Distance Education Survey Report-2012

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BACKGROUND

As one of the projects for the 2011-12 academic year, the Student Success Committee decided to create a distance education survey for students. This came out of an initial discussion of Fall 2010 data that compared success rates for courses that were taught in both online (excluding hybrid) and face-to-face(including web enhanced) modes during this term. There was a significant difference between success rates overall for the courses in this study. During the discussion a concern was raised regarding whether the results of this study reflected differences in instructors or in instructional delivery method. To answer this question, a further analysis was conducted that extracted courses taught in both modes by the same instructors over a four-year period (2006-2010). The results of this analysis indicated a significant difference between modes thereby supporting the idea that differences in success were not solely due to differences in teaching style or skill. For specific data regarding these two studies, please see Appendix A.

Another analysis of distance education explored the relationship between online success and various other factors. Through correlational analysis over 6 years of data (2005-11), relationships were investigated between online success and term (fall/spring vs. winter/summer); online success and number of sections offered; and online success and length in weeks of the course. The highest correlation (inverse) was found between online success and length in weeks. However, this correlation was somewhat nuanced. Overall, six-week courses exhibited higher success rates than eight-week courses; and eight-week courses were higher than sixteen-week courses. Upon further sub-analysis, it was found that success rates for six-week winter session courses were considerably higher than those for six-week summer session courses; and eight-week summer session courses were considerably higher than eight-week fall or spring courses (see Appendix B for report). With these nuanced results, the reason for low success rates in online courses remained puzzling. After excluding these external or institutional factors (instructional mode, instructor differences, term, number of sections, and length of course), the discussion centered around student related factors that might explain the difference in success rates. This led to the decision to create a distance education survey for students.

The goal for these survey data was to identify if distance education students differed from the general population in any meaningful way, and to identify if any variables significantly predicted successful outcomes in the online courses. Beginning fall 2012, a Distance Education committee was created by the academic senate and this report will provide data as a baseline for planning and tracking improvement.

SURVEY SUMMARY

During the Spring 12 semester, the Distance Education survey was sent by email to all students who enrolled in an online course. The survey instrument was compiled from surveys used by other community colleges, as well as input from the Student Success Committee. The instrument was composed of 25 items and was delivered via the SurveyMonkey site. The survey was made available to students for approximately 2 months, and instructors teaching online courses were alerted to the fact that students would be receiving an invitation to participate. The distance education survey received 118 respondents. The survey is included in Appendix C.

Demographics

Table 1 represents a comparison of the demographic characteristics of the survey respondents, online (OL) students in spring 12, and Norco College as a whole. The purpose of this table is two-fold. The first is to provide a comparison between the survey sample and the OL population of students in spring 12. By making this comparison, we can determine if the survey sample was representative or if it was skewed in terms of demographic representation. The second purpose is to provide a comparison of the OL population to the Norco College population to identify demographic differences between the two populations. This will give us a better understanding of Norco's OL student population.

The survey respondents shared some similarities and differences with the population of OL students. Gender distribution was similar between the two groups, however ethnicity and age exhibited some discrepancies in certain subgroups. In ethnicity, the White students were somewhat overrepresented in the survey group, and the Hispanic students were underrepresented. African American students were modestly overrepresented in the survey group and all the other ethnic subgroups were similar between groups. Age was clearly discrepant in the survey group with students under 30 underrepresented, and those over 30 overrepresented by about 22% margins. Given that these discrepancies are known, interpreting the survey data will require taking these results into consideration.

Table 1

	Characteristic	% DE Survey	% OL Norco	% Norco College
Gender				
	Male	30.5%	35.2%	45.0%
	Female	69.5%	64.4%	54.5%
	Unknown/Unreported	0.0%	0.4%	0.5%
Ethnicity				
	White	40.2%	35.2%	28.2%
	Hispanic	27.4%	39.1%	48.8%
	African American	14.5%	11.5%	6.4%
	Asian/Pacific Islander	7.7%	7.5%	9.4%
	Native American/Alaskan	0.9%	0.5%	0.4%
	Other/Unknown	3.4%	3.2%	3.6%
	More than two races	6.0%	3.2%	3.3%
Age				
	Below 30	46.6%	68.9%	84.0%
	30 +	53.4%	31.1%	16.0%

It is clear in reviewing these data that the OL population of students exhibits clear differences from the Norco College population of students. Females participate in OL classes by a margin of about 10% over males in comparison to the gender distribution of Norco College as a whole. In ethnicity, the largest differences were in the White, African American, and Hispanic representation among OL students and Norco College students. Both OL White and African American students were about 6%-7% higher than Norco College percentages, and OL Hispanic students were lower by about the same margin. The largest percentage discrepancy between the OL population and Norco College was in age. The 30-And-Over Group was about 15% higher for the OL population. The Under-30 Group was 15% lower for the OL population. These data illustrate the fact that students who take OL classes differ in age, ethnicity, and gender in comparison to the average Norco College student.

Outside Responsibilities

The survey items which described the respondents' home life or outside responsibilities were: #6-How many hours per week do you work at a paying job, #7-Marital Status, and #8-How many children do you

have (living with you). Norco College does not collect these data elements through the routine, institution-wide MIS data as required by the state chancellor's office. Therefore, data gathered in 2011 from the Community College Survey of Student Engagement (CCSSE) will be used as a comparison for the institution. This survey should be an adequate comparison since the courses surveyed for the CCSSE were randomly selected and thereby are a representative sample of the college. The following tables represent the comparison of the Distance Education Survey respondents to the CCSSE Survey respondents (as a proxy for the college) for outside responsibilities.

Table 2

Work Hrs	DE Survey	CCSSE
0	37.6%	34.1%
1-20	14.6%	25.1%
21-30	11.1%	16.9%
30 or more	36.7%	23.9%

The distribution of work hours appears to be somewhat different between the DE Survey & the CCSSE groups. The one similarity between groups is that 0 hrs/nonworking percentage is highest in both groups for this category. The DE Survey group was quite a bit lower in the 1-20 hrs/wk and 21-30 hrs/wk groups than the CCSSE group. The 30 or more hours/week exhibited the largest difference between groups with the DE group approximately 13% higher than the CCSSE group. This indicates that a larger proportion of OL students in comparison to traditional Norco College students, are working at or close to full-time status.

Table 3

Marital status:		
	DE Survey	CCSSE
Married	33.3%	11.9%
Not Married	66.7%	88.1%

There is a clear difference in the percentage of OL students who are married compared to the CCSSE sample. Before ascribing this difference to inherent differences in the OL population, recall that the DE sample was overrepresented in the 30+ age category and this would certainly be correlated to marital status. Even so, if these factors are taken into consideration, the corrected percentage of the DE sample would still be in excess of the CCSSE percentage by at least 8 percentage points. Hence, even when corrected, married students are more likely to enroll in OL courses than unmarried students.

The last variable indicating outside responsibilities is whether the OL student has children at home. Although the DE Survey item asked how many children were in the home, the CCSSE only asked whether the student had children or not. Therefore the DE item was recalculated into terms that would be comparable to the CCSSE group.

Table 4

Do you have children (living with you)		
Answer Options	DE Survey	CCSSE
No	47.4%	74.1%
Yes	52.5%	25.9%

Similarly to marital status, having children at home (assuming childcare responsibilities would be required) is probably correlated to the 30+ age group and therefore the percentage may be somewhat inflated in the DE Survey group. Correcting for this, the percentage for the DE survey group is still higher than the CCSSE group by approximate 5 percentage points. This would indicate that the OL student would be slightly more likely to have children at home.

All of these variables in combination indicate that OL students tend to work more hours per week, be married, and have children while attending college. In sum, they are probably juggling more outside responsibilities than the average Norco College student.

Academic Variables

The academic variables we will be using to describe the DE Survey group are educational goal, unit load (ft/pt), and home college. For the item measuring educational goal, students were directed to choose all categories that applied. For comparison, the CCSSE sample was used since it directed students to choose categories in the same manner. The state chancellor's office gathers MIS data information on educational goal, but students can only choose one category and the data is only gathered when they first apply and is not updated. Therefore, it was determined that CCSSE would be a better comparison group. The table shows educational goals identified between the DE Survey group and the CCSSE group.

Overall, the patterns between educational goals were different between the two groups. They both had similar percentages for those pursuing a certificate, but the DE group primarily had a focus on associate's degree and transfer goals. The CCSSE group also had high percentages in these categories, but they also showed greater interest in acquiring personal knowledge and job-related skills. The DE

group seemed to be more clearly focused on completing their degree either at the community college, university or both.

Table 5

What are your educational goals? Check all that apply		
Answer Options	DE Survey	CCSSE
Certificate	23.9%	25.8%
Associate's Degree	70.9%	58.7%
Transfer	66.7%	72.8%
Personal Knowledge	18.8%	34.6%
Job-related	19.7%	32.7%
Other (please specify)	6.0%	0.0%

In terms of unit load, Table 6 below identifies these data for the DE Survey and Norco College.

Table 6

How many units are you taking?			
	DE Survey	Norco College	OL Pop Norco
Less than 12 units (part-time)	48.7%	80.7%	84.1%
12 units or more (full-time)	51.3%	19.3%	15.9%

Based on the fact that more respondents in the DE Survey were working, married, and had children, a natural assumption would have been that lower percentages of this group would be attending school full-time. From survey responses, this ostensibly seems to be a false assumption. By a very large margin over the average Norco College student, the DE survey group was comprised of full-time students. However, when comparing the DE Survey respondents to the entire OL population at Norco there are some clear discrepancies. In fact, the OL Norco population has a lower full-time unit load than Norco College as a whole. The reason for this discrepancy on the survey is unclear at this point, although it must be pointed out that the DE Survey was a self-report and the other data sources were not.

The home college designation of DE Survey respondents was interesting as Table 7 below indicates that a fairly large percentage of OL students would not classify themselves as Norco College students. This speaks to the issue that OL students are not looking for courses at their home college necessarily, however the respondents were by and large RCCD students. Reasons for choosing OL courses will be reviewed in the following section.

Table 7

	Response Percent
Norco College student	54.2%
Moreno Valley College student	13.6%
Riverside City College student	28.0%
Other	4.2%

Online Courses

One of the primary purposes for administering the DE survey was to understand the motivation for enrolling in and withdrawing from OL courses. The next section of the survey dealt with these issues. First of all, most of the students (61.6%) who were enrolled in OL courses were also enrolled in non-OL courses (including hybrid courses). Only a little over a third of the students were enrolled solely in OL courses. Also 85% of the students in the DE survey had enrolled in OL courses before, many with several courses in their past academic history. So, based on these data, it appears that course taking patterns for OL students typically combine OL and non-OL courses in their academic load, and they usually continue with this pattern over their time in college. The most common reasons students identified for taking OL courses were "Convenience" and "Work Schedule" (See Table 8 below).

Table 8

What were your main reason(s) for registering in online courses? Check all that apply.		
Answer Options	Response Percent	Response Count
Convenience	78.1%	89
Work schedule	55.3%	63
Only course available	16.7%	19
Course only offered online	14.0%	16
Location or distance from campus	26.3%	30
I prefer online over on campus environment	28.1%	32
I have a documented disability that prevents me from attending classes on campus	2.6%	3
Other	10.5%	12

The low percentages in reasons where no choice was involved ("Only course available", "Course only offered online…") indicate that students were not forced to choose the online environment due to lack of availability in traditional formats. Either due to intrinsic ("I prefer online…") or extrinsic factors ("Convenience", "Work Schedule"), the online environment seemed to be a more desirable option for

these students. However, given the fact that the top reasons for choosing OL courses were extrinsic, there is some concern whether this type of motivation could impact OL course completion.

According to the DE Survey, 75.9% of the respondents did not drop any of their OL courses. This is a similar measure to course retention rate which was 82.3% for all online courses during spring 2012. In the DE survey, 27 respondents indicated that they withdrew from some or all of their OL courses. All of these respondents indicated reasons for their withdrawal and the categories are listed in Table 9 below.

Table 9

What were the main reasons you withdrew from your online course(s)--mark all that apply

Answer Options	Response Percent	Response Count
The course was too difficult for me	7.4%	2
The work required because it was an online course was too much	22.2%	6
I had too many technical problems with the online course	11.1%	3
Work responsibilities	29.6%	8
Childcare responsibilities	11.1%	3
Personal problems	33.3%	9
Other	44.4%	12

The most common reasons for withdrawing were in the Other, Personal Problems, and Work Responsibilities categories. Those who chose 'Other' were required to enter an explanation. After reviewing the 'Other' explanations, most of the statements had to do with family crises, financial issues, or difficulty with the course. Family crises and financial issues could reasonably be reassigned to the personal problems category and the last reason could clearly be reattributed to "The course was too difficult for me" category. With these redistributions the most common reason for withdrawal from OL courses would have been due to personal problems and work responsibilities. These findings are consistent with the Chancellor's Office report on distance education (*Distance Education Report*, 2011).

The last item on the survey attempted to assess the attitudes and perceptions of DE respondents. It was a series of 10 statements targeting various aspects of the online environment and students were asked to rate their level of agreement with each statement. The results of this item are listed in Table 9 below.

All but the first statement focused on different aspects of working in an online environment and these items all exhibited similar patterns of responses. The majority of respondents either somewhat or strongly agreed with each of the statements. This indicated that the technical aspects of the online

Table 9

Please rate how strongly you agree or disagree with each of the following statements for your online courses this semester.					
Answer Options	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Uncertain
I would prefer to have taken this online course in a traditional format if it had been available at a time that was convenient	29	19	15	41	7
My internet skills are adequate for my online courses	95	10	1	4	0
My instructor(s) provides adequate feedback for my online course(s)	65	20	17	7	2
Online course materials are helpful	73	22	10	5	1
The process for sending/receiving assignments is working smoothly	67	29	10	4	1
The instructions for assignments are clear	60	36	10	5	0
The course web site(s) is/are easy to navigate	55	41	10	3	1
The course home page(s) provides helpful information	63	33	9	5	1
I am aware of the student learning outcomes (SLOs) for my online courses	61	23	8	8	11

environment were not perceived as obstacles to most students. The first statement had a different focus and also had a unique pattern of responses. In response to the statement that the student would have preferred a traditional environment if it were at a convenient time, the response pattern had a fairly equal number on the agree side and disagree side. This statement seemed to access whether the OL mode of teaching was chosen by virtue of necessity or preference. There were slightly more responses that disagreed over agreed (56 vs. 48, respectively) with the majority indicating that the OL mode was preferred. However, with there being such a substantial group indicating OL as their non-preferred mode, it will be interesting to investigate if this item was a predictor of OL success.

Predictors of Online Success

The variables discussed up to this point have provided insight into what might be some possible predictors of student success in OL classes. The elements comprising outside responsibilities indicated that hours worked, marital status, and number of children at home may be reasonable as predictor variables as part of the regression model of online success. In addition, the academic variables indicating academic load (full-time/part-time) and mix of online and traditional formats would account for the "weight" and composition of students' courses. Finally, the reasons for taking OL courses and average weekly hours devoted to each course were entered into the model. All of these variables together represent outside responsibilities, academic load and type, and student motivation for OL courses. The variables entered into the stepwise regression model for online course success are listed in Table 10 below

Table 10

Model Construct	Variables
Outside Responsibilities	Work hrs/week
	Marital status
	# Children at home
Academic Load	Full-time/part-time units
	Only OL/OL & Tradition mix
Reason/Time for OL course	Convenience
	Work schedule
	Only course available
	Course only online
	Distance from college
	Prefer OL
	Disability
	Preferred traditional if available
	Average hrs/wk devoted to each OL course

The dependent variable, or outcome variable, for this model was grade-point-average in OL classes (OLGPA) which was calculated by student for all OL courses taken. The OLGPA ranged from 0.0 to 4.0 corresponding to the typical 4-point grade scale used by most colleges or universities. At first, the outcome variable for this model was going to be success rate in OL courses. However, since many of the students in the OL survey sample were taking only one OL course, success would not exhibit as much variance as OLGPA. Since regression models need a dependent variable that will maximize the amount

of variance in the dependent variable, OLGPA was chosen as the model's outcome. Table 11 below shows the mean and standard deviation of OLGPA for the 94 students who provided valid student IDs in the OL survey.

Table 11

	N	Mean	Std. Deviation
OL_GPA	94	3.21	.85

The results of the model indicated that work schedule as a main reason for registering for OL courses was the only predictor of OLGPA (inverse relationship). The inverse relationship between main reason-work schedule and OLGPA indicates that the students who chose this as a main reason tended to have lower OLGPAs. Specifically, students with work schedule as a main reason received an average OLGPA of 3.0 and those who didn't select this reason received an OLGPA of 3.4.

We can surmise several things from these previous data on the regression model. First of all, the DE survey group had a very high average GPA. These students were receiving A's and B's for the most part. This seems to indicate that the OL Survey group may have been a higher achieving subgroup of the OL population. Secondly, since the model only resulted in one predictor variable and that variable only accounted for approximately 9% of the total variance in OLGPA, the model was fairly weak. In other words, we did not include a comprehensive set of variables in our model to account for a sufficient level of variance in OLGPA (generally 25% or greater). This does not undermine the fact that students whose motivation for OL courses is primarily to accommodate work schedule are likely to do worse than those with different motivations for registering for the course. It does point out the fact that further investigation is necessary in order to fully explain the reasons for OL achievement.

SUMMARY OF FINDINGS

At the beginning of the report, the purpose of this survey was to find out if DE students differed from the average Norco College population; and to determine what might be some reasons for lower success rates in OL courses.

The DE survey found that the OL student population tended to have higher percentages of female, white and African-American students; students who are over age 30; and there were lower percentages of

Hispanic students in the OL population than the Norco College population. OL students definitely tended to work 30 hours or more per week in greater proportion than the Norco College population. They were also more likely to be married and have children. The OL population tended to be more focused on transfer and degree attainment, and they were more likely to be enrolled full-time (12 or more units). Also, by nature of the medium, OL students were equally likely to not consider themselves a "Norco College" student as they were to classify themselves as such.

Overall, reasons for taking OL courses seemed to revolve around work and convenience, not an intrinsic desire to be in the OL environment. As for students who withdrew from OL courses, reasons for doing so centered more on personal problems or work responsibilities, than technical difficulties or course rigor of OL courses. There appeared to be a fairly sizeable group of students who would have preferred to take the course in a traditional format if the course had been available at a convenient time.

The only predictor of OLGPA was having chosen an OL course due to work schedule, and this was an inverse relationship. These data are adequate as a baseline for investigating how to improve student success in OL courses. However, more investigation is probably necessary in order to illuminate other areas that might further impact student success in OL courses.

SUCCESS & RETENTION RATES FOR COURSES TAUGHT BOTH ONLINE & FACE-TO-FACE IN FALL 2010

	INSTR_ METHOD	N_ Students	Grp Mean
SUCCESS	ONL	1810	*53%
	FTF	4535	64%
RETENTION	ONL	1810	*77%
	FTF	4535	84%

*Indicates significant difference (p< 0.05)

SUCCESS RATES FOR COURSES TAUGHT BOTH ONLINE & FACE-TO-FACE BY THE SAME INSTRUCTOR BETWEEN 2006-2010

	INSTR_ METHOD	N_ Instructors	Grp Mean
SUCCESS	ONL	45	*56%
	FTF	45	63%

*Indicates significant difference (p< 0.05)

Appendix B

AN EXPLORATION OF RELATIONSHIPS BETWEEN ONLINE SUCCESS & VARIOUS FACTORS

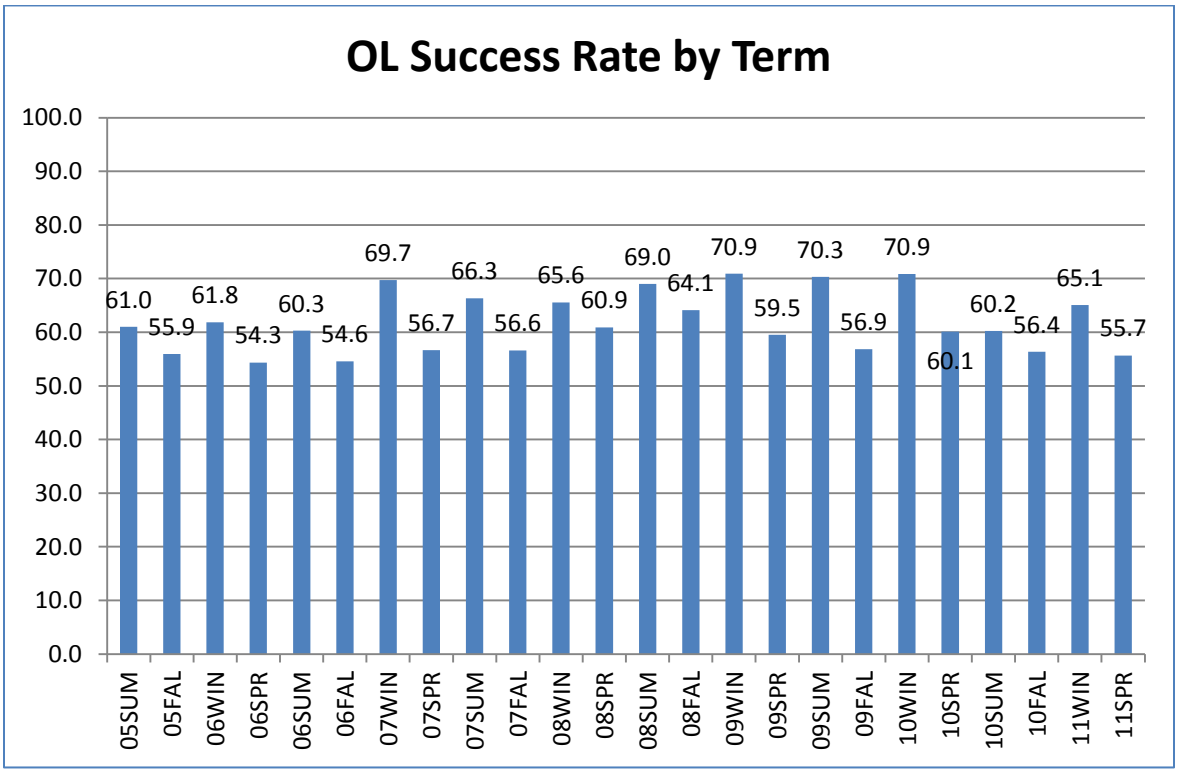
This study explores success rates of online (OL) courses and potential influences on these rates at Norco College. The present study utilized six years of Norco College data provided through the Section Statistics document from Fall 2005 to Spring 2011. Section Statistics is a pivot table program that downloads data directly from Datatel, and therefore is a "live" data source in that data fields may change if users input or change these data in Datatel. These data are not the same as MIS or referential data that is used by the state chancellor's office which are relatively static. The reason for using Section Statistics is that there are some variables included in this dataset that are not part of referential data files. Also, Section Statistics does not tend to exhibit drastic differences in success rates from the referential files.

For the purposes of this study, some definitions should be established for common reference:

- Online courses- courses that were delivered in an online environment 100% of the time.
- Success rate-the percentage of students receiving an 'A', 'B', 'C', or 'P' (Pass) grade.

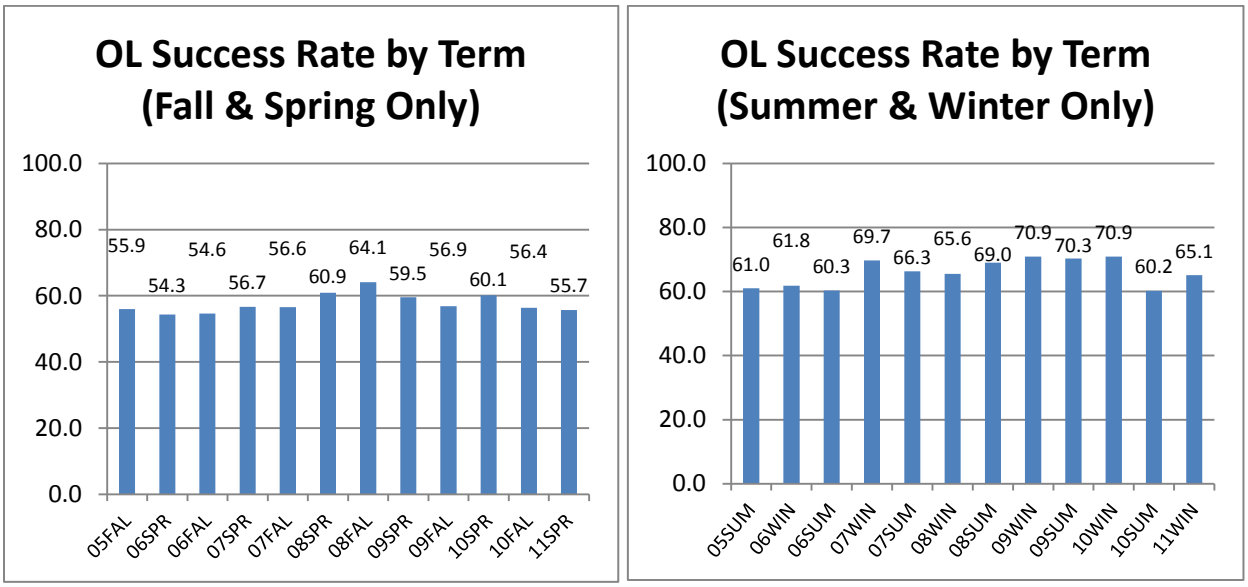
Initially, it can be of some help to see the OL success rates by term which is presented below in the figure below.

Figure 1. Online success rate by term



Given the varied length of the bars and somewhat haphazard appearance of this chart it may appear that little stability exists in OL success. However when extracting the regular terms (Fall & Spring) and the intersessions (Summer & Winter) into their own charts, a more stable pattern appears in OL success rate as indicated in Figure 2 below.

Figure 2. OL Success divided by regular and intersessions.



One pattern evident when looking over the academic years is that success rates have steadily increased and peaked around the 2008-09 academic year. Since then they have begun to decrease and in some cases have returned to levels equivalent to 2005-06. Another clear pattern emerging from Figure 2 is that students consistently are more successful in OL classes during intersessions rather than regular sessions. This may be due to several factors, but one relationship that this study will explore is whether the total number of OL sections offered influences OL success rate.

Figure 3 presents a chart of terms and number of sections offered to get an overall idea how sections offered varies by term between Fall 2005 and Spring 2011. The average number of sections offered for fall, spring, winter, and summer were 67, 66, 31, and 33, respectively. The range for fall & spring was 42-77, and the range for winter & summer was 11-46. This spread of sections represented enough variation to ascertain if number of sections was influential on success rates. To identify whether OL course success was influenced by the total number of classes offered online during the semester one must look at graphs that indicate relationship. The best way to show if a relationship exists between success rates and number of online classes offered would be through a scatter plot graph with a slope or trend line. Figure 4 shows the scatter plot of success rate as a function of number of sections offered.

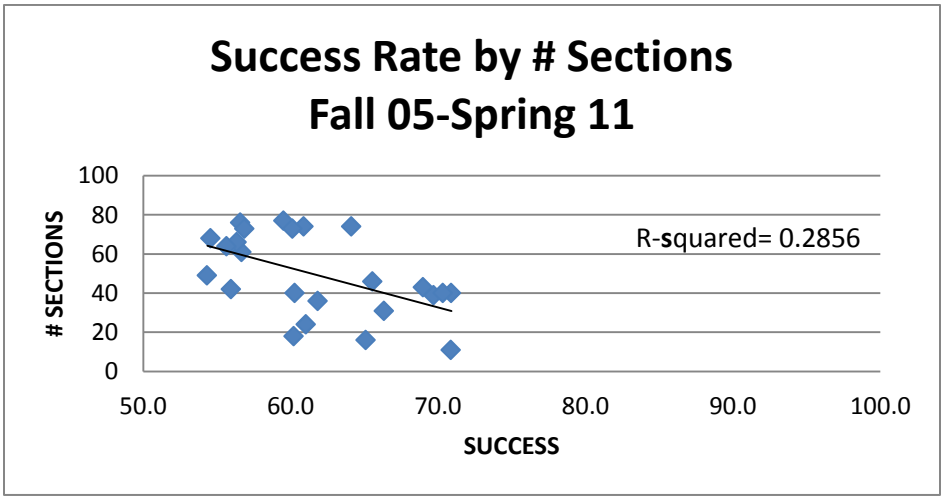
Upon observation of the scatter plot in Figure 4, the spread of the data points around the trend line is fairly wide which indicates the relationship between success rates and total sections offered is weak. Numerically this is represented by the r-squared value of 0.2856. As a general rule, a trend line with an R-squared value between 0.50-0.30 is in the marginal range, and less than 0.30 is considered to be very weak. To verify whether there was a relationship within regular semesters or intersessions, the same analysis was conducted and R-squared values derived. For fall and spring terms, the r-squared

value was 0.3164; for summer and winter, the r-squared value was 0.0305. Clearly, there was virtually no relationship between total OL sections offered and OL success rate in summer and winter; and the relationship for fall and spring terms was marginal to weak. If number of OL sections offered had even a marginal impact on success rates, we would have expected to see a higher r-squared value in It can be concluded that number of OL sections is likely not an influential factor on OL success rate.

Figure 3. Number of sections per term

Term	# of Sections
05SUM	24
05FAL	42
06WIN	36
06SPR	49
06SUM	40
06FAL	68
07WIN	39
07SPR	61
07SUM	31
07FAL	76
08WIN	46
08SPR	74
08SUM	43
08FAL	74
09WIN	40
09SPR	77
09SUM	40
09FAL	73
10WIN	11
10SPR	73
10SUM	18
10FAL	66
11WIN	16
11SPR	64

Figure 4. OL Success rate by number of OL sections offered



Another possible explanation of OL success rate is length of class in weeks. Since winter and summer tend to exhibit higher success rates than fall and spring, an alternative explanation may be that shorter OL courses tend positively influence success rates. Figure 5 displays success rates by length of course in weeks.

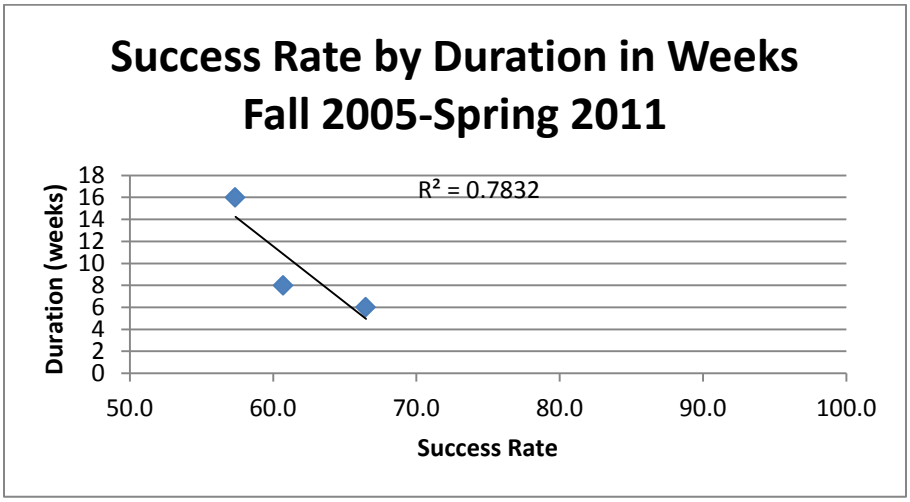
Figure 5. Length of course and success rates

Duration_wks	Success_Rate	No. of Sections
3	61.7	7
4	60.3	8
6	66.5	241
7	85.7	1
8	60.7	490
9	62.3	3
10	75.0	1
11	50.0	2
13	45.5	1
14	54.8	1
16	57.4	426

The most common lengths for OL courses is six, eight, and sixteen weeks as indicated by the number of sections in the last column of Figure 5. Upon inspection of the data, courses which that were not these common lengths (3 weeks, 4 weeks,…. 14 weeks) tended to be predominantly one or two courses. Without variation in course type, we are less able to differentiate whether success rate is a function of class length or an outcome of the specific course. Therefore, it is easier to make generalizations of relationship with course duration if we limit our focus to the common length success

rates. Although this is excluding some of the data, we are increasing our chances of identifying a relationship by excluding confounding variables.

Figure 6. Success rate by duration (weeks)



As indicated by the r-squared value at 0.7832, the relationship between success rate and duration of an OL class is considerably stronger than number of OL courses offered. Although the above graph only indicates three points, these data represent mean success rates from 1,157 sections over the six-year period. Before concluding that OL success rate is definitely a function of course duration, a sub-analysis was conducted to rule out whether success rate was a function of course duration or term. The procedure for ruling this out was to determine if a significant difference occurred in different terms with courses of the same length. For instance was the success rate for an OL six-week course in fall (or spring) any different from a six-week course in summer (or winter)? Figure 7 below shows the success rates divided by duration and separated into term.

Figure 7. Success Rate by duration (separated by term)

Duration_ Weeks	TERM	SUCCESS_ RATE	N_Sections
6	SUM	59.9	60
6	WIN	68.8	181
8	FAL	56.5	185
8	SPR	58.9	177
8	SUM	69.7	128

The only length in weeks that contained both intersession and regular session terms were those of eight-week duration. Reviewing the differences in eight-week OL courses, it is clear there was a noticeable difference in success rate for summer compared to fall and spring. In fact, this difference constituted a statistically significant difference as well ($p<0.001$). Interestingly, there were statistically significant differences ($p<0.001$) between summer and winter six-week courses and between six- and eight-week summer courses. Basically, the best success rates were observed in six-week winter courses and eight-week summer courses. These findings cast some doubt on the idea that OL success rate is a function of duration in weeks of the class. If this were the case, we would have expected to see similar

success rates over all of the six- and eight-week courses. Instead these results indicate that OL success rates may be connected to some aspect of these specific terms and durations. One aspect six-week winter and eight week summer courses have in common is that they are compressed sessions, but they fill the entire session. The data also support this hypothesis in that all durations that do not last the full length of the term have similarly low success rates.

What this study does not answer is why these terms exhibit significantly higher success rates. The 'why' questions could possibly be answered by exploring explanations with faculty involved in teaching OL courses. Another avenue to explore is with students who have taken either the winter six-week or summer eight-week courses, and have also taken the other courses which exhibit lower success rates. These two avenues may be able to employ multiple perspectives in answering these questions.

Appendix C

Distance Education Survey

Demographic Information

The following questions will be kept confidential, but are important in helping us determine how we can improve our online courses. Thanks for participating!

1. Please enter your student ID (enter 7-digit number, example: 1234567)

Student ID

2. What is your age?

- ◯ 17 or under
- ◯ 18-22
- ◯ 23-29
- ◯ 30-39
- ◯ 40-49
- ◯ 50 or above

3. What is your gender

- ◯ Male
- ◯ Female

4. What is your ethnicity?

- ◯ African-American
- ◯ Asian/Pacific Islander
- ◯ Hispanic
- ◯ Native American
- ◯ White
- ◯ More than two races
- ◯ Other (please specify)

5. Do you have a documented disability?

- ◯ No
- ◯ Yes

6. How many hours per week do you work at a paying job?

- ◯ 0
- ◯ 1-10
- ◯ 11-20
- ◯ 21-30
- ◯ 31-39
- ◯ 40 or more

7. Marital status:

- ◯ Married
- ◯ Not Married

8. How many children do you have living with you?

- ◯ 0
- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4 or more

9. What are your educational goals? Check all that apply

- ☐ Certificate
- ☐ Associate's Degree
- ☐ Transfer
- ☐ Personal Knowledge
- ☐ Job-related
- ☐ Other (please specify)

10. How many units are you taking?

- ◯ Less than 12 units (part-time)
- ◯ 12 units or more (full-time)

11. How would you classify your status?

- ◯ Norco College student
- ◯ Moreno Valley College student
- ◯ Riverside City College student
- ◯ Other (please specify)

Directions: Please answer the following questions according to your overall experience in online courses (excluding hybrid) during the present semester. Your individual responses will be kept strictly confidential by the Office of Student Sucess (your instructor will not have access to your answers).

12. Which statement best describes the courses you registered for this semester? (Riverside Community College District courses only)

- ◯ I registered for all classes online
- ◯ I registered for some classes online and some classes on campus

13. What were your main reason(s) for registering in online courses? Check all that apply.

- ☐ Convenience
- ☐ Work schedule
- ☐ Only course available
- ☐ Course only offered online
- ☐ Location or distance from campus
- ☐ I prefer online over on campus environment
- ☐ I have a documented disability that prevents me from attending classes on campus
- ☐ Other (please specify)

14. Do you require assistive technology (AT) to access online courses?

- ◯ No
- ◯ Yes

15. Which AT do you use?

16. As an assistive technology (AT) user, my experience has been smooth

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

17. How many online courses (excluding hybrid) have you taken prior to this semester?

- ◯ 0
- ◯ 1-2
- ◯ 3-6
- ◯ 7 or more

18. Did you withdraw from any online courses this semester?

- ◯ No
- ◯ Yes, I withdrew from some of my online courses
- ◯ Yes, I withdrew from all of my online courses

19. What were the main reasons you withdrew from your online course(s)--mark all that apply

- [ ] The course was too difficult for me
- [ ] The work required because it was an online course was too much
- [ ] I had too many technical problems with the online course
- [ ] Work responsibilities
- [ ] Childcare responsibilities
- [ ] Personal problems
- [ ] Other (please specify)

20. On average, how many hours per week are/were you devoting to each online course?

- ◯ 1-5 hours
- ◯ 6-10
- ◯ 11-15
- ◯ 16-20
- ◯ More than 20 hrs

21. Where do you access the internet for online courses most often?

- ◯ Home
- ◯ Work
- ◯ Campus
- ◯ Other (please specify)

22. Do you participate in online discussions?

- ◯ No
- ◯ Yes

23. I find online discussions helpful

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree

24. What suggestions do you have on how online discussions could become more helpful

25. Please rate how strongly you agree or disagree with each of the following statements for your online courses this semester.

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Uncertain
I would prefer to have taken this online course in a traditional format if it had been available at a time that was convenient	◯	◯	◯	◯	◯
My internet skills are adequate for my online courses	◯	◯	◯	◯	◯
My instructor(s) provides adequate feedback for my online course(s)	◯	◯	◯	◯	◯
Online course materials are helpful	◯	◯	◯	◯	◯
The process for sending/receiving assignments is working smoothly	◯	◯	◯	◯	◯
The instructions for assignments are clear	◯	◯	◯	◯	◯
The course web site(s) is/are easy to navigate	◯	◯	◯	◯	◯
The course home page(s) provides helpful information	◯	◯	◯	◯	◯
I am aware of the student learning outcomes (SLOs) for my online courses	◯	◯	◯	◯	◯

Appendix D

Percentage and Frequency Breakdown of DE Student Survey Responses

Q2--What is your age?

Answer Options	Response Percent	Response Count
17 or under	0.8%	1
18-22	24.6%	29
23-29	21.2%	25
30-39	26.3%	31
40-49	18.6%	22
50 or above	8.5%	10
answered question		118
skipped question		0

Q3--What is your gender

Answer Options	Response Percent	Response Count
Male	30.5%	36
Female	69.5%	82
answered question		118
skipped question		0

Q4--What is your ethnicity?

Answer Options	Response Percent	Response Count
African-American	14.5%	17
Asian/Pacific Islander	7.7%	9
Hispanic	27.4%	32
Native American	0.9%	1
White	40.2%	47
More than two races	6.0%	7
Other (please specify)	3.4%	4
answered question		117
skipped question		1

Number	Other (please specify)	Categories
1	native american, italian, irish	
2	LATIN NOT HISPANIC	
3	Middle Eastern	
4	caucasian	

Q6--How many hours per week do you work at a paying job?

Answer Options	Response Percent	Response Count
0	37.6%	44
1-10	4.3%	5
11-20	10.3%	12
21-30	11.1%	13
31-39	8.5%	10
40 or more	28.2%	33
answered question		117
skipped question		1

Q7--Marital status:

Answer Options	Response Percent	Response Count
Married	33.3%	39
Not Married	66.7%	78
answered question		117
skipped question		1

Q8--How many children do you have (living with you)?

Answer Options	Response Percent	Response Count
0	47.4%	55
1	17.2%	20
2	18.1%	21
3	8.6%	10
4 or more	8.6%	10
answered question		116
skipped question		2

Q9--What are your educational goals? Check all that apply

Answer Options	Response Percent	Response Count
Certificate	23.9%	28
Associate's Degree	70.9%	83
Transfer	66.7%	78
Personal Knowledge	18.8%	22
Job-related	19.7%	23
Other (please specify)	6.0%	7
answered question		117
skipped question		1

Q9--Number	Other (please specify)
1	finish BA
2	physician assistant program
3	Master's P.A
4	Batchlers
5	B.S. / MBA
6	Bachelors Degree in Business/Marketing
7	I have 2 BAs and an MA; I may get a PhD in the future.

Q10--How many units are you taking?

Answer Options	Response Percent	Response Count
Less than 12 units (part-time)	48.7%	57
12 units or more (full-time)	51.3%	60
answered question		117
skipped question		1

Q11--How would you classify your status?

Answer Options	Response Percent	Response Count
Norco College student	54.2%	64
Moreno Valley College student	13.6%	16
Riverside City College student	28.0%	33
Other (please specify)	4.2%	5
answered question		118
skipped question		0

Number	Other (please specify)
1	Norco/Riverside
2	I've taken classes at all three campuses and like them all. Riverside is where I am officially registered, but it is the furthest away.
3	My home school is Riverside but all my classes are at Norco
4	I go to all campus that offer what I need
5	All campuses. It just depends which offers the classes I need. Moreno valley is closest to me though.

Q12--Which statement best describes the courses you registered for this semester? (Riverside Community College District courses only)

Answer Options	Response Percent	Response Count
I registered for online classes only	38.4%	43
I registered for both on-line and on-campus classes	61.6%	69
answered question		112
skipped question		6

Q13--What were your main reason(s) for registering in online courses? Check all that apply.		
Answer Options	Response Percent	Response Count
Convenience	78.1%	89
Work schedule	55.3%	63
Only course available	16.7%	19
Course only offered online	14.0%	16
Location or distance from campus	26.3%	30
I prefer online over on campus environment	28.1%	32
I have a documented disability that prevents me from attending classes on campus	2.6%	3
Other (please specify)	10.5%	12
answered question		114
skipped question		4

Number	Other (please specify)
1	disability and home dialysis
2	I'm a stay at home mom and need to be home with my child.
3	Don't have to pay for a babysitter and can do my classwork mainly on the weekends.
4	I am taking four classes during the week so I only had enough time and gas to take those so it made it a lot easier to take my other two classes online
5	Better teachers
6	financial problem, not enough money for transportation.
7	I wanted to take this class online so I did not have to take Speech on campus
8	No baby-sitter.
9	I was working lots of hours,
10	I am single mother and this allow to stay with my child and not pay a baby sitter.
11	i wanted to take the subject but already had a class at that time
12	when I had work my hours were not predictable. Also am looking for work and need the flexibility of the on-line environment.

Q17--How many online courses (excluding hybrid) have you taken prior to this semester?		
Answer Options	Response Percent	Response Count
0	15.0%	17
1-2	29.2%	33
3-6	32.7%	37
7 or more	23.0%	26
answered question		113
skipped question		5

Q18--Did you withdraw from any online courses this semester?		
Answer Options	Response Percent	Response Count
No	75.9%	85
Yes, I withdrew from some of my online courses	21.4%	24
Yes, I withdrew from all of my online courses	2.7%	3
answered question		112
skipped question		6

Q19--What were the main reasons you withdrew from your online course(s)--mark all that apply		
Answer Options	Response Percent	Response Count
The course was too difficult for me	7.4%	2
The work required because it was an online course was too much	22.2%	6
I had too many technical problems with the online course	11.1%	3
Work responsibilities	29.6%	8
Childcare responsibilities	11.1%	3
Personal problems	33.3%	9
Other (please specify)	44.4%	12
answered question		27
skipped question		91

Number	Other (please specify)
1	I am in the middle of planning my wedding and couldn't dedicate more time to my online class I believe that the main role of an instructor should be to help their students reach the highest level of achievement, but the instructor I had was more interested in watching her students fail. On several occassion she took away almost half of my points on homework assignments because she said I didn't label the problems correctly. When I asked her to clarify what she wanted, she would just tell me to read the syllabus. The problem with this is her syllabus read like stereo instructions. Then her tests were loaded with trick questions, not what she told us to study. It's sad to see a college professor care more about labeling a question, than the content of the work. The instructor was _____ _____, and if this would have been my
2	only experience with college professors, I would have never taken another class.
3	I didn't need the class
4	Death of immediate family member
5	learned course wasn't transferable
6	Could not afford to buy all of the books.
7	expense of books or ebooks way to high
8	My hours and schedule at work
9	books cost too much
10	It was an accerelated course required a lot of hours.
11	The course was an online course, but required a final to be taken at Norco College. I took online courses so I wouldn't have to go to any campus.
12	Seriously poor time management skills.

Q20--On average, how many hours per week are/were you devoting to each online course?		
Answer Options	Response Percent	Response Count
1-5 hours	32.4%	36
6-10	36.0%	40
11-15	17.1%	19
16-20	7.2%	8
More than 20 hrs	7.2%	8
answered question		111
skipped question		7

Q21--Where do you access the internet for online courses most often?		
Answer Options	Response Percent	Response Count
Home	92.0%	104
Work	0.9%	1
Campus	3.5%	4
Other (please specify)	3.5%	4
answered question		113
skipped question		5

Number	Other (please specify)
1	I access black board anywhere I am, home, work, campus, anywhere... I have an iPhone, iPad, and a PC that allow me to easily access it anywhere, anytime.
2	while traveling for work
3	Local Library or Wi-Fi Hotspot
4	starbucks

Q22--Do you participate in online discussions?		
Answer Options	Response Percent	Response Count
No	8.8%	10
Yes	91.2%	103
answered question		113
skipped question		5

Q23--I find online discussions helpful		
Answer Options	Response Percent	Response Count
Strongly Agree	30.4%	31
Agree	52.0%	53
Disagree	13.7%	14
Strongly Disagree	3.9%	4
answered question		102
skipped question		16

Q24--What suggestions do you have on how online discussions could become more helpful

Answer Options	Response Count
	47
answered question	47

Number	Response Text
1	no comments
2	the fact there is a requirement to take campus exams, this kind of defeats the purpose of having an online course.
3	I believe Online Courses should be more lenient in meeting deadlines. Also, if there were more lecture notes posted that would be more helpful.
4	Instructor interaction
5	I thought the class was set up perfectly especially for someone like me who is working and going to school full time. I like that it was self paced especially for me when math isnt my strongest subject, i was able to take my time and if i didnt pass a test i could correct my mistakes and try again. I do have test anxiety though and multiple choice has always helped me with that. I felt like not all the quizzes and exams should have been multiple choice because i got use to that and when i went in for the just paper exams i started to panic a little bit, I was proud I did the best I could. I really enjoyed the detail and how much info was available with the book videos and pracice tests. _____ made it very easy to follow and understand the material and i really appreciate that. hopefully i pass this course and i can have the same structure for a math 35 online class.
6	No suggestions at this time.
7	I think they should be extra credit not required. On campus courses do not give grades in class for talking about related issues; it is just whoever raises their hand. I feel like the workloads are extreme enough and require alot of time to study the book and written assignments alone. i think class discussions are too much
8	I found McGraw Hill Connect very helpful and educative, I have taken business classes where I barely learn because all we do is test on power point presentations, that's boring and you end up reading several times because you just don't get boring things! McGraw activities with video presentations and exercises make it easier to remember lectures. Plus, being able to review your mistakes helps us remember the correct answer.
9	More contact with the instructors.
10	No suggestions at the moment
11	more time for online testing
12	It works well when the professor is constantly checking to answer or correct any posts.
13	No suggestions
14	Don't make them part of the grade and give prompts for them. Everyone in the class just says the same thing because its required.

15	I don't think it should be forced to anwser certian questions because if I feel that it is too long or I od not know the anwsers, I will not participate. I would be more likely to participate if we were told to go to a certain page and pick a question from that page to anwser.
16	I would suggest an optional online textbook through blackboard. So when we login to blackboard and rent an online version of the required text for the online class real cheap, rather than the professor going through all the trouble to post individual pages online or the student having to rent the physical text for an online class. Plus this move would pose a pontentially green move as we wouldn't have to print as many books.
17	I like on-line discussions as is...
18	It would be more helpful to me if the professors would participate in the online discussions as well.
19	Specifically, this semester we did not have online discussions for the class I took (_____). It would have been helpful to discuss what we were learning with other students. Sometimes it helps to see the point of view of others or just to share pertinent information and how it relates to the everyday life.
20	If teachers response faster. And teacher like sterns, put the rest of class demonstration n not just half n forget about it.
21	none.
22	None
23	If the professor becomes more active in the online discussion, however does not discourage the students from discussing.
24	None
25	make them optional some people dont have much to say on some subjects. monitoring need to keep people on the question or subject.that is being discussed. sometime people go off on a tangent or only discuss one part of a question.
26	I feel like online discussion are sometimes pointless.
27	I find them to be mostly a nuisance, perhaps they have a useful application for some material, but I would not participate were it not required.
28	Just get involved. It really helps having input from other students.
29	There should be no min requirement set, as sometime with a set of questions that where everyone has to answer the same questions then you have to try and come up response where you have to try and come up with 15 sentence, is really hard and a lot of people are losing points and just making up stuff to meet the requirements. Maybe they should give them a choice of several different discussions so that there is more to talk about.
30	Change the structure. It is hard to follow who has responded to whom's post.
31	I think the online discussions are working out just fine. I have learned a lot by what others learn from what I have. I miss things, and then go back to review what they have to see what I may have missed. It makes it easier to learn this way.
32	Its not helpful at all, it will be better if there was no discussion board.
33	Formatting is horrible. Blackboard is not the most navigable, especially if the instructor is not very tech savvy. I would add a real time element, and if it exists encourage instructors to use it.

34	n/a
35	Try to have some continuity on how the teachers set up their online class. Each teacher does it different so for every class it takes extra time to get used to the different navigation of the sight. It would be helpful, less stressful and time consuming if it was all the same format. Thanks for doing this survey, I love online classes on the whole.
36	I do not like online discussions because it is usually student based and the feedback from other students are usually not helpful.
37	i think that not everybody has the same to time check out the new messages.
38	I think that they are fine how they are. Sometimes I prefer them to other course work that is available. You get to express yourself and find out the opinion of others. It is interesting and it gives the classes more depth.
39	Blackboard 9 is not as user friendly as the previous version, to either teachers or students. Email is useless. Threads are much harder to follow. Most of the time you can't review your exams. You need to know what you got wrong in order to learn from you mistakes. There is much improvement needed and I think your best assests for this is the people that use the system. Ask for input.
40	Some teachers take them down right after the assignment is due and I don't have time before the assignment to read other people's stuff.
41	Online discussions peretaining to school and are very helpful in that it will keep students in contact. In addition they could be requested for submission so that they may be reviewed to help the campus grow its connectivity with the student body.
42	None
43	As far as I knew, the course I was taking did not have any online discussions.
44	I think the teacher needs to start the discussion or give the topic and have the students follow. Discussions should only be graded if there are specific criteria to them.
45	A class time maybe once for the class just to meet up and ask any questions students may have and to clear up any confusion
46	Every online and regular course should have an online discussion. That way us students can communicate to each other if there is something we did not understand. Some professors do not reply if you send them an e-mail for help.
47	More teachers should use them as tools in online classes. I love them because it allows me to interact with people I don't know.

Q25--Please rate how strongly you agree or disagree with each of the following statements for your online courses this semester.

Answer Options	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Uncertain	Response Count
I would prefer to have taken this online course in a traditional format if it had been available at a time that was convenient	29	19	15	41	7	111
My internet skills are adequate for my online courses	95	10	1	4	0	110
My instructor(s) provides adequate feedback for my online course(s)	65	20	17	7	2	111
Online course materials are helpful	73	22	10	5	1	111
The process for sending/receiving assignments is working smoothly	67	29	10	4	1	111
The instructions for assignments are clear	60	36	10	5	0	111
The course web site(s) is/are easy to navigate	55	41	10	3	1	110
The course home page(s) provides helpful information	63	33	9	5	1	111
I am aware of the student learning outcomes (SLOs) for my online courses	61	23	8	8	11	111
			answered question			111
			skipped question			7

References

Distance Education Report. (2011).). Sacramento: California Community College Chancellor's Office.