

Office of Research and Planning

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The Relationship between Student Registration Date and Course Success

Fall 2009 to Spring 2011 by Week Registered, Term, Priority Registration, and Course Occupational Status

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Introduction

The purpose of this report is to examine the relationship between when students register for a course and course success. In an effort to help improve the likelihood that students would successfully complete courses with a grade of "C" or better the Admissions and Records Office has been discussing the possibility of reducing the late add period for courses with the campus community. As a result, the following examines the relationship between the week in which students register for a course and their likelihood of success in that course by term, occupational course status, and whether or not a student registered for a course during a priority registration period.

Executive Summary

Spring 2009 to Fall 2011 (see Figures 1 and 4, Tables 3 – 9, and Table 12)

• Students had a statistically significantly and substantially *higher* success rate when they registered for the course in the eleventh (82%), tenth (79%), and eighth (79%) week prior to the start date of the course than the overall success rate of 72%

Figure 1: Course Success Rate by Week Student Registered for the Primary Terms from Spring 2009 to Fall 2011 in Weekly Census Sections.



Note: Weeks 3 and 4 after the start date are excluded from the chart because of the low number of GOR (Grades on Record) earned by students in those weeks, 31 and 6 respectively. Spring 2009 was the only semester included where students registered between the 9 and 11 weeks prior to the start date.

Two Weeks after the Section Start Date (see Figures 2 and 5, and Tables 3, 9, and 13)

- In the primary terms from Spring 2009 to Fall 2011 students had a statistically significantly and substantially *lower* success rate when they registered for the course in the second (64%) week after the start date of the course than the overall success rate of 72%
- In Fall 2011 students had a statistically significantly and substantially *lower* success rate when they registered for the course in the second (65%) week after the start date of the course than the overall success rate of 76%

Figure 2: Course Success Rate of Students who Registered for the Course Two Weeks After the Start Date and the Overall Success Rate by Term from Spring 2009 to Fall 2011 in Weekly Census Sections.



Occupational Courses (see Figure 3 and Tables 10, 11, and 13)

- The relationship between course success and week registered is generally the same for non-occupational and occupational courses
- In the primary terms from Spring 2009 to Fall 2011 students had a statistically significantly and substantially *lower* success rate in *non-occupational* courses when they registered for the course in the second (63%) week after the start date of the course than the overall non-occupational success rate of 72%
- In the primary terms from Spring 2009 to Fall 2011 students had a statistically significantly and substantially *lower* success rate in *occupational* courses when they registered for the course in the second (71%) week after the start date of the course than the overall occupational course success rate of 76%

Figure 3: Course Success Rate of Students who Registered for the Course Two Weeks After the Start Date and the Overall Success Rate by Course Occupational Status from Spring 2009 to Fall 2011 in Weekly Census Sections.



Priority Registration (see Table 14)

 In the primary terms from Spring 2009 to Fall 2011 students had a statistically significantly and substantially *higher* success rate when they registered for the course during the priority registration period (76%) than when they registered for the course after the priority registration period (67%)

Methodology

Records for the last two complete years were used to examine the relationship between the week in which a student registers for a course and course success. In order to be included in the study, students had to earn a grade on record: A, B, C, D, F, P, NP, I, or W. The following primary terms for the three most recent years were included in the study: Spring 2009, Fall 2009, Spring 2010, Fall 2010, Spring 2011, and Fall 2011. The summer terms were excluded because the success rates during the summer are often inflated in comparison to the primary terms and consist mostly of daily census sections.

Weeks were first calculated in days by subtracting the section start date by a student's first student status date. After the number of days prior to enrollment or after enrollment was identified, weeks were calculated by determining how many days the enrollment occurred prior to or after the section start date. For instance, a student who enrolled 12 days prior to the start date of the section is identified as enrolling two weeks prior to the start date (i.e. -2). Students who enrolled on the start day of the section were coded as 0.

Occupational Courses. In order to control for the possibility that students enrolled in occupational courses may perform differently than students enrolled in nonoccupational courses, the relationship of week registered to course success was also examined for occupational and non-occupational students. An occupational enrollment was defined as an enrollment in course that has been coded as "clearly occupational" or "advanced occupational." All other courses were flagged as non-occupational courses.

Priority Registration Categories. Priority registration dates are based on a student's status as a Crafton Hills College student and determine the date in which a student can enroll. The following categories of priority registration were the categories for Fall 2011 and are similar to categories in prior semesters. Priority A students are allowed to register first. They are students who have been accepted into the EOPS, DSP&S, or CalWorks programs or are active military veterans. Priority B students are allowed to register second. They are students who attended CHC previously with a break of not more than two years and have completed 40 to 90.9 units at Crafton. Priority C students are allowed to register third. They are students who attended CHC previously with a break of not more than two years and have completed 30 to 39.9 units at Crafton. Priority D students are allowed to register fourth. They are students who attended CHC previously with a break of not more than two years and have completed 15 to 29.9 units at Crafton. Priority E students are allowed to register fifth. They are students who attended CHC previously with a break of not more than two years and have completed 0 to 14.9 units at Crafton. Priority F students are allowed to register sixth. They are students who attended CHC previously with a break of more than two years and have previously earned a Bachelor's Degree or higher or have earned 91 or more units at Crafton. Priority G students are allowed to register seventh. They are new students who completed the Matriculation process or met the pre-enrollment assessment waiver criteria prior to the registration date for Priority G.

Limitations. A limitation to the study was that data was only available for when student's registered for a course not for when they first attended a course session. For example, a student may attend class one or more times prior to enrolling in the course.

A second limitation is that the relationship to week enrolled and course success was not examined by student enrollment status. However, past research indicates that there is not a relationship between student enrollment status, week enrolled, and course success (<u>Wurtz, 2009</u>).

Another limitation is that the results presented here only indicate that a relationship exists between week registered and course success, they do not show that the week a student registers affects course success. Additional research would need to be conducted to show a causal relationship.

Section Accounting Method. Seventy-eight percent of the sections offered in Spring 2009, Fall 2009, Spring 2010, Fall 2010, Spring 2011, and Fall 2011 were weekly census full-term regularly scheduled sections (see Table 1). Weekly census sections were the only sections included in the study because they represented most of the enrollments at Crafton and because the weekly census sections provided a more methodologically sound process for comparing student performance by week. The sections excluded from the study included positive attendance sections, daily census sections, and independent study sections. Positive attendance sections do not have regularly scheduled meeting times. Daily census (e.g.: late start) sections have at least five regularly scheduled meeting times and do not run the entire length of the semester. Independent study sections include cooperative education, and work experience and allow students to meet the requirements of the course in their own unique way.

 Table 1: Number and Percent of Sections Offered by Section Accounting Method

 and Primary Term from Spring 2009 to Fall 2011.

Term	Daily Independent Census Study		Positive Attendance		Weekly Census		Total		
	#	%	#	%	#	%	#	%	
Spring 2009	107	15.3	40	5.7	43	6.1	510	72.9	700
Fall 2009	94	15.0	24	3.8	28	4.5	482	76.8	628
Spring 2010	86	13.9	23	3.7	34	5.5	477	76.9	620
Fall 2010	66	11.4	8	1.4	33	5.7	474	81.6	581
Spring 2011	73	12.2	6	1.0	41	6.9	478	79.9	598
Fall 2011	51	9.6	7	1.3	46	8.6	428	80.5	532
Total	477	13.0	108	3.0	225	6.1	2849	77.9	3,659

Note: "#" refers to the number of sections, and "%" is the row percent and represents the type of sections offered each semester. Honors sections are included in the counts.

Primary Terms. In Spring 2009 students were allowed to start registering for courses on October 27th and courses started on January 12th, giving students 11 weeks to register for courses prior to the start of the semester. Forty-three enrollments (0.4%) had a status date after the census date and were excluded from the analysis. In Spring 2009 the census date occurred at the start of the third week of the semester.

In Fall 2009 students were allowed to start registering for courses on June 22nd and courses started on August 17th, giving students 8 weeks to register for courses prior to the start of the semester. Four enrollments (0.03%) had a status date after the census date and were excluded from the analysis. In Fall 2009 the census date occurred at the start of the fourth week of the semester.

In Spring 2010 students were allowed to start registering for courses on November 16th and courses started on January 11th, giving students 8 weeks to register for courses prior to the start of the semester. Twenty-three enrollments (0.2%) had a status date after the census date and were excluded from the analysis. In Spring 2010 the census date occurred at the start of the fourth week of the semester. In Fall 2010 students were allowed to start registering for courses on June 21st and courses started on August 16th, giving students 8 weeks to register for courses prior to the start of the semester. Four enrollments (0.02%) had a status date after the census date and were excluded from the analysis. In Fall 2010 the census date occurred at the start of the fourth week of the semester.

In Spring 2011 students were allowed to start registering for courses on November 22nd and courses started on January 18th, giving students 8 weeks to register for courses prior to the start of the semester. Three enrollments (0.02%) had a status date after the census date and were excluded from the analysis. In Spring 2011 the census date occurred at the start of the fourth week of the semester.

In Fall 2011 students were allowed to start registering for courses on June 20th and courses started on August 15th, giving students 8 weeks to register for courses prior to the start of the semester. Seven enrollments (0.06%) had a status date after the census date and were excluded from the analysis. In Fall 2011 the census date occurred at the start of the fourth week of the semester.

Definitions

Success. Success is defined as earning a grade of A, B, C, or P. Success rate is the number of successful students divided by the number of students who earned a grade on record (GOR, A, B, C, D, F, I, P, NP or W).

P-Value. The p-value shown in Tables 12 – 14 represents the probability that the difference in success rate between the week student registered and the overall success rate is due to chance. A p-value less than .05 indicates that the difference is less likely to occur randomly in the population (i.e. statistically significant). It is important to keep in

mind that when interpreting statistical significance statistically significant differences can occur even when the difference between two groups is very small (Serlin & Lapsley, 1985). Accordingly, it is also important to not only look at statistical significance, but to also examine how large the difference is between the comparison groups, and to consider the size of the difference in order for it to be meaningful. Therefore, the results presented here also include an effect size.

Effect Size. The **effect size** statistic is used in meta-analyses. A meta-analysis uses quantitative techniques to summarize the findings from a number of studies on a particular topic to determine the average effect of a given technique (Marzano, Pickering, & Pollock, 2001; Marzano, Marzano, & Pickering, 2003). One method of interpreting effect size was developed by Jacob Cohen (Marzano et al.). Jacob Cohen defined "small," "medium," and "large" effect sizes (Rosenthal & Rosnow, 1984). He explained that an effect size of .20 can be considered small, an effect size of .50 can be considered medium, and an effect size of .80 can be considered large (Marzano et al., and Rosenthal & Rosnow, 1984). Equally important, if the lower end of the effect size confidence interval (CI) is above .20 it indicates that there is a 95% probability that the program or characteristic has a meaningful impact on the outcome. 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).

Sample

In the primary terms from Spring 2009 to Fall 2011, 14,677 students earned 77,569 grades on record in weekly census sections (see Table 3). Enrollments were

most likely to occur during priority registration than after priority registration. However,

almost 35,000 enrollments (45%) occurred after priority registration. On the other hand

the percent of enrollments occurring after priority registration has decreased from 64%

in Spring 2009 to 37% in Fall 2011.

 Table 2: Number and Percent of Enrollments by Priority Registration Status and

 Primary Term from Spring 2009 to Fall 2011.

Priority	2009	SP	2009	FA	2010	SP	2010	FA	2011	SP	2011	FA	Tot	al
FIIOIILY	#		#		#		#		#		#		#	
А	425	3.6	560	4.2	792	6.4	629	4.5	1050	7.8	872	6.9	4328	5.6
В	411	3.5	596	4.5	917	7.4	972	7.0	1429	10.6	1387	11.0	5712	7.4
С	413	3.5	606	4.6	666	5.4	811	5.8	1198	8.9	954	7.5	4648	6.0
D	690	5.8	1103	8.3	907	7.3	1672	12.0	1785	13.2	1756	13.9	7913	10.2
E	1114	9.4	1241	9.3	1986	16.1	1402	10.1	2333	17.3	835	6.6	8911	11.5
F	518	4.4	1284	9.7	1367	11.1	1341	9.6	1068	7.9	1384	10.9	6962	9.0
G	693	5.8	901	6.8	592	4.8	877	6.3	574	4.3	779	6.2	4416	5.7
After Priority	7,639	64.2	6,986	52.6	5,140	41.6	6,205	44.6	4,036	30.0	4,673	37.0	34,679	44.7
Total	11,903	100	13,277	100.0	12,367	100.0	13,909	100.0	13,473	100.0	12,640	100.0	77,569	100.0

Results

Figure 1 illustrates the course success rate by week in which the students registered for the course for the six most recent and complete primary terms from Spring 2009 to Fall 2011. Comparing the overall success rate (72%) to the success rate by the week in which the student registered indicates that the success rate is lower than the overall success rate first in the fifth week (68%) prior to the start date of the course (see Figure 4 and Table 3). The lowest success rates occurred for students who registered in the third week (62%) prior to the start date of the course and in the second week (64%) after the start date of the course.

Table 12 illustrates the comparison between weekly success rates to the overall average success rate of 72%. The results indicate that students who register in the eleventh (82%), tenth (79%), and eighth (79%) week prior to the start date of the course had a statistically significantly and substantially higher success rate when compared to

the average success rate (72%). In contrast, students had a statistically significantly and substantially lower success rate than the average success rate when they register in the fourth (65%), third (62%), and second week (65%) prior to the start date of the course; and when they register in the second week (64%) after the start date of the course. Moreover, the students who registered from the fifth week prior to the start date of the course a lower success rate than the average success rate, except for students who registered on the start date of the course (75%).

The results described in Figure 4 and Table 3 are similar to the results found in a similar study at another community college (Wurtz, 2009). The results from the other community college also indicate that the success rate is first lower than the overall success rate for students who registered five weeks prior to the start date of the course. In addition, the success rates for the weeks from the fifth week prior to the start date to the fourth week after the start date are lower than the overall success rate, which is similar to the results provided here. The only difference is that Crafton students who registered on the start date of the course had a higher success rate than the overall average.

Tables 4 – 9 and 13 illustrate the relationship between course success rates by week in which the students registered for the course by term. The relationship between registration week and course success are generally the same for each term. In Fall 2011, the most recent complete term, the relationship is slightly stronger. The lowest success rate across all weeks occurred for courses in which students registered in the second week after the start date of the term. In Fall 2011 students had a statistically

significantly and substantially lower success rate when they registered for the course in the second week (65%) after the start date of the course than the overall success rate of 76% (see Table 13).

Tables 10, 11, and 13 illustrate the relationship between occupational course success rates by week in which the students registered for the course. The relationship between course success and week registered is generally the same for non-occupational and occupational courses. Specifically, in the primary terms from Spring 2009 to Fall 2011 students had a statistically significantly and substantially *lower* success rate in *occupational* courses when they registered for the course in the second (71%) week after the start date of the course than the overall occupational courses rate for occupational courses occurs in the second week after the start date of the course is that the lowest success rate (see Table 11). This is not the case for non-occupational courses (see Table 10). The lowest success rate for non-occupational courses occurs in week 3 (60%) prior to the start date of the course in week 3 (60%) prior to the start date of the course in the course of the course in the course of the course in the start date of the course in week 3 (60%) prior to the start date of the course in the second week after the start date of the course (see Table 10).

In addition to course occupational status, registration for courses that occurred during a priority registration period was also examined (see Table 14). The results indicated that if students registered for a course during a priority registration period they had a statistically significantly and substantially *higher* success rate when they registered for the course during the priority registration period (76%) than when they registered for the course after the priority registration period (67%). The relationship between registering for a course during priority registration and course success is statistically significant and substantial across all six primary terms.

Figure 4: Course Success Rate by Week Student Registered for the Primary Terms from Spring 2009 to Fall 2011 in Weekly Census Sections.



Note: Spring 2009 was the only semester included where students registered between the 9 and 11 weeks prior to the start date of the section. Weeks 3 and 4 after the start date of the section only represent 31 and 6 grades on record (GOR) respectively.

Table 3: Number of Successful Grades, Number of Grades on Record, andSuccess Rate for all Students in Weekly Census Sections in Spring 2009, Fall2009, Spring 2010, Fall 2010, Spring 2011, and Fall 2011.

Week		Success	
Registered	#	Ν	%
-11	749	912	82.1
-10	1,480	1,872	79.1
-9	1,167	1,626	71.8
-8	10,102	12,808	78.9
-7	11,983	16,002	74.9
-6	9,090	12,600	72.1
-5	4,999	7,342	68.1
-4	2,585	3,980	64.9
-3 -2	1,609	2,586	62.2
-2	1,944	2,978	65.3
-1	2,725	4,129	66.0
Start Date	923	1,238	74.6
1	4,475	6,417	69.7
2	1,945	3,042	63.9
3	21	31	67.7
4	4	6	66.7
Overall	55,801	77,569	71.9

Note. "#" refers to the number of success grades, "N" refers to the number of grades on record, and "%" is the success rate.

Table 4: Number of Successful Grades, Number of Grades on Record, and
Success Rate for all Students in Weekly Census Sections in Spring 2009.

Week	Success			
Registered	#	N	%	
-11	749	912	82.1	
-10	1480	1872	79.1	
-9	1167	1626	71.8	
-8	852	1221	69.8	
-7	301	463	65.0	
-6	445	705	63.1	
-5	412	628	65.6	
-4	396	614	64.5	
-3	252	381	66.1	
-2	264	413	63.9	
-1	899	1397	64.4	
Start Date	142	179	79.3	
1	639	946	67.5	
2	353	546	64.7	
Overall	8351	11903	70.2	

Week	Success			
Registered	#	N	%	
-8	1111	1398	79.5	
-7	1757	2265	77.6	
-6	1910	2628	72.7	
-5	1307	1838	71.1	
-4	697	1066	65.4	
-3	488	805	60.6	
-2	432	696	62.1	
-1	410	657	62.4	
Start Date	174	232	75.0	
1	801	1135	70.6	
2	356	539	66.0	
3	10	15	66.7	
4	1	3	33.3	
Overall	9454	13277	71.2	

Table 5: Number of Successful Grades, Number of Grades on Record, andSuccess Rate for all Students in Weekly Census Sections in Fall 2009.

Note. "#" refers to the number of success grades, "N" refers to the number of grades on record, and "%" is the success rate.

Table 6: Number of Successful Grades, Number of Grades on Record, and Success Rate for all Students in Weekly Census Sections in Spring 2010.

Week		Success	
Registered	#	N	%
-8	1600	1990	80.4
-7	2089	2697	77.5
-6	1794	2546	70.5
-5	845	1354	62.4
-4	434	727	59.7
-3	213	323	65.9
-2	167	251	66.5
-1	494	771	64.1
Start Date	138	195	70.8
1	689	958	71.9
2	345	549	62.8
3	4	5	80.0
4	1	1	100.0
Overall	8813	12367	71.3

Week	Success			
Registered	#	N	%	
-8	1642	2032	80.8	
-7	2427	3233	75.1	
-6	1819	2439	74.6	
-5	1181	1743	67.8	
-4	604	897	67.3	
-3	400	664	60.2	
-2	361	538	67.1	
-1	318	453	70.2	
Start Date	140	199	70.4	
1	785	1160	67.7	
2	332	545	60.9	
3	4	6	66.7	
Overall	10013	13909	72.0	

 Table 7: Number of Successful Grades, Number of Grades on Record, and

 Success Rate for all Students in Weekly Census Sections in Fall 2010.

Note. "#" refers to the number of success grades, "N" refers to the number of grades on record, and "%" is the success rate.

Table 8: Number of Successful Grades, Number of Grades on Record, and Success Rate for all Students in Weekly Census Sections in Spring 2011.

Week	Success			
Registered	#	N	%	
-8	2748	3418	80.4	
-7	3085	4377	70.5	
-6	1362	2031	67.1	
-5	458	704	65.1	
-4	183	292	62.7	
-3	96	182	52.7	
-2	221	370	59.7	
-1	228	357	63.9	
Start Date	183	244	75.0	
1	750	1087	69.0	
2	266	410	64.9	
3	0	1	0.0	
Overall	9580	13473	71.1	

Figure 5: Course Success Rate by Week Student Registered for the Primary Terms from Fall 2011 in Weekly Census Sections.



Week Registered

Note: Weeks 3 and 4 are not included in Figure 1 because there is only 4 and 2 GOR respectively.

 Table 9: Number of Successful Grades, Number of Grades on Record, and

 Success Rate for all Students in Weekly Census Sections in Fall 2011.

Week		Success	
Registered	#	Ν	%
-8	2149	2749	78.2
-7	2324	2967	78.3
-6	1760	2251	78.2
-5	796	1075	74.0
-4	271	384	70.6
-3	160	231	69.3
-2	499	710	70.3
-1	376	494	76.1
Start Date	146	189	77.2
1	811	1131	71.7
2	293	453	64.7
3	3	4	75.0
4	2	2	100.0
Overall	9590	12640	75.9

Table 10: Number of Successful Grades, Number of Grades on Record, and Success Rate for all Students in Weekly Census *Non-OCCUPATIONAL* Sections Only in Spring 2009, Fall 2009, Spring 2010, Fall 2010, Spring 2011, and Fall 2011.

Week		Success	
Registered	#	N	%
-11	669	815	82.1
-10	1,323	1,673	79.1
-9	1,054	1,470	71.7
-8	9,070	11,553	78.5
-7	10,947	14,633	74.8
-6	8,118	11,231	72.3
-5	4,341	6,441	67.4
-4	2,187	3,447	63.4
-3	1,325	2,196	60.3
-2	1,542	2,437	63.3
-1	2,060	3,289	62.6
Start Date	857	1,155	74.2
1	4,122	5,939	69.4
2	1,747	2,761	63.3
3	17	27	63.0
4	4	6	66.7
Overall	49,383	69,073	71.5

Note. "#" refers to the number of success grades, "N" refers to the number of grades on record, and "%" is the success rate. Non-Occupational sections are courses that are not coded as clearly or advanced occupational.

Table 11: Number of Successful Grades, Number of Grades on Record, andSuccess Rate for all Students in Weekly Census OCCUPATIONAL Sections Onlyin Spring 2009, Fall 2009, Spring 2010, Fall 2010, Spring 2011, and Fall 2011.

Week		Success	
Registered	#	N	%
-11	80	97	82.5
-10	157	199	78.9
-9	113	156	72.4
-8	1,032	1,255	82.2
-7	1,036	1,369	75.7
-6	972	1,369	71.0
-5	658	901	73.0
-4	398	533	74.7
-3 -2	284	390	72.8
	402	541	74.3
-1	665	840	79.2
Start Date	66	83	79.5
1	353	478	73.8
2	198	281	70.5
3	4	4	100.0
Overall	6,418	8,496	75.5

Note. "#" refers to the number of success grades, "N" refers to the number of grades on record, and "%" is the success rate. Occupational sections are coded as clearly or advanced occupational.

Table 12: P Values, Effect Sizes, and 95% Confidence Interval Effect Sizes for Success Rate by Week Registered and the Average Success Rate for all Students in Weekly Census Sections in Spring 2009, Fall 2009, Spring 2010, Fall 2010, Spring 2011, and Fall 2011.

Week	Success			Total S	Succes	sful	Р	Effect	95%	95% CI	
Registered	<u>N</u>	M	SD	<u>N</u>	M	SD	Value	Size	LR	UP	
-11	912	82.1	0.38	77,569	71.9	.449	0.00	0.23	0.16	0.29	
-10	1,872	79.1	0.41	77,569	71.9	.449	0.00	0.16	0.11	0.20	
-9	1,626	71.8	0.45	77,569	71.9	.449	0.45	0.00	-0.05	0.05	
-8	12,808	78.9	0.41	77,569	71.9	.449	0.00	0.16	0.14	0.18	
-7	16,002	74.9	0.43	77,569	71.9	.449	0.00	0.07	0.05	0.09	
-6	12,600	72.1	0.45	77,569	71.9	.449	0.37	0.00	-0.02	0.02	
-5	7,342	68.1	0.47	77,569	71.9	.449	0.00	-0.09	-0.11	-0.06	
-4	3,980	64.9	0.48	77,569	71.9	.449	0.00	-0.15	-0.18	-0.12	
-3	2,586	62.2	0.48	77,569	71.9	.449	0.00	-0.22	-0.26	-0.18	
-2	2,978	65.3	0.48	77,569	71.9	.449	0.00	-0.15	-0.19	-0.12	
-1	4,129	66.0	0.47	77,569	71.9	.449	0.00	-0.13	-0.16	-0.10	
Start Date	1,238	74.6	0.44	77,569	71.9	.449	0.16	0.07	0.01	0.13	
1	6,417	69.7	0.46	77,569	71.9	.449	0.00	-0.04	-0.07	-0.02	
2	3,042	63.9	0.48	77,569	71.9	.449	0.00	-0.18	-0.21	-0.14	
3	31	67.7	0.48	77,569	71.9	.449	0.34	-0.09	-0.44	0.27	
4	6	66.7	0.52	77,569	71.9	.449	0.41	-0.11	-0.91	0.69	

Note. "N" refers to the number of grades on record, "M" refers to the average success rate, and "SD" is the standard deviation. "LR" refers to the lower end of the 95 effect size confidence interval and "UP refers to the upper end.

Table 13: P Values, Effect Sizes, and 95% Confidence Interval Effect Sizes for Success Rates for Students who Registered in Week 2* and the Average Success Rate for all Students in Weekly Census Sections in Spring 2009, Fall 2009, Spring 2010, Fall 2010, Spring 2011, and Fall 2011 by Term and Course Occupational Status.

Term /	Success in Week 2			Total Successful			Р	Effect	95% CI	
Occupational	N	M	SD	N	M	<u>SD</u>	Value	Size	LR	UP
2009SP	546	64.7	.48	11,903	70.2	.46	.007	-0.12	-0.21	-0.03
2009FA	539	66.0	.47	13,277	71.2	.45	.012	-0.12	-0.20	-0.03
2010SP	549	62.8	.48	12,367	71.3	.45	< .001	-0.19	-0.27	-0.10
2010FA	545	60.9	.49	13,909	72.0	.45	< .001	-0.25	-0.33	-0.16
2011SP	410	64.9	.48	13,473	71.1	.45	.009	-0.14	-0.24	-0.04
2011FA	453	64.7	.48	12,640	75.9	.43	< .001	-0.26	-0.35	-0.17
Non- Occupational	2,761	63.3	.48	69,073	71.5	.45	<.001	-0.18	-0.22	-0.14
Occupational Only	281	70.5	.46	8,496	75.5	.43	.066	-0.12	-0.24	0.00

Note. "N" refers to the number of grades on record, "M" refers to the average success rate, and "SD" is the standard deviation. "LR" refers to the lower end of the 95 effect size confidence interval and "UP refers to the upper end. Non-Occupational sections are courses that are not coded as clearly or advanced occupational. Occupational sections are coded as clearly or advanced occupational.

Table 14: P Values, Effect Sizes, and 95% Confidence Interval Effect Sizes for Success Rates for Registrations that Occurred and Did Not Occur during Priority Registration in Weekly Census Sections in Spring 2009, Fall 2009, Spring 2010, Fall 2010, Spring 2011, and Fall 2011 by Term.

Term	Did Not Priority Register			Priority Registered			P	Effect	95% CI	
	#	N	%	#	N	%	Value	Size	LR	UP
2009SP	5,053	7,639	66.1	3,298	4,264	77.3	< .001	0.25	0.21	0.28
2009FA	4,676	6,986	66.9	4,778	6,291	75.9	< .001	0.20	0.17	0.23
2010SP	3,334	5,140	64.9	5,479	7,227	75.8	< .001	0.24	0.21	0.28
2010FA	4,125	6,205	66.5	5,888	7,704	76.4	< .001	0.22	0.19	0.26
2011SP	2,640	4,036	65.4	6,940	9,437	73.5	< .001	0.18	0.14	0.22
2011FA	3,357	4,673	71.8	6,233	7,967	78.2	< .001	0.15	0.11	0.19
Total	23,185	34,679	66.9	32,616	42,890	76.0	< .001	0.21	0.19	0.22

Note. "#" refers to the number of success grades, "N" refers to the number of grades on record, and "%" is the success rate.

Discussion

Even when examining the results by term and controlling for students who registered

late for a course, the results indicate a similar pattern where the success rate first decreases

below the average success rate in approximately the fifth week prior to the start date of the

course and remains lower than average from the fifth week prior to the start date of the

course to the fourth week after the start date of the course. Future research could identify

characteristics of students who are more likely to register between the fifth week prior to the

start of the course to the fourth week after the course start date.

References

Marzano, Robert, Marzano, Jana, and Pickering, Debra. (2003). Classroom Management that Works: Research-Based Strategies for Every Teacher, Alexandria, Virginia: Association for Supervision and Curriculum Development.

Marzano, Robert, Pickering, Debra, and Pollock, Jane. (2001). Classroom Instruction that Works: Research-Based Strategies for Increasing Student Achievement, Alexandria, Virginia: Association for Supervision and Curriculum Development.

Rosenthal, Robert and Rosnow, Ralph. (1984). Essentials of Behavioral Research: Methods and Data Analysis, United States: McGraw-Hill Book Company. Serlin, R.C., & Lapsley, D.K. (1985). Rationality in psychological research: The good enough principle. *American Psychologist*, *40*, 73-83.

Wurtz, K. (2009). The relationship between student registration date and course success. *Chaffey College*. Retrieved April 19th, 2012 from http://www.chaffey.edu/research/IR_PDF_Files/Research_Reports/Enrollment/0910_ Report_E&M_AddWeek.pdf