

Enrollment and Achievement of Students Participating in Online Courses

Summary of Results

Background

This enrollment and achievement analysis was requested by the Distance Education Committee at Los Medanos College for purposes of examining how students taking online instruction compare to students taking traditional courses. This analysis was done generally and by discipline for a two year period (from fall 2005 to spring 2007).

Data: All data was extracted from the Research Data Warehouse.

Variables and Definitions: The variables observed in this analysis include:

1. Attempted enrollment defined as the total number of enrollment throughout the semester, includes students who have dropped the course before they have a "W".
2. Student drop without "W" defined as the number of students who dropped the course before the allowed time period for dropping a course.
3. Student Retention defined as the student is retained in the course to end of term. A, B, C, D, F, CR, NC, I grade notations. Retention Rate: calculated by dividing the numerator (number of students with A, B, C, D, F, CR, NC, I) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I)
4. Student Success defined as the student succeeds in the course to end of term. A, B, C, CR grade notations. The success rate is calculated by dividing the numerator (number of students with A, B, C, CR) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I).

Results

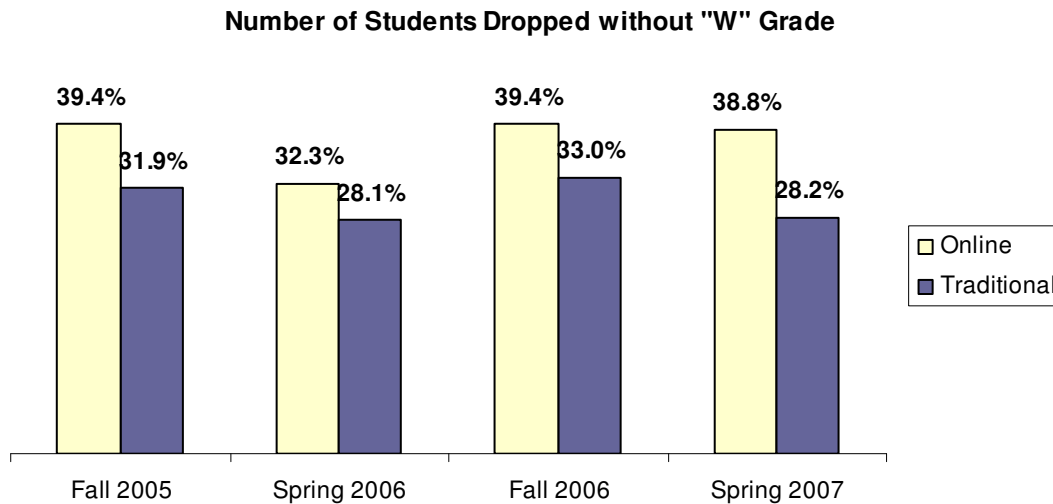
Attempted Enrollment: Overall student enrollment in online courses has not increased significantly in the last two years. In fact, it has fluctuated: from 1963 students in fall 2005, to 1849 in spring 2006, 2034 in fall 2006, and 1993 in spring 2007.

Student enrollment trends differ within discipline. When compared to other disciplines, enrollment for online Computer Science has increased the most (from 504 in fall 2005 to 663 in spring 2007, an increase of 149); Business has also increased greatly (from 262 in fall 2005 to 369 in spring 2007, an increase of 106 students). Decreases in enrollment are observed for English, Philosophy and Spanish.

Online Courses Attempted Enrollment: Fall 2005 to Spring 2007

	Fall 2005	Spring 2006	Fall 2006	Spring 2007	
DEPT					CHANGE
BUS	263	313	249	369	106
CNT	161	191	n/a	n/a	
COMSC	504	460	672	653	149
DRAMA	177	241	257	269	92
ENGL	343	192	243	218	-125
HIST	133	101	172	143	10
MUSIC	110	11	148	153	43
PHIL	54	148	53		-54
SPAN	117	54	64	50	-67
TRAVL	101	138	176	138	37
TOTAL*	1963	1849	2034	1993	30

Drops Without “W”: Compared to students taking traditional courses, a greater proportion of students taking online courses tend to drop the class without a “W”



Drops Without “W” by Discipline: When compared to traditional courses by discipline, students taking online courses tend to drop the course without a “W” in greater proportions. Within disciplines, Travel and Spanish tend to have the lower drop without “W” rates.

Student Drops without “W” by Discipline: Fall 2005

DEPT	Online			Traditional		
	Attempted Enrollment ¹	Number of Students Dropped without "W" Grade		Attempted Enrollment ¹	Number of Students Dropped without "W" Grade	
		Number	%		Number	%
BUS	263	93	35.4%	1599	525	32.8%
CNT	161	85	52.8%	81	40	49.4%
COMSC	504	163	32.3%	754	203	26.9%
DRAMA	177	73	41.2%	363	146	40.2%
ENGL	343	138	40.2%	2730	902	33.0%
HIST	133	76	57.1%	555	203	36.6%
MUSIC	110	40	36.4%	1424	359	25.2%
PHIL	54	26	48.1%	304	86	28.3%
SPAN	117	42	35.9%	402	149	37.1%
TRAVL	101	38	37.6%	120	45	37.5%
TOTAL*	1963	774	39.4%	8332	2658	31.9%

Student Drops without "W" by Discipline: Spring 2006

DEPT	Attempted Enrollment ¹	Online		Attempted Enrollment ¹	Traditional	
		Number of Students Dropped without "W" Grade			Number of Students Dropped without "W" Grade	
		Number	%		Number	%
BUS	313	117	37.4%	1458	433	29.7%
CNT	191	68	35.6%			
COMSC	460	110	23.9%	759	208	27.4%
DRAMA	241	94	39.0%	330	80	24.2%
ENGL	192	62	32.3%	2458	726	29.5%
HIST	101	34	33.7%	428	132	30.8%
HMSRV	11	5	45.5%	1187	252	21.2%
MUSIC	148	54	36.5%	499	138	27.7%
SPAN	54	15	27.8%	514	183	35.6%
TRAVL	138	38	27.5%	91	19	20.9%
TOTAL*	1849	597	32.3%	7724	2171	28.1%

Student Drops without "W" by Discipline: Fall 2006

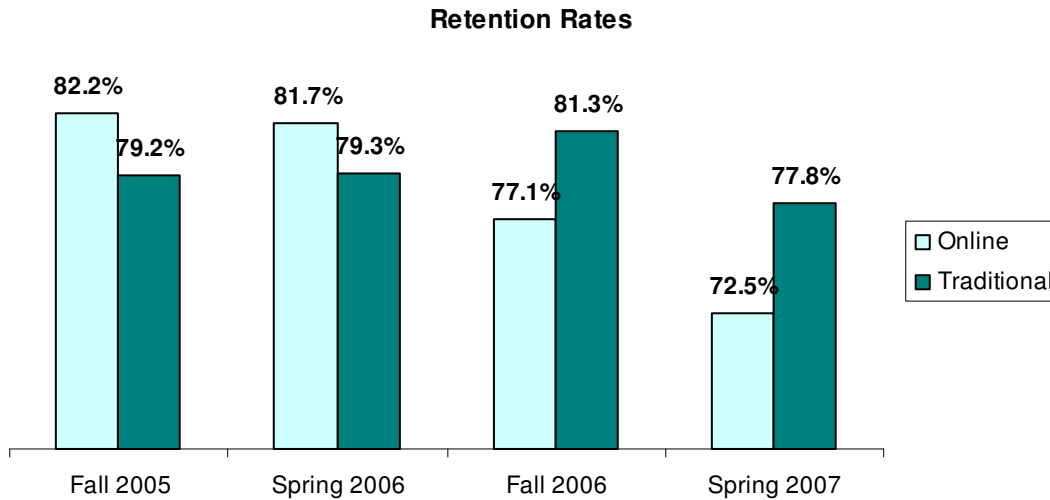
DEPT	Attempted Enrollment ¹	Online		Attempted Enrollment ¹	Traditional	
		Number of Students Dropped without "W" Grade			Number of Students Dropped without "W" Grade	
		Number	%		Number	%
BUS	249	80	32.1%	1555	544	35.0%
COMSC	672	253	37.6%	842	230	27.3%
DRAMA	257	110	42.8%	275	98	35.6%
ENGL	243	105	43.2%	2825	979	34.7%
HIST	172	86	50.0%	479	193	40.3%
MUSIC	148	71	48.0%	1180	262	22.2%
PHIL	53	42	79.2%	419	157	37.5%
SPAN	64	19	29.7%	486	196	40.3%
TRAVL	176	36	20.5%	91	29	31.9%
TOTAL*	2034	802	39.4%	8152	2688	33.0%

Student Drops without “W” by Discipline: Spring 2007

DEPT	Online			Traditional		
	Attempted Enrollment ¹	Number of Students Dropped without “W” Grade		Attempted Enrollment ¹	Number of Students Dropped without “W” Grade	
		Number	%		Number	%
BUS	369	119	32.2%	1383	367	26.5%
COMSC	653	245	37.5%	744	196	26.3%
DRAMA	269	147	54.6%	203	49	24.1%
ENGL	218	81	37.2%	2460	733	29.8%
HIST	143	61	42.7%	464	163	35.1%
MUSIC	153	69	45.1%	1046	220	21.0%
SPAN	50	11	22.0%	568	206	36.3%
TRAVL	138	40	29.0%	3	3	100.0%
TOTAL*	1993	773	38.8%	6871	1937	28.2%

Retention: The retention rates for online courses were higher than traditional courses in fall 2005 and spring 2006. In fall 2006 and spring 2007 the retention rates for online courses dropped to be lower than traditional courses.

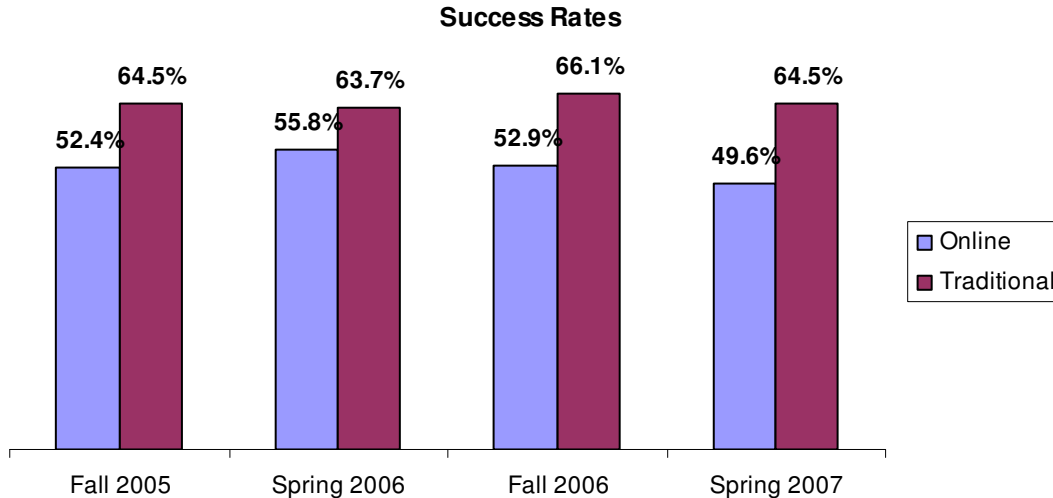
Retention rates by discipline also seem to be lower for online courses compared to traditional courses, except for Spanish.



Course Retention of Online and Traditional Courses: Fall 2005 to Spring 2007

	Fall 2005		Spring 2006		Fall 2006		Spring 2007	
	Online	Traditional	Online	Traditional	Online	Traditional	On Line	Traditional
BUS	81.2%	82.8%	71.4%	80.1%	67.5%	77.7%	65.6%	74.4%
CNT	90.8%	65.9%	79.9%	n/a	n/a	n/a	n/a	n/a
COMSC	88.9%	79.3%	91.1%	78.0%	81.6%	86.3%	76.7%	83.2%
DRAMA	79.8%	82.0%	81.0%	84.0%	80.3%	89.8%	77.9%	87.7%
ENGL	81.0%	77.1%	79.2%	73.1%	79.7%	78.1%	65.0%	73.6%
HIST	59.6%	75.3%	64.2%	83.4%	68.6%	80.8%	72.0%	79.7%
MUSIC	72.9%	79.8%	83.3%	87.4%	64.9%	87.1%	66.7%	86.0%
PHIL	75.0%	76.1%	76.6%	82.0%	45.5%	79.4%	n/a	n/a
SPAN	93.3%	80.2%	94.9%	76.1%	88.9%	78.3%	76.9%	74.9%
TRAVL	66.7%	90.7%	87.0%	90.3%	80.0%	98.4%	79.6%	n/a
TOTAL*	82.2%	79.2%	81.7%	79.3%	77.1%	81.3%	72.5%	77.8%

Success: When compared to the success rate of traditional courses, success rate for online courses is lower.



Success Rate by Discipline: Generally, the success rates for online courses by discipline are lower than the success rates for traditional courses. There is one exception. Success for online Spanish is higher than traditional Spanish courses.

Success rates for travel and history seem to be in the direction of improvement.

Course Success of Online and Traditional Courses: Fall 2005 to Spring 2007

	Fall 2005		Spring 2006		Fall 2006		Spring 2007	
	Online	Traditional	Online	Traditional	Online	Traditional	On line	Traditional
BUS	58.2%	66.6%	45.9%	62.3%	46.1%	62.4%	42.0%	59.6%
CNT	40.8%	48.8%	45.5%	n/a	n/a	n/a	n/a	n/a
COMSC	51.0%	60.4%	57.4%	59.7%	49.4%	64.4%	46.1%	60.6%
DRAMA	45.2%	77.0%	60.5%	75.2%	57.8%	81.9%	61.5%	80.5%
ENGL	52.7%	62.3%	69.2%	57.7%	60.1%	61.5%	51.8%	59.6%
HIST	50.9%	65.6%	44.8%	75.0%	54.7%	70.6%	63.4%	69.4%
MUSIC	42.9%	69.4%	83.3%	72.7%	40.0%	75.2%	40.5%	77.5%
PHIL	35.7%	54.6%	50.0%	64.0%	36.4%	69.1%		n/a
SPAN	88.0%	60.5%	71.8%	59.2%	77.8%	64.1%	53.8%	77.5%
TRAVL	46.0%	62.7%	63.0%	75.0%	59.3%	72.6%	60.2%	n/a
TOTAL*	52.4%	64.5%	55.8%	63.7%	52.9%	66.1%	49.6%	64.5%

Conclusion:

In general, enrollment in online courses has fluctuated; when compared to traditional courses, online courses at LMC seem to have more drops without “W”, lower retention rates and lower success rates, even within discipline, with the exception of Spanish.

Future analysis for online education should also include productivity figures and some form of affective measures. Affective measures could include, but not be limited to the following:

1. Reasons for taking online courses.
2. Who is taking online courses.
3. Experiences with online courses.
4. Self-perceived impact of online education.
5. How online courses could be improved.