

**Does Changing Majors Really Affect the Time to Graduate?
The Impact of Changing Majors on Student Retention,
Graduation, and Time to Graduate**

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Abstract

When discussing student graduation rates and in particular the time required to complete degrees, the impact of students changing their majors often arises as a possible factor in both the ability to graduate and the ability to graduate in a timely fashion. Several studies seeking to identify the causes for students requiring five or more years to graduate found that both students (California State Postsecondary Commission, 1988; Colorado Commission on Higher Education, 1992) and their parents (Sanford and Rivera, 1994) listed the changing of majors as one of the top contributors to the delay in completing a bachelor's degree. However, quantitative studies examining student major changes and graduation data (Murphy, 2000; Micceri, 2001) found that a change in major increased a student's chances of graduating and had minimal impact on the time-to-degree completion. At the University of South Florida, Micceri (2001) examined seven cohorts of fall first-time freshmen and found that in all seven cohorts students who changed majors had significantly greater graduation rates.

Does the changing of majors impact graduation rates and times-to-graduate at Western Kentucky University? This study examined three cohorts of first-time, full-time bachelor's degree seeking freshmen and tracks their major changing behavior from term to term as they progress towards graduation. After presenting descriptive statistics on the major changing activity at the university, I examined the relationship between major changing and students' graduation outcomes in terms of both completion and time-to-graduate.

Introduction

Higher education governance does not emphasize the reporting of undergraduate student declarations of majors. The federal reporting requirements to the Integrated Postsecondary Education Data System (IPEDS) do not collect data on declared majors. Not surprisingly, rigorous quantitative studies on major changing activity are scarce. The literature that does exist suggests that approximately one-third to one-half of the undergraduate students at America's universities change their majors at least once prior to graduation (California State Postsecondary Commission, 1988; Colorado Commission on Higher Education, 1992; Murphy, 2000). When asked, a change in major has been listed by students and their parents as a chief reason for increasing the time it takes to graduate (Sanford and Rivera, 1994). Many say a major change decreases the likelihood of graduation and, for those that persist, increases the time required to earn a degree.

The view seems reasonable, for a different major is likely to introduce new prerequisites and render some completed coursework irrelevant. Students have to switch to a lower rung on a different ladder. However, some studies suggest that major changing activity, in particular changes during the first two years of study, have no negative impact on graduation outcomes. Murphy (2000) and Micceri (2001) found a positive relationship between the changing of majors and graduation outcomes. Similarly, Lewallen (1993, 1995) found that students declaring an initial major of "undeclared" or "undecided" were not placed at risk in persisting with their college education. Examining a variety of student characteristics, Kojaku (1971) found that students who changed majors moved into groups with characteristics more closely matching their own, resulting in more homogenous sets pursuing the same fields. Such results point to the

possibility that a major change (including a switch from an initially undeclared status to a selected field) is a refined selection based upon a student's early college experience.

This study examined 7,009 Western Kentucky University first-time, full-time bachelor's degree seeking freshmen and closely tracked their majors and major changes throughout their undergraduate experiences. From the first fall term to each subsequent spring and fall, year to year, I tracked the major changing behavior of the students. For every sequence of major changing activity I produced the statistics associated with term to term retention, graduation rates, and the time-to-graduation.

Methods

The study examined three fall cohorts of first-time, full-time bachelor's degree seeking freshmen and tracked their declared major status each fall and spring term as they progressed towards the completion of their degrees. Students who initially declared a specific major were distinguished from those who began with an undeclared status. For each term, a major change status indicator code designated each student's action regarding their major with respect to the three possibilities of 1) no change in major, 2) a change from one specified major to another specified major, and 3) a change from the undeclared status to a specific major. As the students progressed from term to term, the code for the major change action for each term was appended to produce a "sequence code" showing the activity for every student. With these codes in place for each student for each term of their enrollment, it was possible to generate statistics for each code sequence.

The Sequence Code

The first digit in the major change sequence code distinguished whether the student began with a declared major (first digit “D”) or an undeclared major (first digit “X”). From this term on, four possible major change behaviors were possible: 1) no change in major, coded as an “N”, 2) a change from one specified major to another major, coded as a “C”, 3) a change from an undeclared status to a specified major, coded as a “U”, and 4) switching from one undeclared major to another, yet still undeclared major, also coded as an “N.” A change from undeclared to undeclared was not considered a change in the context of this study. As cohorts progressed from term to term, the sequence code expanded one digit per term with the letter corresponding to the student’s major status change for that term. The number of digits specified the number of terms the student had completed at the time being examined.

Table 1

Sequence Code Examples

Code Sequence	Interpretation
DNNN	A two year record with the original major still in place
XNU	A three semester record where the student started as undeclared, remained undeclared the second term, and specified a major the third term.
DNCNN	A five semester record starting with a declared major that was changed to a different major during the third semester.
XNNUNN	A three year record where the student began as undeclared and remained undeclared until the spring of the second year, when a specific major was chosen and has not changed again.

The number of possible sequence codes grew exponentially with each subsequent term. By the fourth term, there were 22 unique sequence codes, and by the sixth term (the end of the third year), students had a total of 77 unique sequence codes. Note that some sequence codes (e.g. XNC) were not logically possible, since an undeclared student cannot change from a specified major.

As the number of possible sequence codes rapidly escalated, it was useful to distinguish the students into two categories, the “minimals,” those students who began as either declared or undeclared and then changed their major only once or not at all, and the “multiples,” those students who changed their majors more than once. For each term, the data on the number of students, the rate of retention to the next term, the graduation rate, and the time to graduation was calculated for each sequence code. The data quantify both the portion of students that participate in each pattern of major changing behavior as well as its relationship to retention, graduation rate, and the time to degree completion. Before presenting these results, it is necessary to clarify the student population selected and the criteria used to designate a change in major.

The Study Population

The study examined first-time, full-time bachelor's degree seeking freshmen who began their studies during the fall semesters of 2003, 2004, and 2005. Transfer students were not included. For purposes of generating meaningful time to graduate comparisons, only those students who maintained continuous fall/spring enrollment remain in the study. Students who skipped a term were dropped from the analysis. This caveat is of particular importance when examining the retention and graduation statistics. In other words, one should exercise caution comparing retention or graduation rates in this study with those of other reports where students

who skip a term but return in a later term might be included as retained or successful graduates should they complete their degrees.

Major Changes

At Western Kentucky University, some colleges in selected fields assign students a “seeking admission” major code for their selected majors until certain course work is satisfactorily completed. Clearly, the transition from the “seeking admission” major code to the final “admitted” major code does not represent a change in the student’s course of study, and it was not considered a change in major in this study. Also, as already noted, a switch from one undeclared status to a different undeclared status was not considered a major change. However, if a student dropped a declared major and replaced it with an undeclared status, the study considered it to be a change in major.

Graduation Rates

To properly understand the graduation rates discussed in this study, it is important to recognize that the rates were examined longitudinally across the number of terms the students had completed. The graduation rates commonly discussed in the literature (and reported to IPEDS annually by participating institutions) refer to the incoming cohort of first-time, full-time degree-seeking freshmen, and the calculation is based on the graduating percentage of that first-time incoming group. At Western Kentucky University, this six-year graduation rate for an incoming group of bachelor’s degree seeking freshmen has typically been close to 49%. For the combined cohorts in this study, the six-year graduation rate at term one is 49.1%. When

examining graduation rates from term to term, the graduation rates discussed *are for those students who have persisted through that term.*

These rates rise from term to term as the population consists of students who have completed an increasing portion of their degree requirements. For the students who persist to the spring of the first year, the graduation rate climbs to 55%. Those who successfully complete the first two years have a six-year graduation rate of 73%. As we compare graduation rates, it is important to keep the comparisons between students who have completed an equal number of terms. Throughout this study, all discussions of graduation rates refer to the six-year graduation rate.

Retention

For the first two years, the study tracked the retention rates to the next term for students with each particular sequence of major changing activity. After the second year was completed, term to term retention was very high and did not vary in ways warranting inclusion in the study.

Time-to-Graduate

The mean time to graduation was calculated for those students who graduated within six years. Students who do not graduate within six years were deemed to have not graduated. This will result in averages that are below those analyses where students with longer graduation times are included. Mean time to graduate was calculated for the same population of students that produced the graduation rates reported.

Term Grade Point Average and Graduation Grade Point Average

The mean cumulative grade point average was calculated for students upon the completion of the term examined as well as the graduating grade point average for those students in the group who graduated within six years.

Results and Discussion

The first term cohort consisted of 7,009 first-time, full-time bachelor's degree seeking students. Of these, 4,572 declared a specified major (first code digit "D") and 2,437 selected an undeclared major (first code digit "X"). Those who declared a major had a fall-to-spring retention rate of 88.2% and a six-year graduation rate of 49.5%. Those who began as undeclared returned in the spring at a rate of 87.2% and had a graduation rate of 48.5%. In the snapshot of the very first term, it appeared that those who begin as undeclared were slightly less successful than those who declared immediately upon entry. As the results will show, the situation was not that simple.

The second term cohort dropped to 6,159 students. The students who began with a declared major and left it unchanged persisted to the next fall at a rate of 80.8% and had a graduation rate of 55.5%. Those who changed their majors that first spring persisted to the fall at a rate of 78.1% and had a graduation rate of 53.4%. Those who started as undeclared and remained undeclared persisted to the fall at a rate of 78.5% and had a graduation rate of 54.0%. However, those who started as undeclared but then declared a specified major in the second term persisted to the fall at a rate of 87.6% and had a graduation rate of 63.4%. As early as the second term, the spring after the students began, the students who began as undeclared and then declared

quickly began to show noticeably stronger statistics when compared to the other students, including higher grade point averages at both the conclusion of the term and upon graduation.

TABLE 2: The First Two Terms

TERM 1 – The First Fall

Sequence Code	Student Count	GPA at Term	Retention Rate	Graduation Rate	Time-to-Graduate	GPA at Graduation
D	4,572	2.76	88.2%	49.5%	4.47	3.25
X	2,437	2.70	87.2%	48.5%	4.61	3.21
Total	7,009	2.74	87.9%	49.1%	4.52	3.24

TERM 2 – The First Spring

Sequence Code	Student Count	GPA at Term	Retention Rate	Graduation Rate	Time-to-Graduate	GPA at Graduation
DN	3,640	2.83	80.8%	55.5%	4.46	3.25
DC	393	2.79	78.1%	53.4%	4.48	3.27
XN	1,924	2.77	78.5%	54.0%	4.62	3.19
XU	202	3.06	87.6%	63.4%	4.45	3.35
Total	6,159	2.82	80.2%	55.2%	4.51	3.24

GPA at Term = the cumulative grade point average at the conclusion of the term

Retention Rate = the retention to the following term

After the third term, the results shows that of the 3,249 students who began with a declared major, 2,490 (76.6%) still had that major. For the minimalists who began with declared majors, the changes from one declared major to another had only a modest impact on graduation rates and no discernible effect on the time to graduate. For the minimalists who began as undeclared, selecting a major quickly (in the second or third term) resulted in higher graduation rates than the other students. For the minimalists that remained undeclared in the third term, graduation rates fell and the time to graduate increased.

TABLE 3: The Third Term – The Second Fall

Sequence Code	Student Count	GPA at Term	Retention Rate	Graduation Rate	Time-to-Graduate	GPA at Graduation
Minimals						
DNN	2,490	2.99	92.2%	67.5%	4.46	3.25
DCN	252	2.97	89.2%	67.9%	4.46	3.26
DNC	452	2.94	91.2%	66.8%	4.44	3.27
XUN	158	3.14	93.7%	72.8%	4.46	3.33
XNU	375	3.20	96.0%	83.7%	4.44	3.34
XNN	1,136	2.83	88.2%	61.6%	4.69	3.12
Total	4,863	2.97	91.4%	67.5%	4.50	3.24
Multiples						
DCC	40	2.85	90.0%	52.5%	4.48	3.32
DCU	15	3.11	86.7%	86.7%	4.23	3.39
XUC	19	3.19	94.7%	63.2%	4.42	3.48
Total	74	2.99	90.5%	62.2%	4.39	3.38
TOTAL	4,937	2.97	91.4%	67.4%	4.50	3.24

For the small number of students having already committed multiple major changes by the end of the third term, we see a considerable degradation in graduation rate for those who declared a specific major upon admission and then changed it each successive term. Curiously, the small set of 15 students who began with a declared major, changed to an undeclared status the second term, and then selected a major the third term (sequence code DCU) had the highest graduation rate of any set of students at this point (the completion of the third term) in the study. As the results will show, major changing activity that occurs during the first three semesters appears to have no negative impact on graduation rates or the time required to complete the degree.

Examining the students after the completion of two years of study led to the following five logical categories of major changing behavior:

- 1) an initial declaration and no change (2,033 students)
- 2) an initial declaration and one change (815 students)
- 3) a delayed declaration and no change (began as undeclared and declared by the fourth term – 747 students)
- 4) remained undeclared (696 students)
- 5) had multiple changes (219 students).

When restricted to the students who selected a specific major (i.e. excluded the fourth category of those who have yet to declare), 3,595 out of 3,814 (94.3%) remained minimal. Put another way, over 94% of WKU first-time freshmen bachelor’s degree seekers either kept their initial majors or enacted one, and only one, major change. The data refute the anecdotal myth of a major changing epidemic. Further, looking at the graduation rates and the times to graduate for the above five categories produced the following:

Table 4 – Change Behavior Classifications after Two Years

<u>Behavior</u>	<u>Count</u>	<u>Graduation Rate</u>	<u>Time-to-Graduate</u>
Delayed Declaration	747	83.4%	4.46
No Change	2,033	72.8%	4.44
One Change	815	71.7%	4.45
Multiple Changes	219	70.0%	4.57
Still Undeclared	696	62.6%	4.76
TOTAL	4,510	72.6%	4.49

An easy to understand way of expressing the result is that for the students remaining after their first two years of study, roughly 70% retained their initial majors (either declared at once or later) and 25% changed their majors once. Only 5% switched majors more than once. In terms of statistics regarding student success as measured by graduation rate, the strongest group are

those who began as undeclared and then declared a major before the end of the second year (83.4% graduation rate), followed by those who retained their original major (72.8%), those having one major change (71.7%), those with multiple changes (70.0%), and those remaining undeclared after two years of study (62.6%).

TABLE 5: The Fourth Term – The Second Spring

<u>Sequence Code</u>	<u>Student Count</u>	<u>GPA at Term</u>	<u>Retention Rate</u>	<u>Graduation Rate</u>	<u>Time-to-Graduate</u>	<u>GPA at Graduation</u>
Minimals						
DNNN	2,033	3.04	89.9%	72.8%	4.44	3.27
DCNN	194	3.04	93.3%	76.3%	4.44	3.26
DNCN	358	2.97	90.5%	72.3%	4.40	3.23
DNNC	263	3.04	90.1%	67.3%	4.53	3.28
XUNN	124	3.23	91.9%	83.1%	4.44	3.37
XNUN	317	3.29	94.0%	86.1%	4.41	3.36
XNNU	306	3.05	91.5%	80.7%	4.53	3.25
XNNN	696	2.83	86.9%	62.6%	4.76	3.07
Total	4,291	3.02	90.1%	72.8%	4.49	3.25
Multiples						
DCCC	2	3.31	100.0%	50.0%	4.00	4.00
DCCN	33	2.90	81.8%	57.6%	4.50	3.27
DCCU	1	3.50	100.0%	100.0%	4.50	3.47
DCNC	20	2.80	75.0%	55.0%	4.59	3.00
DCNU	11	3.12	90.9%	72.7%	4.56	3.29
DCUC	3	3.29	100.0%	100.0%	4.17	3.43
DCUN	10	3.29	100.0%	100.0%	4.25	3.37
DNCC	37	2.98	89.2%	73.0%	4.67	3.28
DNCU	17	2.74	94.1%	64.7%	4.64	2.95
XNUC	19	3.14	97.7%	88.4%	4.64	3.27
XUCC	1	3.64	100.0%	0.0%	N/A	N/A
XUCN	16	3.22	68.8%	68.8%	4.45	3.49
XUCU	1	3.33	100.0%	100.0%	4.00	3.39
XUNC	24	2.95	83.3%	50.0%	4.67	3.04
Total	219	3.01	87.7%	70.0%	4.57	3.38
TOTAL	4,510	3.02	90.0%	72.6%	4.49	3.24

Once the students persisted to the fifth term, the beginning of their third year in college, the term to term retention rates between sequence codes lack the variation to have any meaning, all of them being well above 90% at this point. Also, the number of unique sequence codes for the multiples jumps from 14 to 34. Table 5 lists the minimal's codes individually and the aggregate statistics for the multiples' codes. The complete listing of all codes is provided in the Appendix.

Table 6: The Fifth Term – The Third Fall

<u>Sequence Code</u>	<u>Student Count</u>	<u>GPA at Term</u>	<u>Graduation Rate</u>	<u>Time-to-Graduate</u>	<u>GPA at Graduation</u>
Minimals					
DNNNN	1,611	3.11	80.8%	4.42	3.28
DCNNN	145	3.08	79.3%	4.38	3.31
DNCNN	267	3.12	79.8%	4.37	3.33
DNNCN	208	3.01	72.1%	4.52	3.21
DNNNC	216	2.93	71.3%	4.57	3.15
XUNNN	96	3.30	88.5%	4.43	3.39
XNUNN	259	3.23	88.8%	4.37	3.37
XNNUN	249	3.11	84.7%	4.51	3.27
XNNNU	292	2.94	77.1%	4.63	3.11
XNNNN	313	2.79	64.9%	4.88	3.04
Total Minimals	3,656	3.07	79.0%	4.49	3.25
Total Multiples	402	3.05	81.3%	4.54	3.22
TOTAL	4,058	3.07	79.2%	4.49	3.25

With sequence codes spanning five terms, a pattern emerged in the minimal's regarding the deterioration of performance as major changing activity was delayed. Starting with the students who declared a major the first term, we saw changes that occurred during the first spring or the second fall had minimal impact on student success. However, if the change occurred after the second fall, the graduation rate fell significantly (from about 80% to 72%) and times to

graduation increase. Similarly, for the students who began as undeclared, if they selected a major within the first four terms, they enjoyed high graduation rates (85% to almost 89%) but experienced a drop to 77% if they waited until the fifth term to declare. Graduation rates for students still undeclared at the fifth term dropped to 65%. In other words, fewer than two out of three students still undeclared at the fifth term will graduate. Note that these are students who have persisted through two and a half years of college.

The proliferation of sequence codes for the multiples shows that such behavior reflects a wide variation of behaviors. For example, one student in the Business College changed his major every semester for the first six semesters of his undergraduate career and graduated in four years with a 4.0 grade point average. Since late major changing activity can be viewed as a proxy for persistence (students who drop out cannot continue to change their majors), graduation rate statistics continued to climb for these students. Surprisingly, the mean time to graduate did not increase with the multiple changing of majors. In aggregate, the multiples had a faster mean time to graduate (4.3 years) than the minimalists (4.5 years). Further study is required to fully understand the stories underlying multiple major change behavior.

The final term examined in the study, the sixth term or the spring of the students' junior year, reinforced the results found in the fourth and fifth terms. After three years of study, of the 7,009 first-time freshmen who entered at term one, 3,841 remained enrolled that third spring, with 1,403 of them (36.5%) having retained the same major they initially declared at the beginning of their studies. Another 905 individuals (23.6%) had the same major they selected after beginning as undeclared, resulting in a combined 2,308 (60.1%) who kept the first major they specified. 836 (21.8%) students changed their majors once, and 523 (13.6%) changed their

majors multiple times. Even after three years of study, 174 (4.5%) still remained undeclared.

Only half of this last group graduated in the following three years.

Table 7: The Sixth Term – The Third Spring

<u>Sequence Code</u>	<u>Student Count</u>	<u>GPA at Term</u>	<u>Graduation Rate</u>	<u>Time-to-Graduate</u>	<u>GPA at Graduation</u>
Minimals					
DNNNNN	1,403	3.16	85.7%	4.40	3.28
DCNNNN	123	3.14	83.7%	4.33	3.32
DNCNNN	225	3.17	83.6%	4.36	3.38
DNNCNC	185	3.03	75.1%	4.50	3.19
DNNNCN	185	2.93	74.6%	4.58	3.15
DNNNNC	118	2.87	72.0%	4.55	3.16
XUNNNN	89	3.29	89.9%	4.42	3.39
XNUNNN	228	3.26	90.4%	4.36	3.39
XNNUNN	217	3.13	87.1%	4.51	3.27
XNNNUN	254	2.98	81.5%	4.60	3.12
XNNNNU	117	2.91	80.3%	4.77	3.07
XNNNNN	174	2.74	59.2%	4.96	3.01
Total Minimals	3,318	3.09	82.4%	4.47	3.25
Total Multiples	523	3.06	83.0%	4.55	3.22
TOTAL	3,841	3.09	82.5%	4.48	3.25

After three years of study, most students (86.4%) remained minimalists, having changed their majors only once if at all. For both the students who declared at once and those who began as undeclared, a clear pattern emerged regarding the timing of the major change and graduation rates. Those who change their majors (or switched from undeclared to declared) within the first three semesters showed no degradation of graduation rates and no extension of their times to graduate. In fact, the correlations were positive for early changes and student success, and these early changers also earned the highest grades of the groups. However, as the major change or

switch from undeclared occurred later, beginning with the fourth term and continuing with additional delay, we saw a marked drop in performance and graduation rates. This represents the most significant finding of the study.

For the multiples (13.6% of students as of the end of the third year), earlier changes tended to be less problematic than later changes, a finding consistent with the results for the minimalists. Other than this timing, the extreme variation of code sequences shows no particular pattern or relationship between the major changing activity and student success. Even with late changes, counterexamples exist where students change majors as late as the spring semester of their third year and still graduate in four years.

Conclusion

Key Findings

1. Two-thirds of incoming Western Kentucky University bachelor's degree seeking students declared their major immediately while one-third chose an initial "undeclared" major.
2. Students who began as undeclared were more successful if they declared a specific major by the end of the second year. Delaying the choice of a major after the second year resulted in rapid deterioration of success rates.
3. WKU students were not engaging in excessive switching of their declared majors.
Among the students completing their second year of study, 70% retained the first major they declared and 25% changed their major once. Only 5% changed their majors more than once.

4. Early major changing activity had no negative impact on student success. Major changing activity after the second year correlated with modestly lower grades, lower graduation rates, and longer times-to-graduate.

The stronger performance by students who began as undeclared yet declare a major quickly as well as the students who change their majors early in their studies suggests that a major chosen after a period of college experience may represent a refined selection based upon additional information that improves the “match” between student and field of study. However, major changes implemented after the second year of study (or an excessively long undeclared major status) appear to indicate student difficulty in gaining traction or interest in a specific field of study. Further study of the students in this latter group is needed to help improve their overall graduation rates and the time these students require to complete their degrees.

APPENDIX – The Complete Codes

Table 8: Students Having Completed Five Semesters

Sequence Code	Students Count	GPA at Term	Graduation Rate	Time-to-Graduate	GPA at Graduation
Minimals					
DNNNN	1,611	3.11	80.8%	4.42	3.28
DCNNN	145	3.08	79.3%	4.38	3.31
DNCNN	267	3.12	79.8%	4.37	3.33
DNNCN	208	3.01	72.1%	4.52	3.21
DNNNC	216	2.93	71.3%	4.57	3.15
XNNNN	313	2.79	64.9%	4.88	3.04
XUNNN	96	3.30	88.5%	4.43	3.39
XNUNN	259	3.23	88.8%	4.37	3.37
XNNUN	249	3.11	84.7%	4.51	3.27
XNNNU	292	2.94	77.1%	4.63	3.11
Minimals	3,656	3.07	79.0%	4.49	3.24
Multiples					
DCCCC	1	4.00	100%	4.00	4.00
DCCCN	1	2.68	0%	N/A	N/A
DCCNC	7	2.74	100%	4.50	3.01
DCCNN	19	3.02	72.2%	4.50	3.43
DCCNU	1	2.66	100%	4.50	2.70
DCCUN	1	3.48	100%	4.50	3.47
DCNCC	2	3.35	50.0%	3.50	3.82
DCNCN	13	2.76	69.2%	4.56	2.92
DCNNC	25	3.05	83.3%	4.55	3.23
DCNNU	11	2.95	100%	4.85	2.96
DCNUN	10	3.15	80.0%	4.56	3.29
DCUCC	2	2.97	100%	4.25	3.15
DCUCN	1	4.00	100%	4.00	4.00
DCUNC	2	2.84	100%	4.00	2.98
DCUNN	8	3.35	100%	4.21	3.49
DNCCC	4	3.51	100%	4.38	3.53
DNCCN	29	3.03	75.9%	4.37	3.25
DNCNC	38	2.90	65.8%	4.38	3.19

Table 8: Students Having Completed Five Semesters (continued)

Sequence Code	Student Count	GPA at Term	Graduation Rate	Time-to-Graduate	GPA at Graduation
DNCNU	19	2.79	84.2%	4.53	3.02
DNCUC	2	2.91	100%	5.00	3.09
DNCUN	14	2.71	57.4%	4.50	2.78
DNNCC	25	3.11	88.0%	4.57	3.31
DNNCU	4	3.02	100%	4.17	3.45
XNNUC	31	3.01	96.8%	4.62	3.17
XNUCC	6	3.29	100%	4.33	3.37
XNUCN	31	3.12	87.1%	4.78	3.24
XNUCU	5	3.22	100%	4.30	3.35
XNUNC	39	3.20	89.7%	4.56	3.24
XUCCN	1	3.46	0%	N/A	N/A
XUCNN	11	3.48	100%	4.45	3.49
XUCUN	1	3.39	100%	4.00	3.39
XUNCC	1	3.76	100%	4.50	3.74
XUNCN	19	2.91	57.9%	4.68	2.97
XUNNC	18	3.14	88.9%	4.38	3.30
Multiples	402	3.04	81.3%	4.54	3.22
TOTAL	4,058	3.07	79.2%	4.49	3.25

Table 9 – Students Having Completed the Third Year

Sequence Code	Student Count	GPA at Term	Graduation Rate	Time-to-Graduate	GPA at Graduation
Minimals					
DNNNNN	1,403	3.16	85.7%	4.40	3.28
DCNNNN	123	3.14	83.7%	4.33	3.32
DNCNNN	225	3.17	83.6%	4.36	3.34
DNNCNN	185	3.03	75.1%	4.50	3.19
DNNNCN	185	2.93	74.6%	4.58	3.15
DNNNNC	118	2.87	72.0%	4.55	3.16
XNNNNN	174	2.74	59.2%	4.96	3.01
XUNNNN	89	3.29	89.9%	4.42	3.39
XNUNNN	228	3.26	90.4%	4.36	3.39
XNNUNN	217	3.13	87.1%	4.51	3.27
XNNNUN	254	2.98	81.5%	4.60	3.12
XNNNNU	117	2.91	80.3%	4.77	3.07
Total Minimals	3,318	3.09	82.4%	4.47	3.25
Multiples					
DCCCCC	1	4.00	100%	4.00	4.00
DCCCNN	1	2.60	0%	N/A	N/A
DCCNCN	5	3.08	100%	4.50	3.01
DCCNNC	2	2.60	50%	4.00	2.89
DCCNNN	16	3.12	75%	4.54	3.48
DCCNUN	1	2.66	100%	4.50	2.70
DCCUNN	1	3.46	100%	4.50	3.47
DCNCCC	1	2.85	0%	N/A	N/A
DCNCCN	1	3.88	100%	3.50	3.82
DCNCNC	2	2.81	0%	N/A	N/A
DCNCNN	1	2.73	81.8%	4.56	2.92
DCNNCC	1	2.63	100%	4.50	2.62
DCNNCN	23	3.09	82.6%	4.55	3.27
DCNNNC	8	3.02	87.5%	4.64	3.28
DCNNNU	1	2.97	100%	4.50	3.00
DCNNUC	1	2.34	100%	4.50	3.00
DCNNUN	9	2.94	100%	4.89	3.03
DCNUNC	1	2.06	100%	4.50	2.39
DCNUNN	9	3.28	77.8%	4.57	3.42
DCUCCN	2	3.00	100%	4.25	3.15
DCUCNN	1	4.00	100%	4.00	4.00
DCUNCC	1	3.05	100%	4.00	3.06
DCUNCN	1	2.58	100%	4.00	2.90
DCUNNN	7	3.37	100%	4.21	3.54

Sequence Code	Student Count	GPA at Term	Graduation Rate	Time-to-Graduate	GPA at Graduation
DNCCCN	4	3.53	100%	4.38	3.53
DNCCNC	2	3.71	100%	4.75	3.76
DNCCNN	25	3.04	80.0%	4.70	3.20
DNCNCC	3	2.60	100%	4.50	2.82
DNCNCN	34	2.92	61.7%	4.33	3.24
DNCNCU	1	2.50	100%	5.00	N/A
DNCNNC	18	3.02	77.8%	4.46	3.26
DNCNNU	9	2.86	77.8%	4.50	2.91
DNCNUC	2	3.17	100%	4.50	3.30
DNCNUN	16	2.83	87.5%	4.54	2.98
DNCUCN	2	2.88	100%	5.00	3.09
DNCUNC	2	2.53	50.0%	4.00	2.33
DNCUNN	9	2.74	77.8%	4.57	2.86
DNNCCN	22	3.12	95.5%	4.57	3.32
DNNCNC	12	3.09	58.3%	4.71	3.37
DNNCNU	3	3.17	100%	5.17	3.13
DNNCUN	3	3.36	100%	4.17	3.45
DNNNCC	18	2.91	66.7%	4.46	3.23
XNNNUC	21	2.82	66.7%	4.86	3.06
XNNUCC	4	3.23	100%	5.00	3.44
XNNUCN	27	3.00	92.6%	4.56	3.13
XNNUNC	22	3.12	86.4%	4.53	3.27
XNUCCC	2	3.08	100%	4.50	3.28
XNUCCN	4	3.37	100%	4.25	3.41
XNUCNC	2	3.12	100%	4.50	3.06
XNUCNN	27	3.16	92.6%	4.80	3.25
XNUCUC	1	3.00	100%	4.50	3.08
XNUCUN	4	3.35	100%	4.25	3.42
XNUNCC	4	3.17	100%	4.50	3.41
XNUNCN	33	3.22	90.9%	4.55	3.24
XNUNNC	24	3.13	91.7%	4.43	3.22
XUCCNC	1	2.83	0%	N/A	N/A
XUCNNN	10	3.47	100%	4.40	3.51
XUCNNU	1	3.51	100%	5.00	3.26
XUCUNN	1	3.40	100%	4.00	3.39
XUNCCC	1	3.77	100%	4.50	3.74
XUNCNC	2	2.58	0%	N/A	N/A
XUNCNN	17	2.89	64.7%	4.68	2.97
XUNNCC	3	3.21	100%	4.17	3.08
XUNNCN	15	3.13	86.7%	4.42	3.35
XUNNNC	5	3.19	80.0%	4.65	3.37
Total Multiples	523	3.06	83.0%	4.55	3.22
TOTAL	3,841	3.09	82.5%	4.48	3.25

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