



SBCCD Distance Education Success and Retention Rates 2004 – 2005 to 2008 – 2009

Overview: The following brief illustrates the number of grades on record earned (GOR), and the success and retention rates for courses in the San Bernardino Community College District (SBCCD) from 2004 – 2005 to 2008 – 2009 by instruction method.

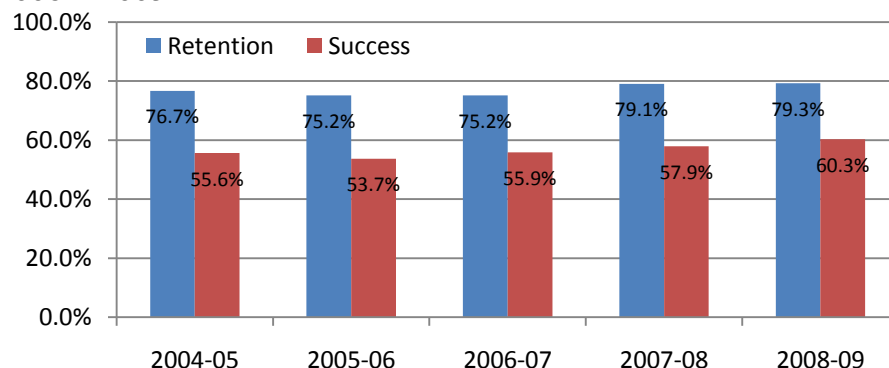
Methodology: Tables 1 and 2 display the success and retention rates for SBCCD by instruction method from 2004 – 2005 to 2008 – 2009. Instruction method refers to the method of instruction. There are ten methods of instruction identified in Tables 1 and 2: clinical, two-way video and audio, one-way video, internet with simultaneous interaction, internet with delayed interaction, independent study, field experience, laboratory, lecture, and work experience. The internet – delayed interaction instruction method is the method often referred to as distance education. At the same time, distance education also includes two-way video and audio, one-way video, and internet – simultaneous interaction.

When examining the success and retention rates illustrated in Tables 1 and 2 it is essential to not compare the success and retention rates of different instructional methods because each method does not control for instructor and discipline, and would be misleading. A more methodologically sound comparison is to compare the success and retention rates longitudinally.

Definitions: The number of GOR refers to one of the following grades and is also the number of students enrolled at census: A, B, C, D, F, P (CR), NP (NC), I, or W. Success rate is the number of A, B, C, or P grades divided by the number of GOR, and retention rate is the number of A, B, C, D, F, P, NP, or I grades divided by the number of GOR.

Findings: The distance education sessions with the highest enrollments at SBCCD are the delayed interaction (i.e. internet) internet sessions. Specifically, the number of enrollments in internet sessions has increased from 3,736 in 2004 – 2005 to 8,645 in 2008 – 2009, a 131% increase. In contrast, lecture sessions have only had an 11% increase from 2004 – 2005 to 2008 – 2009. Equally important, the success rate in internet sessions has increased from 53.7% in 2005 – 2006 to 60.3% in 2008 – 2009, a substantial increase ($ES^* = .13$).

Figure 1. Internet Delayed Interaction Retention and Success Rates from 2004 – 2005 to 2008 – 2009.



* A .10 effect size corresponds to a Pearson r of .05. The effect size represents the magnitude of the difference between the target and the baseline measure. Using an effect size increases the likelihood that the difference is not only statistically significant but practical as well.

Table 1. Success Rate by Instructional Method from 2004 – 2005 to 2008 – 2009.

Instruction Method	2004 – 2005			2005 – 2006			2006 – 2007			2007 – 2008			2008 – 2009		
	#	N	%	#	N	%	#	N	%	#	N	%	#	N	%
Clinical	81	81	100.0	93	93	100.0	76	77	98.7	67	68	98.5	92	94	97.9
Two-way Video/Audio							51	70	72.9	51	61	83.6	36	39	92.3
One-way Video	1,574	2,836	55.5	1,162	2,284	50.9	505	810	62.3	138	255	54.1			
Internet – Simultaneous Interaction	7	20	35.0												
Internet – Delayed Interaction	2,079	3,736	55.6	2,392	4,453	53.7	2,378	4,251	55.9	3,629	6,263	57.9	5,215	8,645	60.3
Independent Study	119	157	75.8	118	175	67.4	85	110	77.3	80	89	89.9	42	53	79.2
Field Experience	39	45	86.7	46	50	92.0	33	38	86.8	29	31	93.5	47	50	94.0
Laboratory	5,626	7,739	72.7	5,445	7,277	74.8	5,573	7,504	74.3	5,460	7,268	75.1	6,597	8,486	77.7
Lecture	59,528	89,900	66.2	57,513	86,231	66.7	57,864	87,538	66.1	61,349	91,869	66.8	68,722	99,925	68.8
Work Experience	775	1355	57.2	748	1241	60.3	716	1166	61.4	697	1149	60.7	658	984	66.9
Total	69,828	105,869	66.0	67,517	101,804	66.3	67,281	101,564	66.2	71,500	107,053	66.8	81,409	118,276	68.8

Note. The blue font refers to distance education sessions, “#” refers to the number of successful grades, “N” refers to the number of GOR, and “%” is # divided by N.

Table 2. Retention Rate by Instructional Method from 2004 – 2005 to 2008 – 2009.

Instruction Method	2004 – 2005			2005 – 2006			2006 – 2007			2007 – 2008			2008 – 2009		
	#	N	%	#	N	%	#	N	%	#	N	%	#	N	%
Clinical	81	81	100.0	93	93	100.0	76	77	98.7	67	68	98.5	94	94	100.0
Two-way Video/Audio							56	70	80.0	53	61	86.9	37	39	94.9
One-way Video	2,187	2,836	77.1	1,674	2,284	73.3	686	810	84.7	197	255	77.3			
Internet – Simultaneous Interaction	12	20	60.0												
Internet – Delayed Interaction	2,867	3,736	76.7	3,348	4,453	75.2	3,195	4,251	75.2	4,951	6,263	79.1	6,855	8,645	79.3
Independent Study	140	157	89.2	161	175	92.0	101	110	91.8	82	89	92.1	45	53	84.9
Field Experience	45	45	100.0	50	50	100.0	37	38	97.4	31	31	100.0	50	50	100.0
Laboratory	6,413	7,739	82.9	6,341	7,277	87.1	6,406	7,504	85.4	6,270	7,268	86.3	7,500	8,486	88.4
Lecture	73,978	89,900	82.3	72,389	86,231	83.9	72,852	87,538	83.2	77,570	91,869	84.4	85,610	99,925	85.7
Work Experience	1,025	1,355	75.6	992	1,241	79.9	859	1,166	73.7	842	1,149	73.3	775	984	78.8
Total	86,748	105,869	81.9	85,048	101,804	83.5	84,268	101,564	83.0	90,063	107,053	84.1	100,966	118,276	85.4

Note. The blue font refers to distance education sessions, “#” refers to the number of retained students, “N” refers to the number of GOR, and “%” is # divided by N.