



**Research Brief**

**The Relationship between Probationary I and II Students with Course Success, and Fall to Spring Retention from 2013 – 2014 to 2015 – 2016.**

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**Purpose of Brief**

The purpose of this research brief is to identify the number of units for counselors to recommend to students on probation to enroll in.

**Summary of Findings**

- The number of Crafton students on academic probation has declined from 835 in Fall 2013 to 795 in Fall 2015, a 5% decrease
- The percent of students on academic probation has declined from 14.5% in Fall 2013 to 13.1% in Fall 2015, a 10% decrease in the percentage of Crafton students on academic probation
- Probationary Level I students who enrolled in 12 or more fall units were statistically significantly ( $p < .05$ ) more likely to enroll in the subsequent spring semester (61%) than Probation Level I students enrolled in less than 12 units (46%)
- Probationary Level II students enrolled in less than 12 units in the fall were statistically significantly ( $p < .05$ ) more likely to complete their courses successfully in the spring (51%) than students enrolled in 12 or more units in the fall (37%)
- There did not appear to be a relationship between ethnicity and units enrolled for probationary students; however, this could be a result of low numbers when the data is disaggregated

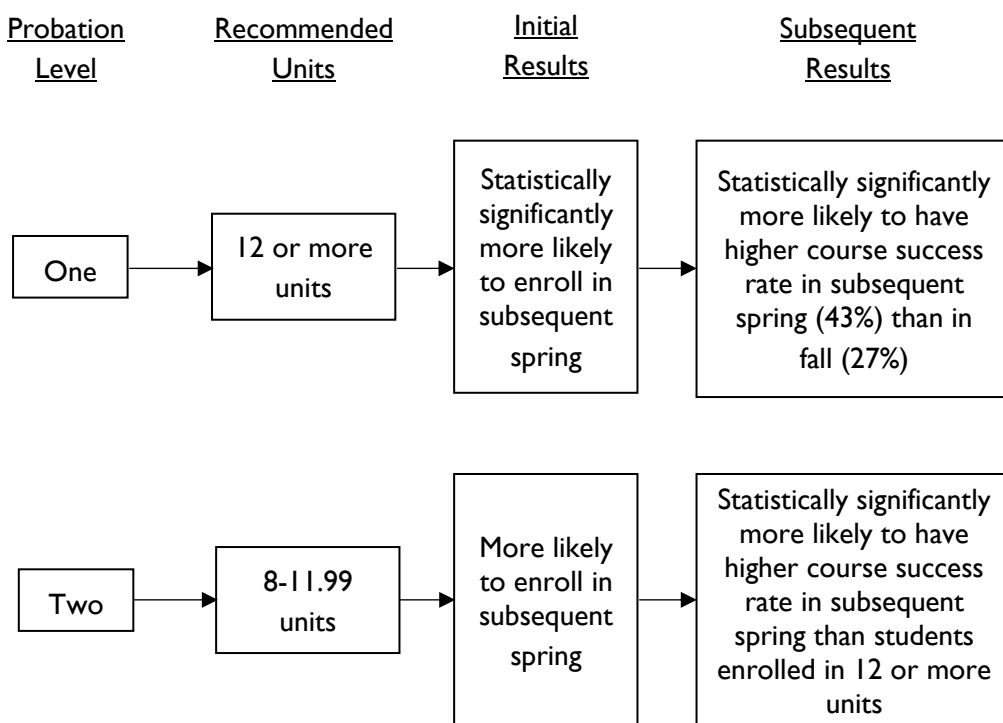
**Overview**

The purpose of this research brief is to illustrate the relationship between course success and fall to spring retention with the number of units probationary students enrolled in to help inform counselor recommendations to students.

**Possible Implications**

Probationary Level I students who enrolled in 12 or more units in the fall semester were statistically significantly more likely to enroll in the subsequent spring semester (see Figure 1). In addition, if Probationary Level I students enrolled in the spring they had a slightly higher course success rate overall in the spring (44%) than in the fall (39%). Probationary Level II students who enrolled in less than 12 units in the fall were statistically significantly more likely to complete courses successfully in the spring, and slightly more likely to enroll in the subsequent spring semester. One possible implication is that the data suggest that Probationary Level I students need to be encouraged to enroll in more than 12 units and Probation Level II students need to be encouraged to enroll in less than 12 units.

**Figure 1: Decision Tree by Probation Level.**



## Findings

The number of Crafton students on academic probation has declined from 835 in Fall 2013 to 795 in Fall 2015, a 5% decrease (see Table 1). Moreover, the percent of students on academic probation has declined from 14.5% in Fall 2013 to 13.1% in Fall 2015, a 10% decrease in the percentage of Crafton students on academic probation (see Table 2).

**Table 1: Total Number of Unduplicated Students by Term and Probation Category from Fall 2013 to Fall 2015.**

Probation Level	Probation Category	Term		
		2013F A	2014F A	2015F A
I	CAI (C-Level I Academic Probation)	411	437	353
I	CPI (C-Level I Progress Probation)	52	48	57
I	CPIAI (C-Academic & Progress Probation)	23	19	30
I	CPIAD (C-Progress Probation & Academic Dismissal)	2	7	2
I	CPDAI (C-Progress Dismissal & Academic Probation)	2	2	3
II	CA2 (C-Level 2 Academic Probation)	160	146	157
II	CPIA2 (C-Progress Probation & Academic STD)	4	4	3
II	CP2 (C-Level 2 Progress Probation)	8	10	9
II	CP2A2 (C-Academic & Progress STD)	6	2	6
II	CP2AD (C-Progress STD & Academic Dismissal)	2	2	2
II	CPDA2 (C-Progress Dismissal & Academic STD)	3	2	3
III	CP2AI (C-Progress STD & Academic Probation)	1	1	4
IV	CAD (C-Academic Dismissal)	149	136	160
IV	CPD (C-Progress Dismissal)	7	8	6
IV	CPDAD (C-Academic & Progress Dismissal)	5	3	0
Total		835	827	795

**Table 2: Total Number of Unduplicated Students by Term and Probation Level from Fall 2013 to Fall 2015.**

Probation Level	Term		
	2013F A	2014F A	2015FA
Level I Probation	490	513	445
Level II Probation	183	166	180
Progress Probation Level 2, Academic Probation I	1	1	4
Dismissed	161	147	166
Total	835	827	795
Total Unduplicated Number of All Crafton Students	5,760	6,003	6,058
Percent of Students on Probation	14.5%	13.8%	13.1%

Table 3 illustrates the number and percent of Probation I and II students enrolled in fall units. Specifically, students on Probationary Level I are more likely to be enrolled in 12 or more units (57%) than 8-11.99 (26%) units, or less than 8 units (18%). Probation Level II students are more likely to be enrolled in less than 8 units (46%), followed by 8-11.99 units (36%), and 12 or more units (18%).

**Table 3: Total Number and Percent of Unduplicated Students by Term, Probation Level I and II, and Units Enrolled from Fall 2013 to Fall 2015.**

Fall Probation Level	Fall Units Enrolled	Term							
		2013FA		2014FA		2015FA		Total	
		#	%	#	%	#	%	#	%
I	Less than 8	69	14.1%	92	17.9%	96	21.6%	257	17.7%
	8-11.99	109	22.2%	135	26.3%	127	28.5%	371	25.6%
	12 or more	312	63.7%	286	55.8%	222	49.9%	820	56.6%
	Total	490	100.0%	513	100.0%	445	100.0%	1,448	100.0%
II	Less than 8	83	45.4%	80	48.2%	81	45.0%	244	46.1%
	8-11.99	58	31.7%	55	33.1%	77	42.8%	190	35.9%
	12 or more	42	23.0%	31	18.7%	22	12.2%	95	18.0%
	Total	183	100.0%	166	100.0%	180	100.0%	529	100.0%

Note: “#” refers to the number of unduplicated students enrolled in the specified unit value, and “%” refers to the percent of students enrolled in the specified unit value.

Referring to Table 4, the data indicated that there was no relationship between fall course success and the number of fall units enrolled in by students on probation. The highest course success rate for students on Probation Level I was for students enrolled in less than 8 units (30%), followed by students enrolled in 12 or more units (27%), and students enrolled in 8-11.99 units (25%). The only exception was Probation Level I Fall 2014 students. Specifically, Probationary Level I students enrolled in 12 or more units in Fall 2014 were statistically significantly ( $p < .01$ ) more likely to complete their courses successfully than Probation Level I students enrolled in 8-11.99 units (21%). Moreover, there also appears to be no relationship between units enrolled and Probation Level II students. The highest courses success rate for students on Probation Level II was for students enrolled in less than 8 units (39%), followed by students enrolled in 12 or more units (38%), and students enrolled in 8-11.99 units (36%).

**Table 4: Course Success Rate by Probation Levels I and II, Units Enrolled, and Fall Terms from 2013 to 2015.**

Fall Probation Level	Fall Units Enrolled	Term											
		2013FA			2014FA			2015FA			Total		
		Success Rate			Success Rate			Success Rate			Success Rate		
#	N	%	#	N	%	#	N	%	#	N	%		
I	Less than 8	42	122	34.4	44	163	27.0	49	173	28.3	135	458	29.5
	8-11.99	99	332	29.8	98	459	21.4 <sub>a</sub>	105	412	25.5	302	1,203	25.1
	12 or more	345	1,269	27.2	342	1,188	28.8 <sub>a</sub>	225	925	24.3	912	3,382	27.0
	Total	486	1,723	28.2	484	1,810	26.7	379	1,510	25.1	1,349	5,043	26.7
II	Less than 8	59	143	41.3	49	130	37.7	52	139	37.4	160	412	38.8
	8-11.99	59	173	34.1	67	168	39.9	76	225	33.8	202	566	35.7
	12 or more	56	167	33.5	47	129	36.4	41	88	46.6	144	384	37.5
	Total	174	483	36.0	163	427	38.2	169	452	37.4	506	1,362	37.2

Note: “#” refers to the number of students earning a “C” grade or better, “N” is the number of students who earned a grade on record (GOR), and “%” is the course success rate.

<sub>a</sub> Probationary Level I students enrolled in 12 or more units in Fall 2014 were statistically significantly ( $p < .01$ ) more likely to complete their courses successfully than Probation Level I students enrolled in 8-11.99 units (21%).

Table 4A illustrates the course success rate data by probation level, ethnicity, and units enrolled. There were no statistically significant differences within ethnicity by units enrolled. Even though some of the differences within ethnicity appear to be substantial, there is not a large enough sample to indicate significance.

**Table 4A: Course Success Rate by Probation Levels I and II, Units Enrolled, and Ethnicity for the Aggregated Fall Terms from 2013 to 2015.**

Fall Probation Level	Ethnicity	Fall Units	#	GOR	Success Rate
I	Asian	<8	9	17	52.9%
		8-11.99	10	33	30.3%
		>=12	30	101	29.7%
		Total	49	151	32.5%
	African American	<8	6	30	20.0%
		<b>8-11.99</b>	<b>30</b>	<b>90</b>	<b>33.3%</b>
		>=12	51	238	21.4%
		Total	87	358	24.3%
	Hispanic	<8	65	230	28.3%
		8-11.99	147	651	22.6%
		>=12	470	1752	26.8%
		Total	682	2633	25.9%
	Native American	<8	3	9	33.3%
		8-11.99	0	5	0.0%
		>=12	4	12	33.3%
		Total	7	26	26.9%
	Caucasian	<8	51	170	30.0%
		8-11.99	115	424	27.1%
		>=12	350	1265	27.7%
		Total	516	1859	27.8%
Missing	<8	1	2	50.0%	
	8-11.99				
	>=12	7	14	50.0%	
	Total	8	16	50.0%	
II	Asian	<8	2	8	25.0%
		8-11.99	4	19	21.1%
		<b>&gt;=12</b>	<b>12</b>	<b>32</b>	<b>37.5%</b>
		Total	18	59	30.5%
	African American	<8	7	19	36.8%
		8-11.99	4	26	15.4%
		>=12	6	33	18.2%
		Total	17	78	21.8%
	Hispanic	<8	71	204	34.8%
		8-11.99	127	333	38.1%
		<b>&gt;=12</b>	<b>86</b>	<b>198</b>	<b>43.4%</b>
		Total	284	735	38.6%
	Native American	<8	1	6	16.7%
		<b>8-11.99</b>	<b>2</b>	<b>8</b>	<b>25.0%</b>
		>=12			
		Total	3	14	21.4%
	Caucasian	<8	79	175	45.1%
		8-11.99	65	180	36.1%
		>=12	40	121	33.1%
		Total	184	476	38.7%

Referring to Table 5, there does appear to be a relationship between fall units enrolled and fall to spring retention for Probation Level I students. Specifically, Probationary Level I students who enrolled in 12 or more fall units were statistically significantly ( $p < .05$ ) more likely to enroll in the subsequent spring semester (61%) than Probation Level I students enrolled in 8-11.99 units (49%) or less than 8 units (41%). This same relationship did not exist for Probationary Level II students. Although, Probationary Level II students who enrolled in 12 or more units did have a higher fall to spring retention rate (54%), followed by students enrolled in 8-11.99 units (53%), and those enrolled in less than 8 units (43%).

**Table 5: Fall to Spring Retention Rate (i.e. formally persistence) by Probation Levels I and II, and Units Enrolled from 2013-2014 to 2015-2016.**

Fall Probation Level	Fall Units Enrolled	Terms											
		2013FA to 2014SP			2014FA to 2015SP			2015FA to 2016SP			Total		
		Retention Rate			Retention Rate			Retention Rate			Retention Rate		
		#	N	%	#	N	%	#	N	%	#	N	%
I	Less than 8	32	69	46.4 <sub>a</sub>	32	92	34.8 <sub>b</sub>	42	96	43.8	106	257	41.2 <sub>c</sub>
	8-11.99	55	109	50.5	64	135	47.4	63	127	49.6	182	371	49.1 <sub>c,d</sub>
	12 or more	194	312	62.2 <sub>a</sub>	180	286	62.9 <sub>b</sub>	127	222	57.2	501	820	61.1 <sub>c</sub>
	Total	281	490	57.3	276	513	53.8	232	445	52.1	789	1,448	54.5
II	Less than 8	39	83	47.0	31	80	38.8	34	81	42.0	104	244	42.6
	8-11.99	26	58	44.8	30	55	54.5	44	77	57.1	100	190	52.6
	12 or more	21	42	50.0	16	31	51.6	14	22	63.6	51	95	53.7
	Total	86	183	47.0	77	166	46.4	92	180	51.1	255	529	48.2

Note: “#” refers to the number of students who earned a grade on record (GOR) in both fall and the subsequent spring semester, “N” is the number of students who earned a grade on record (GOR) in the specified fall semester, and “%” is the fall to spring retention rate.

<sub>a, b</sub> – Students with Probation Level I, and who were enrolled in 12 or more units were statistically significantly and substantially more likely to earn a GOR in the subsequent spring semester than students enrolled in less than 8 units.

<sub>c, d</sub> – Students with Probation Level I and who were enrolled in 12 or more units were statistically significantly and substantially more likely to earn a GOR in the subsequent spring semester than students enrolled in less than 12 units from 2013 to 2016.

Table 5A illustrates the fall-to-spring retention rate data by probation level, ethnicity, and units enrolled. There were no statistically significant differences within ethnicity by units enrolled. Even though some of the differences within ethnicity appear to be substantial, there is not a large enough sample to indicate significance.

**Table 5A: Fall to Spring Retention Rate (i.e. formally persistence) by Probation Levels I and II, Units Enrolled from 2013-2014 to 2015-2016, and Ethnicity.**

Probation Level	Ethnicity	Units	#	GOR	Fall to Spring Retention Rate
I	Asian	<8	8	11	72.7%
		8-11.99	6	11	54.5%
		>=12	16	25	64.0%
		Total	30	47	63.8%
	African American	<8	6	19	31.6%
		8-11.99	14	27	51.9%
		>=12	30	57	52.6%
		Total	50	103	48.5%
	Hispanic	<8	48	121	39.7% <sub>oa</sub>
		8-11.99	99	198	50.0% <sub>ob</sub>
		>=12	268	427	62.8% <sub>oa,b</sub>
		Total	415	746	55.6%
	Native American	<8	4	6	66.7%
		8-11.99	0	2	0.0%
		>=12	2	3	66.7%
		Total	6	11	54.5%
	Caucasian	<8	39	99	39.4% <sub>oa</sub>
		8-11.99	63	133	47.4% <sub>ob</sub>
		>=12	183	305	60.0% <sub>oa,b</sub>
		Total	285	537	53.1%
	Missing	<8	1	1	100.0%
8-11.99					
>=12		2	3	66.7%	
Total		3	4	75.0%	
II	Asian	<8	3	7	42.9%
		8-11.99	2	7	28.6%
		>=12	4	8	50.0%
		Total	9	22	40.9%
	African American	<8	4	10	40.0%
		8-11.99	6	10	60.0%
		>=12	3	8	37.5%
		Total	13	28	46.4%
	Hispanic	<8	55	124	44.4%
		8-11.99	56	108	51.9%
		>=12	28	49	57.1%
		Total	139	281	49.5%
	Native American	<8	1	3	33.3%
		8-11.99	2	3	66.7%
		>=12			
		Total	3	6	50.0%
	Caucasian	<8	41	100	41.0%
		8-11.99	34	62	54.8%
		>=12	16	30	53.3%
		Total	91	192	47.4%

Table 6 illustrates whether the units enrolled in fall by Probationary I and II students were related to the course success rates in the subsequent spring semester. Overall, the data indicate that there was not a relationship between spring course success and the number of fall units enrolled in by students on Probation Level I. The highest courses success rate for students on Probation Level I was for students enrolled in less than 8 units (48%), followed by students enrolled in 8-11.99 units (45%), and students enrolled in 12 or more units (43%). However, Probation Level I Spring 2014 students who enrolled in less than 8 units in the fall were statistically significantly more likely to complete courses in the spring than students enrolled in 12 or more units in the prior fall term. Equally important, there does appear to be a relationship between fall units enrolled and spring course success for Probation Level II students. Specifically, Probationary Level II students who enrolled in less than 12 units in the fall were statistically significantly ( $p < .05$ ) more likely to complete courses successfully in the spring (51%) than students enrolled in 12 or more units in the fall (37%).

**Table 6: Spring Course Success Rate by Probation Levels I and II, and Fall Units Enrolled from 2013-2014 to 2015-2016.**

Fall Probation Level	Fall Units Enrolled	Terms											
		2014SP			2015SP			2016SP			Total		
		Success Rate			Success Rate			Success Rate			Success Rate		
		#	N	%	#	N	%	#	N	%	#	N	%
I	Less than 8	43	67	64.2 <sub>a</sub>	27	67	40.3	31	77	40.3	101	211	47.9
	8-11.99	84	166	50.6	71	175	40.6	81	183	44.3	236	524	45.0
	12 or more	284	670	42.4 <sub>a</sub>	274	597	45.9	171	411	41.6	729	1,678	43.4
	Total	411	903	45.5	372	839	44.3	283	671	42.2	1,066	2,413	44.2
II	Less than 8	39	86	45.3 <sub>b</sub>	37	68	54.4	32	64	50.0	108	218	49.5 <sub>e</sub>
	8-11.99	31	65	47.7 <sub>c</sub>	35	82	42.7	66	108	61.1 <sub>d</sub>	132	255	51.8 <sub>f</sub>
	12 or more	12	48	25.0 <sub>b,c</sub>	20	42	47.6	18	45	40.0 <sub>d</sub>	50	135	37.0 <sub>e,f</sub>
	Total	82	199	41.2	92	192	47.9	116	217	53.5	290	608	47.7

Note: “#” refers to the number of students earning a “C” grade or better, “N” is the number of students who earned a grade on record (GOR), and “%” is the course success rate.

<sub>a</sub> – Students with Probation Level I and enrolled in less than 8 units in the fall semester were statistically significantly and substantially more likely to successfully complete a course in the subsequent spring semester than students enrolled in 12 or more units in the fall semester.

<sub>b, c</sub> – Students with Probation Level II and enrolled in less than 12 units in the fall semester were statistically significantly and substantially more likely to successfully complete a course in the subsequent spring semester than students enrolled in 12 or more units in the fall semester.

<sub>d</sub> – Students with Probation Level II and enrolled in 8-11.99 units in the fall semester were statistically significantly and substantially more likely to complete a course successfully in the subsequent spring semester than students enrolled in 12 or more units in the prior fall semester.

<sub>e, f</sub> – Students with Probation Level II and enrolled in less than 12 units in the fall semester were statistically significantly and substantially more likely to complete a course successfully in the subsequent spring semester than students enrolled in 12 or more units in the prior fall semester from Spring 2014 to Spring 2016.

Table 6A illustrates the spring course success rate data by probation level, ethnicity, and fall units enrolled. There were no statistically significant differences within ethnicity by units enrolled. Even though some of the differences within ethnicity appear to be substantial, there is not a large enough sample to indicate significance.

**Table 6A: Spring Course Success Rate by Probation Levels I and II, Fall Units Enrolled from 2013-2014 to 2015-2016, and Ethnicity.**

Probation Level	Ethnicity	Units	#	GOR	Success Rate
I	Asian	<8	1	2	50.0%
		8-11.99			
		>=12	12	20	60.0%
		Total	13	22	59.1%
	African American	<8	1	2	50.0%
		8-11.99	3	6	50.0%
		>=12	13	39	33.3%
		Total	17	47	36.2%
	Hispanic	<8	24	37	64.9%
		8-11.99	49	102	48.0%
		>=12	149	349	42.7%
		Total	222	488	45.5%
	Native American	<8	2	2	100.0%
		8-11.99			
		>=12			
		Total	2	2	100.0%
Caucasian	<8	15	24	62.5%	
	8-11.99	32	58	55.2%	
	>=12	110	262	42.0%	
	Total	157	344	45.6%	
II	Asian	<8	1	5	20.0%
		8-11.99	2	3	66.7%
		>=12			
		Total	3	8	37.5%
	African American	<8	0	5	0.0%
		8-11.99	0	3	0.0%
		>=12	2	5	40.0%
		Total	2	13	15.4%
	Hispanic	<8	16	37	43.2%
		8-11.99	18	34	52.9%
		>=12	9	30	30.0%
		Total	43	101	42.6%
	Caucasian	<8	22	39	56.4%
		8-11.99	11	25	44.0%
		>=12	1	13	7.7%
		Total	34	77	44.2%



## **Methodology**

Tables 1 and 2 illustrate the number of unduplicated Crafton students on probation by fall term from 2013 to 2015, probation category, and probation level. The Counseling Office defined Probation Levels I and II and are included in Table 1. Probation level categories III and IV were not examined for this study because most of these students were at the dismissal stage of probation.

Table 3 illustrates the number and percent of unduplicated students by fall term, number of units enrolled, and probation level. The Counseling Office also determined the categories of units enrolled: less than 8 units, 8 – 11.99 units, and 12 or more units.

Tables 4 and 4A illustrate the fall course success rates by fall probation category level, fall units enrolled, and ethnicity. Course success is defined by dividing the grades of A, B, C, or P by the total number of Grades on Record (GOR): A, B, C, D, F, P, NP, I, or W. Tables 5 and 5A show the fall to spring retention rates by fall probation category level, fall units enrolled, and ethnicity. Fall to spring retention refers to the number of students earning a GOR in fall divided by the number of students who earn a GOR in the subsequent spring semester. Tables 6 and 6A illustrate the subsequent spring course success rates by fall probation category level, fall units enrolled, and ethnicity.