# RESEARCH BRIEF

Topic: First-time noncredit ESL students and transitions to credit

Date: April 9, 2020

#### **OVERVIEW**

This research brief explores credit course taking behaviors among three cohorts of noncredit ESL students who enrolled in their first noncredit ESL course during Fall 2008, Fall 2012, or Fall 2015. By following these three cohorts from their first noncredit ESL term through Fall 2018, students' enrollments were observed over ten years, six years, and three years, respectively. This data allowed us to investigate whether students are more likely to make the transition to credit if given more time. Findings are disaggregated by age, ethnicity, gender, ESL level, and location of first noncredit and credit courses.

We found minimal differences in rates of transition to credit when following students over a period of three, six, or ten years. A majority of students who transitioned to credit did so within three academic years of their first noncredit ESL enrollment. However, there were noticeable differences when disaggregating by demographics: female students transitioned to credit at a higher rate than male students, Asian students at a higher rate than Latino/a students, and younger students at a higher rate than older students.

Most students who transitioned to credit enrolled in their first credit course at the Ocean campus, though a notable number of noncredit ESL students at Chinatown/North Beach and Mission enrolled in their first credit course at the same location as their first noncredit enrollment. Typically, students beginning noncredit ESL courses at higher ESL levels were more likely to transition to credit than students beginning at lower ESL levels. Students who began noncredit ESL courses at lower levels but advanced to higher ESL levels transitioned to credit more frequently than those who did not advance through ESL levels.

## Description of the data

To identify the sample for this analysis, we started with all students who enrolled in their first noncredit ESL course in Fall 2008, Fall 2012, or Fall 2015. We then examined all of their enrollments from their first noncredit ESL term through Fall 2018 to identify whether and when they enrolled in their first credit course. Students in this starting population fell into one of four categories with respect to their first noncredit ESL and credit enrollments:

- 1. Credit enrollment before first noncredit ESL enrollment (transition from credit)
- 2. Credit and first noncredit ESL enrollment in the same term
- 3. Credit enrollment after first noncredit ESL enrollment (transition to credit)
- 4. **No** credit enrollment (no transition to credit)

This brief will focus on the 7,899 sudents who transitioned to credit or did not transition to credit from noncredit ESL (Figure 1). Students who enrolled in a credit course before or at the same time as their first noncredit ESL course (n = 96) did not make up a large enough sample to include in this analysis.

Figure 1. New noncredit ESL students, by first term of noncredit ESL enrollment and cohort

First noncredit		Students exclud	led from analysis	Students included in analysis		
ESL enrollment	Cohort	Transition from credit	Credit in the same term	Transition to credit	No transition to credit	
Fall 2008	10-year cohort	30	16	344	2,969	
Fall 2012	6-year cohort	13	14	279	2,076	
Fall 2015	3-year cohort	14	9	226	2,005	
Total students a	cross all cohorts	57	39	849	7,050	

#### **Definitions**

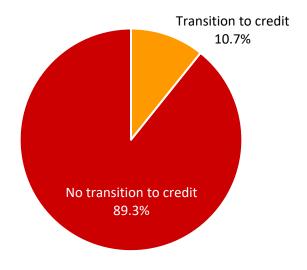
Noncredit enrollment includes any students who were registered for and attended at least 8 hours of a noncredit course section.

Credit enrollment was defined as any enrollment, in any subject, that resulted in a transcriptable grade, A-F, P/NP, or W.

#### **FINDINGS**

Among the 7,899 first-time noncredit ESL students in the three analysis cohorts, 849 students—representing just under 11%—transitioned to credit (Figure 2).

Figure 2. Percent of students in all cohorts to transition to credit



## Do rates of transition to credit vary by cohort?

While there are some minor variations in rates of transition to credit and demographics across cohorts, by discussing outcomes for all cohorts in total, higher counts in each transition category allowed us to disaggregate across various demographic groups.

Students in all three cohorts transitioned to credit coursework within a similar number of academic years (Figure 3). Of the 849 students who transitioned to credit, approximately 11% did so in the first academic year, about 48% in the second academic year, and 22% in the third academic year following their first noncredit ESL enrollment. After three academic years, students in all cohorts were much less likely to transition to credit; in each cohort, 25 or fewer students transitioned to credit after three years.

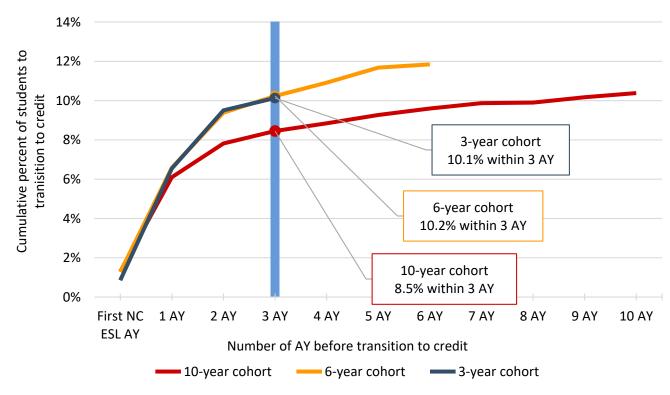


Figure 3. Cumulative percent of students to transition to credit, by cohort and AY of first credit enrollment

Students in the 10-year cohort transitioned to credit within three academic years at a slightly lower rate than students in the 6-year and 3-year cohorts.

Do rates of transition to credit vary by demographic groups?

#### Rates of transition to credit by age group

In the 2017-18 academic year, students aged 50 or above made up almost 40% of all noncredit students (ORP, 2019), but the same age group accounted for just under 20% of first-time noncredit ESL students. Rates of transition to credit steadily decreased as students increased in age, ranging from a high of 26.0% of students 19 or younger and a low of 2.4% of those 50 or above (Figure 4).

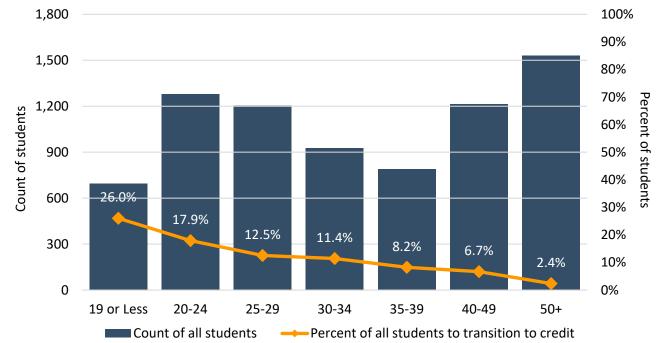


Figure 4. Percent of students in all cohorts to transition to credit, by age group

#### Rates of transition to credit by ethnicity

Similiarly to the overall CCSF noncredit ethnicity distribution (ORP, 2018), the largest proportion of first-time noncredit ESL students were Asian, followed by Latino/a. Students identifying as American Indian or Alaska Native, Black or African American, Filipino, Pacific Islander, and Two or More Races each comprise less than 1% of all students (Figure 5). Given the low counts for these students, subsequent analysis does not disaggregate by these groups.

Figure 5. Percent of students in all cohorts, by ethnicity

Student ethnicity group	Percent of students
American Indian or Alaska Native	< 1%
Asian	48.0%
Black or African American	< 1%
Filipino	< 1%
Latino	29.9%
Pacific Islander	< 1%
Two or More Races	< 1%
Unknown	13.0%
White	7.5%
Total	100%

Over the complete period of analysis, Asian students were three times more likely to transition to credit than Latino/a students (Figure 6). In this same period, Latino/a students continued to transition to credit after the first three academic years at a higher rate than Asian students. When limiting transitions to credit that occurred within the first three academic years of a student's first noncredit ESL enrollment, the rates of transition to credit for Asian and Latino/a students remained consistent across cohorts.

Transition to credit

15.8%

No transition to credit

84.2%

Asian students

No transition to credit

95.1%

Latino/a students

Figure 6. Percent of Asian and Latino/a students in all cohorts to transition to credit

#### Rates of transitions to credit by age group and ethnicity

Both overall distribution and rates of transition to credit were considerably different when disaggregating by the combination of ethnicity and age. Asian students across all cohorts were more frequently aged 40 or over, while Latino/a students were more frequently aged under 30. Asian students transitioned to credit more frequently than Latino/a students, particularly when aged 39 or younger. However, rates of transition to credit were low for both Asian and Latino/a students aged 40 or over. Rates of transition to credit steadily decreased for Asian students in higher age groups (Figure 7) but remained relatively level for Latino/a students of all ages (Figure 8).

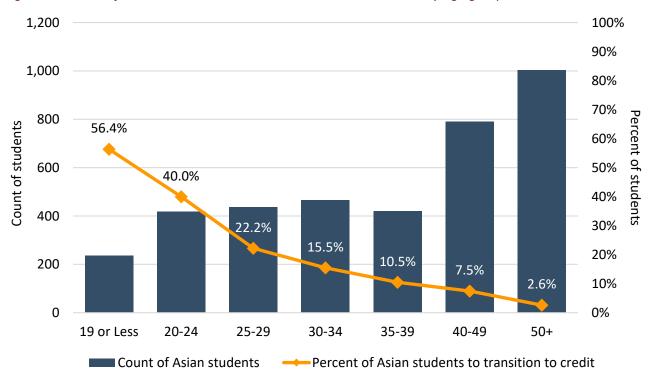


Figure 7. Percent of Asian students in all cohorts to transition to credit, by age group

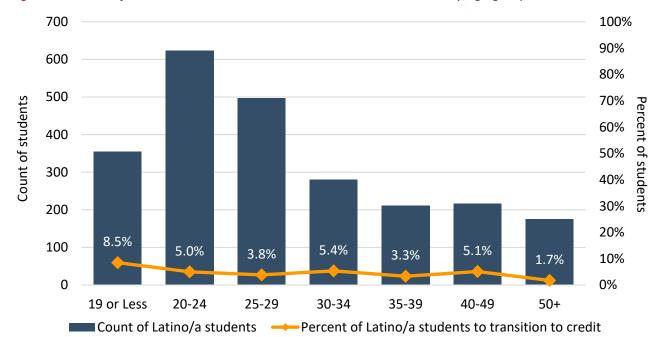


Figure 8. Percent of Latino/a students in all cohorts to transition to credit, by age group

### Rates of transitions to credit by sex

Overall, more female students took noncredit ESL courses than male students, and female students were more likely to transition to credit coursework (Figure 9).

Figure 9. Percent	: of studen	ts ın all co	horts to t	transition t	to credit, by sex
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Sex	No transition to credit	Transition to credit	Count of students
Female	87.2%	12.8%	4,391
Male	91.0%	9.0%	3,084
Unknown/Not reported	98.1%	1.9%	423
Total	89.3%	10.7%	7,899

Do rates of transitions to credit vary by the location of a student's first noncredit ESL course

There were differences in the rates of transition to credit when considering the location of a student's first noncredit ESL course. Students who first enrolled in noncredit ESL at Downtown or at multiple locations had the highest rates of transition to credit, 20% and 40% of students at those locations, respectively. The two centers with the highest numbers of first-time noncredit ESL enrollments, Chinatown/North Beach and Mission, both had relatively low rates of transition to credit, at 7.5% and 4.7% respectively (Figure 10).

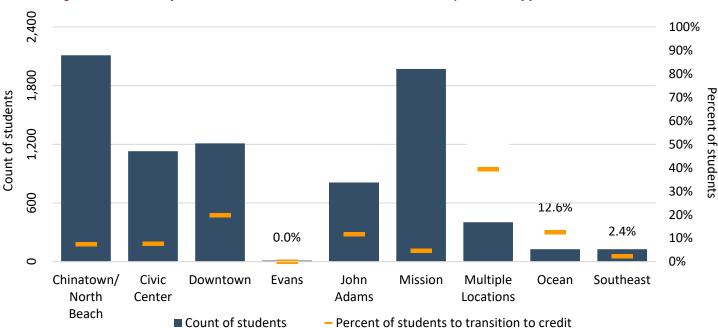


Figure 10. Percent of students in all cohorts to transition to credit, by location of first noncredit ESL

Generally, among students who did transition to credit, they did not enroll in their first credit course at the same location as their first noncredit ESL course (Figure 11). A total of 103 students enrolled in credit at multiple locations during their credit first term, and 97% of these students enrolled at Ocean. Of the 849 students who transitioned to credit, 25 students enrolled in a distance education course in their first credit term; of those enrolled in distance education, 19 concurrently enrolled in a face-to-face course at another location.

Figure 11. First noncredit ESL and first credit enrollment locations for students in all cohorts

Location of first	Percent of students with ar	enrollment	in their fir	st credit term
noncredit ESL enrollment	at only the same location as first noncredit ESL enrollment	at multiple locations	at Ocean	
Chinatown/North Beach	22.8%	16.5%	74.7%	3.8%
Civic Center	1.2%	11.6%	88.4%	
Downtown	2.5%	8.8%	93.3%	2.5%
John Adams	2.1%	12.6%	83.2%	
Mission	16.1%	15.1%	80.6%	3.2%
Multiple Locations	N/A	11.3%	78.0%	
Ocean	68.8%	0.0%	75.0%	6.3%
Southeast	33.3%	12.5%	66.7%	
Total	8.5%	12.1%	83.5%	2.9%

Do rates of transition to credit vary by minimum and maximium ESL level?

In this analysis, minimum and maximum ESL levels are defined as the lowest and highest level of ESL a student enrolled, respectively. Students who transitioned to credit, on average, enrolled in courses with higher minimum ESL levels and reached higher maximium ESL levels than those who did not transition to

credit. Students transitioning to credit most often had a maximum ESL level between level four and level seven. Students who did not transition to credit saw some increase of average lowest and highest ESL level, though most frequently these students enrolled in a maximum ESL level between literacy and levels one, two, or three (Figure 12).

Figure 12. Transitions to credit and distribution of minimum and maximum ESL level groups for students in all cohorts

		No transiti	on to credit	Transition	to credit
ESL Level	Count of students	Percent of students with min level	Percent of students with max level	Percent of students with min level	Percent of students with max level
Literacy or ESL 1	4,633	62.3%	36.8%	28.0%	3.7%
ESL 2-3	950	11.9%	23.7%	13.2%	11.7%
ESL 4-5	1,286	13.8%	20.7%	37.1%	37.8%
ESL 6-7	474	5.2%	9.2%	12.5%	29.9%
ESL 8-9	148	1.5%	4.3%	4.9%	12.7%
No ESLN	408	5.3%	5.3%	4.2%	4.2%
Total	7,899	100.0%	100.0%	100.0%	100.0%

As we would expect, students were generally more likely to transition to credit if they reached higher ESL levels. Students who began at a low ESL level were more likely to transition as they increased their ESL level, and students who began at a high level were more likely to transition than those who began at a low level (Figure 13).

Figure 13. Percent of students in all cohorts to transition to credit with combination of minimum and maximum ESL level

Lowest ESL level	▶ Highest ESL level (max ESLN)									
(min ESLN)	0	1	2	3	4	5	6	7	8	9
0	0.4%	1.3%	1.9%	3.3%	10.8%	*	*	*	*	*
1		1.7%	5.1%	9.1%	12.2%	23.3%	30.6%	20.6%	*	*
2			1.8%	10.5%	16.4%	18.2%	*	*	*	*
3				7.6%	16.5%	22.0%	*	30.6%	*	*
4					6.4%	34.2%	*	34.3%	*	*
5						20.1%	35.1%	39.9%	28.6%	25.6%
6							10.7%	*	*	*
7								21.2%	36.0%	21.0%
8									29.5%	*
9										25.4%

<sup>\*</sup>Fewer than 30 students in this group

Do students who transition to credit have different course taking behaviors than students who do not transition to credit?

Course taking behavior for noncredit ESL students can be examined in a variety of ways. Total course taking behavior accounts for the cumulative progress of students over the period of analysis, which lets

us see if there are differences when students are allowed varying amounts of time to enroll. Term based averages, on the other hand, allow us to normalize progress over the varying range of terms available to students in each cohort.

Totals and per term averages include all enrollments in all noncredit subjects for students who did not transition to credit, and only enrollments before the first credit term for students who did transition to credit.

#### Course taking overall totals

Students who transitioned to credit enrolled in noncredit courses during fewer terms than those who did not transition, but when taking noncredit courses they enrolled in more courses, sections, and completed more hours (Figure 14).

Figure 14. Coursework totals for students across all analysis cohorts, by transition to credit

Total number of	Students in	all cohorts with
rotal number of	Transition to credit	No transition to credit
Terms enrolled	3.2	3.5
Courses enrolled	5.7	3.5
Sections enrolled	8.6	6.5
Hours completed	528.2	368.0

When considering only coursework taken during the first three years after first enrolling in noncredit ESL, the average total terms, courses, sections, and hours remained relatively constant for each transition category and comparable to the totals for the 3-year cohort.

#### Coursework averages per term

Students who transitioned to credit, on average, enrolled in a higher number of courses and sections per term while completing more hours per section, course, and term than students who did not transition to credit (Figure 15). See Appendix B for complete data tables reporting these metrics.

Figure 15. Coursework averages for students across all analysis cohorts, by transition to credit

Average number of	Students in all cohorts with				
Average number of	Transition to credit	No transition to credit			
Courses per term	2.2	1.4			
Sections per term	2.6	1.6			
Hours per course	58.4	49.2			
Hours per section	71.3	57.7			
Hours per term	150.8	80.7			

#### Variation in per term coursework averages by demographic groups

Among all students in the three cohorts, Asian students typically enrolled in more coursework per term than Latino/a students. Among all students who transitioned to credit, Latino/a students completed the same hours per term as Asian students (Figure 16); however, since Asian students also completed more sections per term, Latino/a students who transitioned to credit completed fewer hours per term than Asian students who transitioned to credit.

70 3 2.8 60 60.8 60.4 50 Hours per section Sections per term 2 ■ Hours per section - transition to credit 2.1 40 ■ Hours per section - no transition to credit 1.8 30 Sections per term - transition to credit 1.5 53.1 46.2 Sections per term - no transition to credit 20 10 0 0 Latino/a students Asian students

Figure 16. Hours per section and sections per term for Asian and Latino/a students, by transition to credit

Female students enrolled in a slightly higher number of courses and sections per term as well as hours per term, while male students completed slightly more hours per section and hours per course. Among students who did not transition to credit, female students completed consistently more coursework than male students.

By age group, while sections per term remained relatively constant for students who did not transition to credit, students who transitioned to credit completed anywhere between 2.4 and 3.0 sections per term. Generally, hours per section completed steadily increased for students who did not transition to credit. For students who transitioned to credit, hours per section completed by age group steadily declined, with students age 30-34 completing the fewest hours per section; subsequent age groups completed increasingly more hours per section (Figure 17).

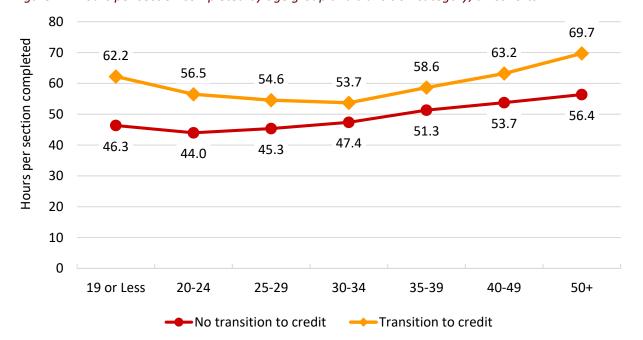


Figure 17. Hours per section completed by age group and transition category, all cohorts

#### When students transition to credit, do they continue in ESL?

Across all three cohorts, about 64% of all students who transitioned to credit enrolled in credit ESL in their first credit term. The remaining 36% enrolled in credit courses in other subjects, and did not enroll in a credit ESL course, in their first credit term.

#### CONCLUSION

After studying the enrollment patterns among several cohorts of students, our analysis suggests that increasing the length of time a student has to transition from noncredit ESL to credit does not substantially increase the rates of transition from noncredit ESL to credit coursework. The majority of students in the 10-year and 6-year cohorts who transitioned to credit did so within three to four years. Some demographic groups are more likely to transition to credit than others, and students who transition to credit complete more noncredit coursework than those who do not transition to credit. There appear to be fewer variations in course taking behavior among students who do not transition to credit than between those who do transition to credit.

Additional questions were raised through the course of this analysis and may lead to future research. Future work may help us to understand students' progression through ESL levels. Since students across cohorts typically transitioned to credit within three to four years, additional research could include a greater number of cohorts with fixed lengths of time to enroll in coursework in order to create a larger sample of students and allow for further disaggregation.

#### REFERENCES

CCSF Office of Research and Planning. (2019). Argos datablock: Noncredit attendence and course completion. Saved state executed April 29, 2019.

CCSF Office of Research and Planning. (2018). Noncredit numbers. Summary data: Noncredit classes and students. Retrieved from http://www.ccsf.edu/dam/Organizational\_Assets/Department/Research\_Planning\_Grants/Reports/Non\_Credit\_Numbers/NoncreditNumbers\_20180830.pdf

#### **SOURCE**

Database: CCSF Banner DEVL

Date: Data retrieved January 21, 2020 Author: Katie Mills, Research Analyst

# APPENDIX A. DATA BY COHORT

Variations in rates of transition to credit across cohorts

Table A-1. Percent of all students in cohort to transition to credit by number of AY

Number of AY after first NC ESL	% of 10-year cohort	% of 6-year cohort	% of 3-year cohort
During first NC ESL AY	1.30%	1.27%	0.85%
1 AY	4.80%	5.31%	5.69%
2 AY	1.72%	2.80%	2.96%
3 AY	0.63%	0.85%	0.63%
Total	8.45%	10.23%	10.13%

# Demographics

Table A-2. Percent of students in all cohorts, by age group and cohort

Age group	% of 10-year cohort	% of 6-year cohort	% of 3-year cohort
19 or Less	10.0%	8.5%	7.4%
20-24	15.8%	16.4%	16.5%
25-29	13.2%	15.4%	18.2%
30-34	10.2%	11.0%	14.7%
35-39	9.1%	10.8%	10.4%
40-49	14.9%	16.6%	14.7%
50+	20.0%	19.9%	17.7%
Unknown	6.9%	1.5%	0.2%
Total	100.0%	100.0%	100.0%

Table A-3. Percent of students in all cohorts, by ethnicity and cohort

Ethnicity	% of 10-year cohort	% of 6-year cohort	% of 3-year cohort
American Indian/Alaskan Native	< 1%	< 1%	< 1%
Asian	39.8%	56.6%	51.1%
Black or African American	< 1%	< 1%	1.0%
Filipino	< 1%	< 1%	< 1%
Latino	31.4%	25.4%	32.4%
Pacific Islander	< 1%	< 1%	< 1%
Two or more Races	< 1%	< 1%	< 1%
Unknown	22.0%	8.2%	4.5%
Total	100.0%	100.0%	100.0%

# First noncredit ESL location across cohorts

Table A-4. Percent of students to enroll at location in first noncredit ESL term, by cohort

Location	% of 10-year cohort	% of 6-year cohort	% of 3-year cohort
Chinatown/North Beach	23.7%	30.7%	27.0%
Civic Center	17.0%	15.0%	9.6%
Downtown	15.9%	13.3%	16.5%
Evans	0.2%	0.1%	0.0%
John Adams	8.8%	10.7%	11.9%
Mission	25.7%	20.6%	28.4%
Multiple Locations	4.6%	6.7%	4.1%
Ocean	1.5%	1.2%	2.2%
Southeast	2.4%	1.7%	0.4%
Total	100.0%	100.0%	100.0%

# Enrollment averages across cohorts

Table A-5. Total terms, courses, sections and hours for first time noncredit ESL students, by cohort

	Trar	nsition to cr	redit	No transition to credit			
Total number of	10-year	6-year	3-year	10-year	6-year	3-year	
	cohort	cohort	cohort	cohort	cohort	cohort	
Terms enrolled	3.5	3.3	2.7	3.9	3.7	2.8	
Courses enrolled	5.8	6.1	5.1	3.5	3.7	3.2	
Sections enrolled	9.0	9.4	7.0	6.9	7.2	5.1	
Hours completed	584.6	573.9	385.7	415.0	399.7	265.6	

Table A-6. Averages by term, section, and course for first time noncredit ESL students, by cohort

	Trar	nsition to cr	edit	No transition to credit			
Average number of	10-year cohort	6-year cohort	3-year cohort	10-year cohort	6-year cohort	3-year cohort	
Courses per term	2.1	2.3	2.1	1.3	1.4	1.4	
Sections per term	2.5	2.8	2.5	1.6	1.7	1.7	
Hours per course	61.9	59.5	51.6	51.6	48.5	46.4	
Hours per section	74.5	74.9	62.1	60.0	58.5	53.6	
Hours per term	153.3	164.1	130.8	81.3	83.7	76.6	

# APPENDIX B. PER TERM COURSEWORK BY TRANSITION TO CREDIT AND SELECTED DEMOGRAPHIC GROUPS

Table B-1. Per term, course, and section averages for students in all cohorts, by age group

	Courses per term		Sections per term		Hours per course		Hours per section		Hours per term	
Age group	Transition to credit	No transition								
19 or Less	2.3	1.4	2.8	1.7	80.1	56.2	62.2	46.3	174.6	79.6
20-24	2.0	1.3	2.4	1.5	67.9	50.3	56.5	44.0	138.6	68.1
25-29	2.3	1.4	2.7	1.6	65.3	51.8	54.6	45.3	139.9	74.1
30-34	2.1	1.5	2.4	1.7	65.0	55.0	53.7	47.4	136.7	80.2
35-39	2.4	1.5	3.0	1.7	72.8	60.0	58.6	51.3	170.5	88.8
40-49	2.1	1.4	2.4	1.7	75.0	63.7	63.2	53.7	147.2	89.0
50+	2.1	1.4	2.5	1.7	81.8	67.9	69.7	56.4	169.2	92.8
Unknown	0.0	1.1	0.0	1.1	0.0	33.0	0.0	32.2	0.0	35.1

Table B-2. Per term, course, and section averages for students in all cohorts, by sex

	Courses per term		Sections per term		Hours per course		Hours per section		Hours per term	
Say	Transition	No	Transition	No	Transition	No	Transition	No	Transition	No
Sex	to credit	transition	to credit	transition	to credit	transition	to credit	transition	to credit	transition
Female	2.2	1.5	2.7	1.7	60.3	70.5	57.7	50.6	154.3	87.6
Male	2.0	1.3	2.4	1.5	56.3	72.0	59.0	48.8	142.5	75.0
Unknown	*	*	*	*	*	*	*	*	*	*

Table B-3. Per term, course, and section averages for students in all cohorts, by ethnicity

	Courses per term		Sections per term		Hours per course		Hours per section		Hours per term	
Ethnicity	Transition to credit	No transition								
Asian	2.3	1.5	2.8	1.8	75.8	64.7	53.1	60.8	166.1	94.3
Latino/a	1.8	1.3	2.1	1.5	68.4	51.8	46.2	60.4	124.2	67.9

<sup>\*</sup>Coursework totals masked for counts of fewer than 30 students