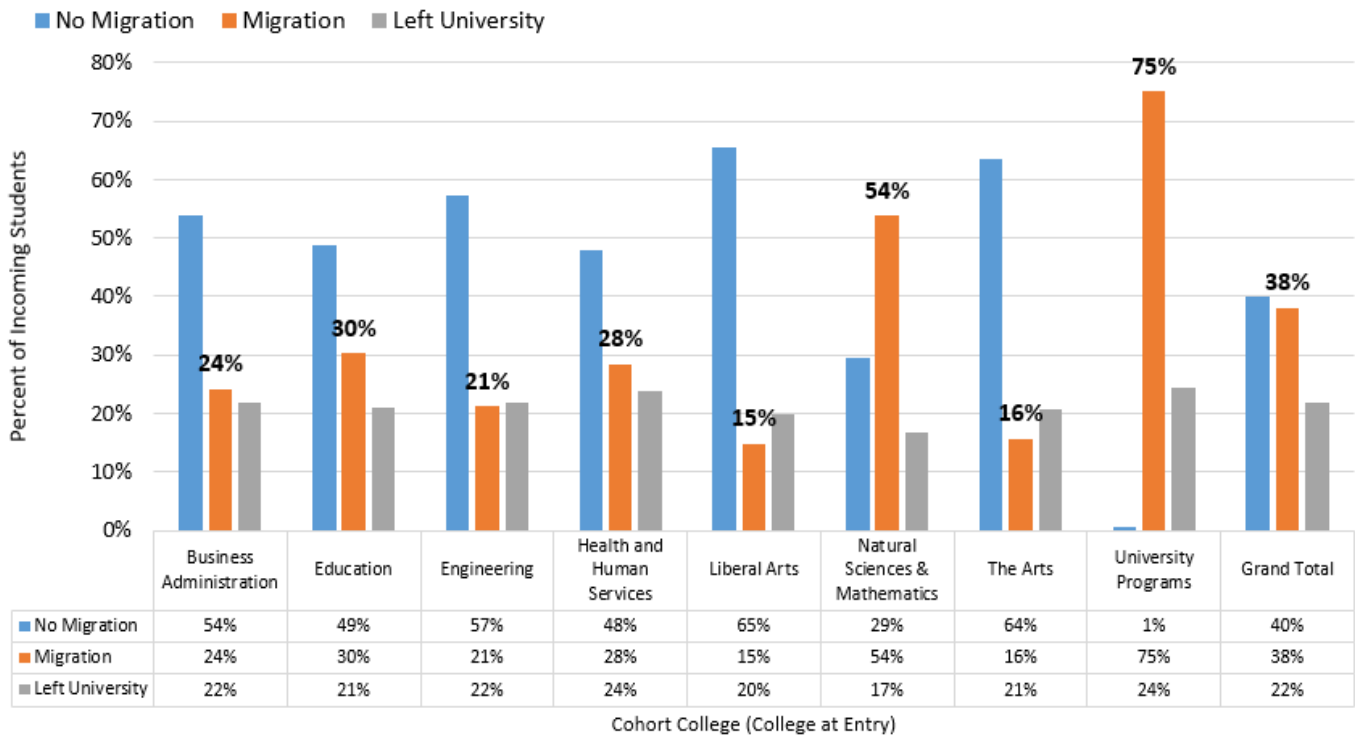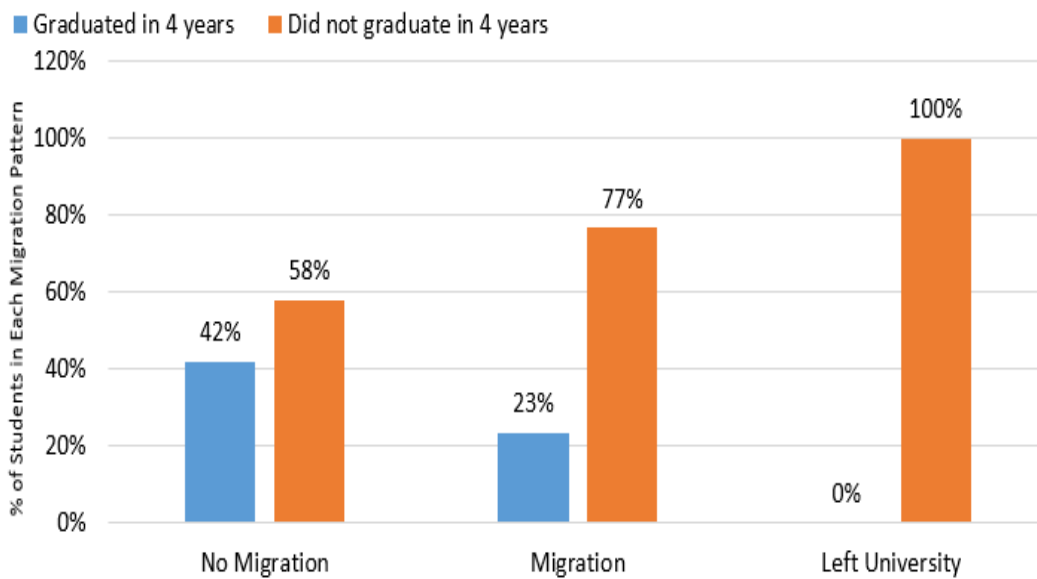## Migration Patterns by College for Fall 2013 Cohort

■ No Migration ■ Migration ■ Left University

	Business Administration	Education	Engineering	Health and Human Services	Liberal Arts	Natural Sciences & Mathematics	The Arts	University Programs	Grand Total
No Migration	54%	49%	57%	48%	65%	29%	64%	1%	40%
Migration	24%	30%	21%	28%	15%	54%	16%	75%	38%
Left University	22%	21%	22%	24%	20%	17%	21%	24%	22%

Cohort College (College at Entry)

Figure 3

Did F13 FTF Graduate in 4 Years? (Percentage by Migration Pattern)

■ Graduated in 4 years ■ Did not graduate in 4 years

No Migration: 42% / 58%
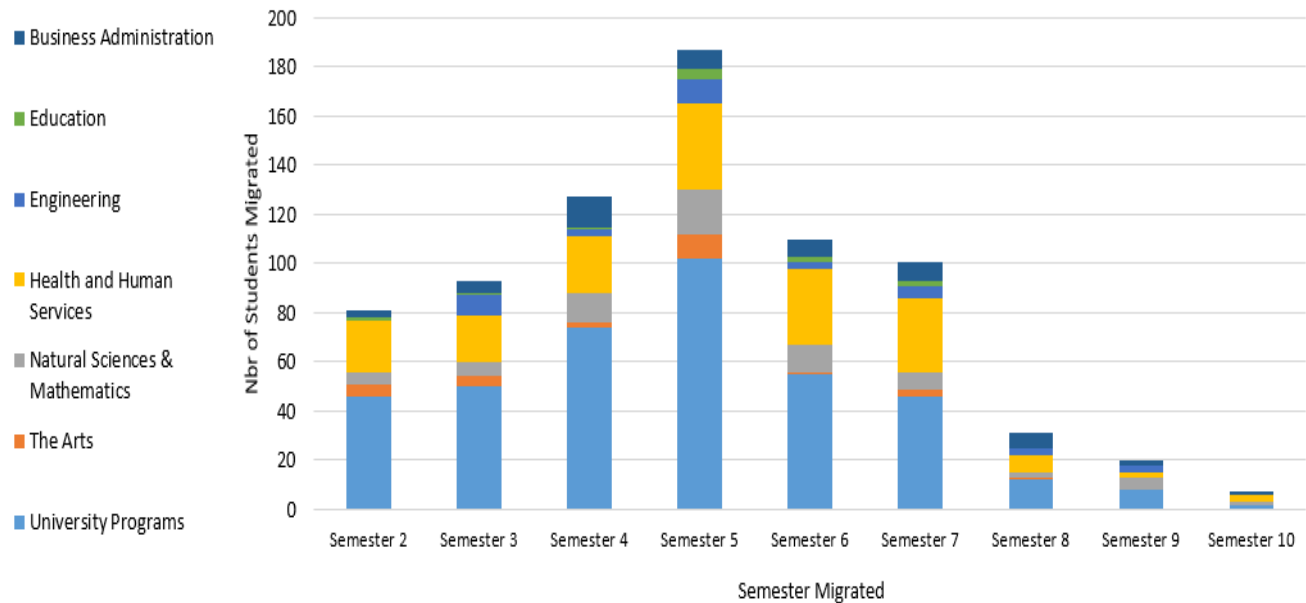Migration: 23% / 77%
Left University: 0% / 100%

When does migration to CLA happen?

As seen in Table 2, across different cohorts we can see students continually migrating from all the different colleges and from undeclared to CLA. Figure 3 below specifically focuses on the Fall 2013 FTF cohort. Although CLA started with **528** FTF for the Fall 2013 cohort, an additional **757** students from that same cohort have migrated from other colleges and undeclared. Almost 40% of migration into CLA occurred by the end of the second year (Semester 4). However, an additional 39% occurred in the third year (Semesters 5 & 6), 17% occurred in the fourth year (Semesters 7 & 8) and about 4% in the fifth year (Semesters 9 & 10).

Figure 3

Fall 2013 FTF Migration Into CLA By College & Semester Migrated

Row Labels	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8	Semester 9	Semester 10	Grand Total
Business Administration	3	5	12	8	7	8	6	2	1	52
Education	1	1	1	4	2	2				11
Engineering		8	3	10	3	5	3	3		35
Health and Human Services	21	19	23	35	31	30	7	2	3	171
Natural Sciences & Mathematics	5	6	12	18	11	7	2	5	1	67
The Arts	5	4	2	10	1	3	1			26
University Programs	46	50	74	102	55	46	12	8	2	395
Grand Total	81	93	127	187	110	101	31	20	7	757

Who is migrating to CLA?

What colleges and departments are students coming from?

As seen in Figure 1 above, the largest migrating group came from undeclared (52%), followed by CHHS (23%) and CNSM (9%). Although students migrating come from many different departments, about 18% of migrating students come from the following three departments – Biological Services (7%), Criminal Justice (6%), and Kinesiology (5%).
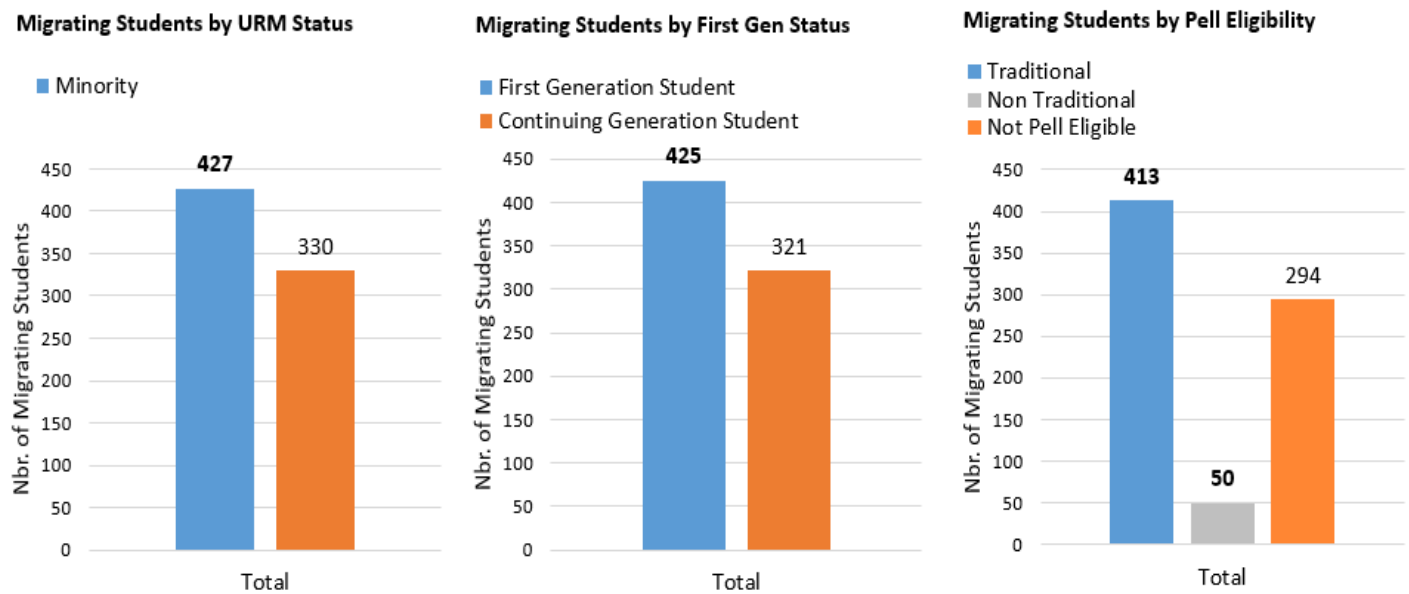
As seen in Table 2 and Figure 1, the largest groups of students migrating into CLA come from undeclared, Health and Human Services, and College of Natural Sciences and Mathematics.

What are the demographics of students migrating?

In light of the achievement gap issue that continues both in terms of persistence and graduation, it is also important to recognize that minority, first generation, and Pell-eligible students also have higher rates of migration to CLA than non-minority, continuing student, and non-Pell-eligible students (See Figure 4).

- While minority students made up 44% of the Fall 13 FTF cohort, 56% of students that migrated to CLA were minority students.
- While first-generation students made up about 49% of the Fall 13 FTF cohort, 56% of students that migrated to CLA were first-generation students.
- While Pell-eligible students (both traditional and non-traditional recipients) made up about 54% of the Fall 13 FTF cohort, 61% of students that migrated to CLA were first-generation students.

Figure 4

While females made up about 58% of the Fall 13 FTF cohort, almost 65% of students that migrated to CLA were females. (See Figure 5).

What are the entry scores of students migrating?

The average eligibility index of students migrating into CLA is 3822 (SD = 360), as compared to an average eligibility index of 3892 (SD = 344) for all Fall 2013 FTF. Figure 6 shows average eligibility index and high school GPAs for students that migrated to CLA based on semester migrated. With the exception of Semester 9 migration, the trend is that later migrants have on average lower eligibility indexes and high school GPAs.
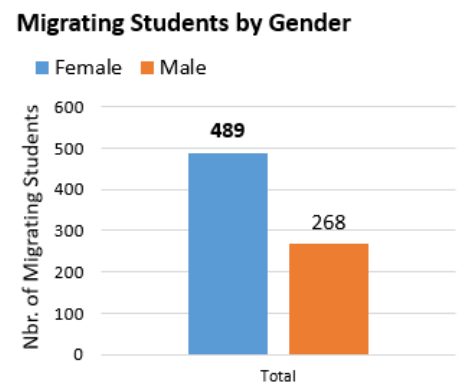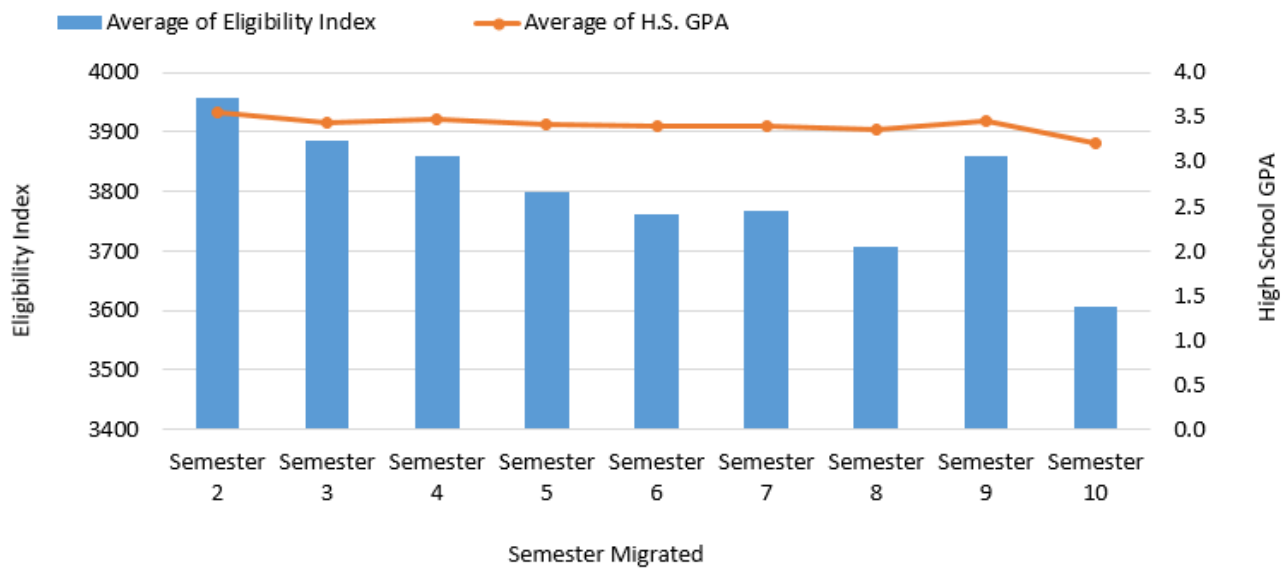
Figure 5

Figure 6

Fall 2013 Cohort - Average Eligibility Index & H.S. GPA By Semester Migrated
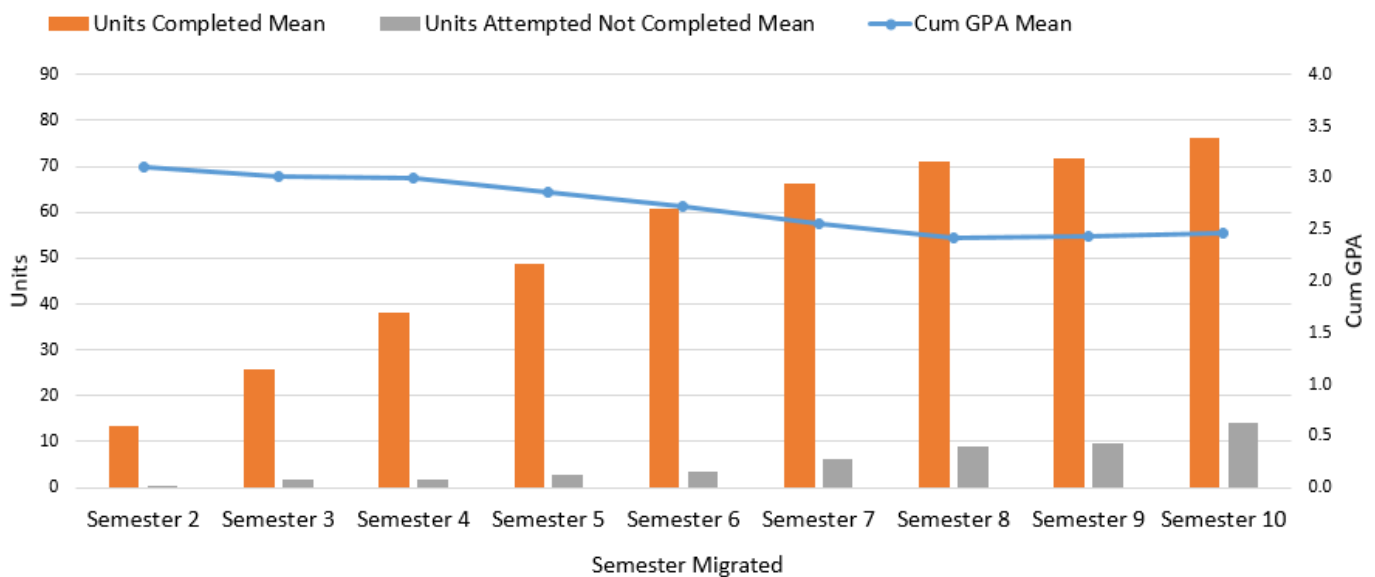

Row Labels	Eligibility Index Mean	Eligibility Index SD	H.S. GPA Mean	H.S. GPA SD
Semester 2	3956	356	3.55	0.33
Semester 3	3884	373	3.44	0.41
Semester 4	3860	332	3.48	0.32
Semester 5	3798	382	3.42	0.36
Semester 6	3763	340	3.40	0.32
Semester 7	3767	312	3.39	0.32
Semester 8	3707	316	3.37	0.30
Semester 9	3859	405	3.46	0.37
Semester 10	3607	432	3.21	0.45
Grand Total	**3822**	**360**	**3.44**	**0.35**

What are the academic characteristics of students at the time that they migrate?

The average cumulative GPA of students migrating to CLA is 2.84 (SD = 0.56). The average student migrating into CLA has completed approximately 46.2 units of coursework (SD = 20.20) and has attempted but failed to complete approximately 4.7 units (SD = 4.7) either through D, F, or W grades. Figure 7 shows average cumulative GPA, units completed, and "attempted but not completed" units based on the semester migrated.

Figure 7

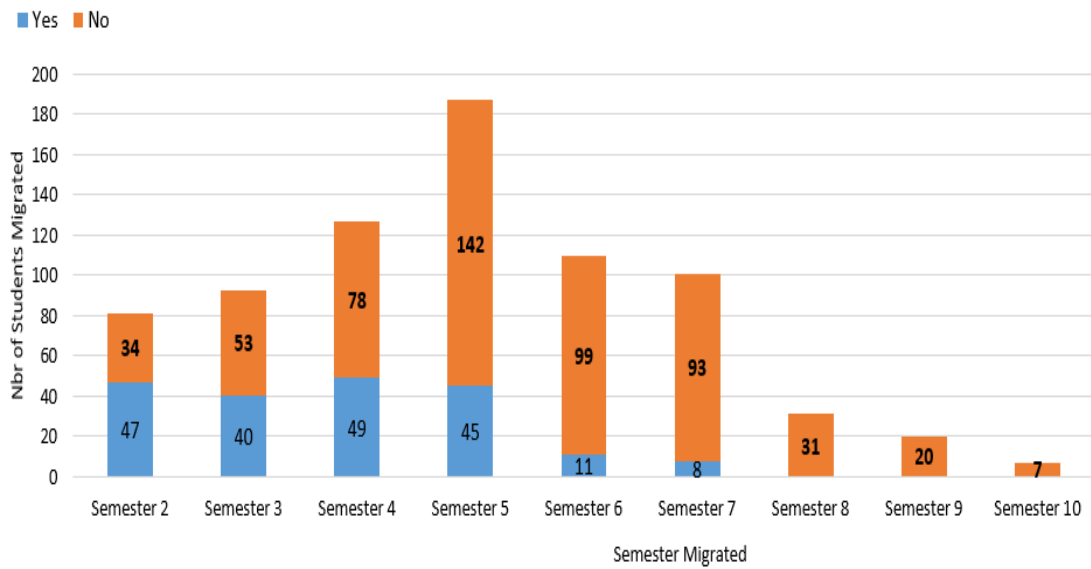## F13 Cohort - Average Cum GPA, Units Completed, & Units Attempted By Semester Migrated

Row Labels	Cum GPA Mean	Cum GPA SD	Units Completed Mean	Units Completed SD	Units Attempted Not Completed Mean	Units Attempted But Not Completed SD
Semester 2	3.11	0.65	13.43	1.80	0.53	1.53
Semester 3	3.02	0.54	25.78	4.12	1.69	3.05
Semester 4	3.00	0.52	38.00	6.10	1.65	2.98
Semester 5	2.86	0.51	48.89	8.81	2.82	3.64
Semester 6	2.73	0.42	60.61	7.93	3.63	4.02
Semester 7	2.55	0.52	66.22	15.12	6.17	5.62
Semester 8	2.43	0.34	71.23	14.09	9.06	6.18
Semester 9	2.43	0.58	71.90	18.80	9.65	6.88
Semester 10	2.46	0.50	76.29	30.67	14.21	7.80
Grand Total	**2.84**	**0.56**	**46.22**	**20.20**	**3.35**	**4.73**

Are the students migrating to CLA graduating in four years?

In general, the likelihood of migrating students graduating in four years declines the later a student migrates to CLA. As seen in the bottom table of Figure 8, about 58% of students that migrated to CLA by the end of their first year (Semester 2) graduated in four years. This declined to 43% for students that migrated in Semester 3 and 39% for students that migrated by the end of the second year (Semester 4). By **Semester 5**, when CLA had the largest group of migrating students, that declined to **24%**. Finally for students that migrated by the end of the third year that declined to 10%. Figure 8 also provides exact breakdowns by college a student migrated from. For **undeclared** students, who make up the largest group of migrating students, about 39% of students graduated in four years if they migrated to CLA by the end of the second year, but this declined to 22% if they migrated until the fall semester of their third year (Semester 5).

Figure 8

Fall 2013 FTF Migration Into CLA By College & Semester Migrated (Did they graduate in 4 Yrs? Yes/No)

Total Students Migrating By College & Semester									
Count of FLAG: Migration Into CLA - When are they Migrating?	Column Labels								
Row Labels	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8	Semester 9	Semester 10	Grand Total
Business Administration	3	5	12	8	7	8	6	2	1	52
Education	1	1	1	4	2	2				11
Engineering		8	3	10	3	5	3	3		35
Health and Human Services	21	19	23	35	31	30	7	2	3	171
Natural Sciences & Mathematics	5	6	12	18	11	7	2	5	1	67
The Arts	5	4	2	10	1	3	1			26
University Programs	46	50	74	102	55	46	12	8	2	395
Grand Total	81	93	127	187	110	101	31	20	7	757

Based on Semester & College Migrated from, What Percentage of Students Are Graduating in 4 Years									
Cohort College	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8	Semester 9	Semester 10	Grand Total
Business Administration	33%	40%	8%	50%	14%	13%	0%	0%	0%	19%
Education	100%	100%	0%	50%	0%	0%				36%
Engineering		38%	0%	20%	0%	0%	0%	0%		14%
Health and Human Services	67%	37%	57%	20%	10%	10%	0%	0%	0%	27%
Natural Sciences & Mathematics	80%	50%	25%	22%	0%	14%	0%	0%	0%	22%
The Arts	40%	25%	50%	40%	0%	33%	0%			35%
University Programs	54%	46%	42%	22%	13%	4%	0%	0%	0%	28%
Grand Total	58%	43%	39%	24%	10%	8%	0%	0%	0%	26%