San Joaquin Valley College, Inc. Distance Learning Profile (DLP) Analysis 2014

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Overview

Background

Wonderlic is a recognized leader in the development and delivery of proven educational assessments and surveys that make it easy for schools to attract, qualify, train, and develop students. Our educational products and services help schools to increase the quality and efficiency of student admissions and placement, resulting in improved retention and higher graduation rates. Wonderlic is an approved test publisher with the U.S. Department of Education and recognized by all major accrediting associations.

San Joaquin Valley College has partnered with Wonderlic to administer two assessments for incoming students:

- 1) Distance Learning Profile (also known as the Admissions Risk Profile)
- 2) Scholastic Level Exam

Purpose

The primary purpose of this report is to provide an analysis of how student responses on the Distance Learning Profile (DLP) and the Scholastic Level Exam (SLE-Q) relate to student GPA, likelihood of graduation, and likelihood of drops.

To meet this purpose, this report provides the following analyses:

- 1) Frequencies of DLP responses obtained from April 2013 October 2014
- 2) Correlations:
 - a. of the DLP to GPA, Graduation, Drops, and SLE-Q results
 - b. of individual risk factors from the DLP to GPA and SLE-Q results
- 3) Predictive Ability:
 - a. of the DLP
 - b. of the SLE-Q

Summary of Results

- Students with fewer reported risk factors on the DLP were more likely to have higher GPAs
- Students with fewer reported risk factors on the DLP were less likely to drop
- Students with higher SLE-Q scores were more likely to have higher GPAs
- Students with higher SLE-Q scores were more likely to report fewer risk factors
- Students who *disagree* that it is OK to miss deadlines and those who *agree* that they could work independently were more likely to have higher GPAs
- Several of the individual items within the DLP were related to lower SLE-Q scores when a student reported risk on the individual item
- Students with fewer reported risk factors and higher SLE-Q scores tended to have higher GPAs and both risk factors and SLE-Q scores added predictive significance to this relationship.
- Differences between programs were examined but no statistically significant differences of note were observed. Consequently, no program specific results are displayed.



Analysis

1) Frequencies

Responses on the DLP are generally categorized into two groups: Responses that are considered risk factors and those responses that are not considered risk factors. A risk factor is any response to an item that puts a student at risk of not achieving academic success. The chart below shows the frequency with which students reported a given number of these risk factors. For example, there were only 3 out of 980 students who reported 6 risk factors on the DLP.

Number of Risk Factors	Number of Students	Overall Percentage
0	429	43.8%
1	392	40.0%
2	110	11.2%
3	28	2.9%
4	14	1.4%
5	4	.4%
6	3	.3%
Total	980	100.00%



The chart below includes the DLP risk factor results obtained from 980 students between the months of April 2013 and October 2014. It details the frequencies of how many times each answer was selected by the group of 980 students. For example, 746 of the 980 students reported they strongly agree that they have the support they need to finish their degree.

DLP Item	Students who strongly agreed	Students who agreed	Students who neither agreed/disagreed:	Students who disagreed:	Students who strongly disagreed:
Have Good Place to Study	751	215	6	1	7
Expect Difficult Coursework	14	8	103	401	454
Need Face to Face Interaction	8	9	94	454	415
Have Support To Finish	746	201	13	2	18
Previous Classes were a Waste	9	22	171	356	422
OK to Miss Deadline	6	4	39	284	647
Trouble Finishing Boring Tasks	5	25	101	465	384
Steady Computer and Internet	744	213	7	3	13
Dropped out of Classes in the Past	14	206	180	232	348
Hard to Manage Schedule	4	12	106	440	418
Not Sure of Ability to Complete	10	3	16	231	720
Worried About Online Classes	3	14	87	361	515

	Students who reported as Poor	Students who reported as Fair	Students who reported as Good	Students who reported as Excellent
English Ability	0	20	161	799
Computer Skills	7	89	485	399
Work Independently	0	19	262	699



2) Correlations

a. Correlating the DLP to GPA, Graduation, Drops, and SLE-Q results

The table below illustrates the relationships between the DLP and the following items: Graduation, Drops, GPA, and SLE-Q results. The numbers in bold indicate relationships that are considered statistically significant, which means that when one item in the relationship is present, it is likely that the other item in the relationship will also be present. Furthermore, the results of this analysis suggest that these relationships displayed in bold font are likely not due to chance.

According to this table, the DLP has a statistically significant relationship with student drops, GPA, and the SLE-Q. In particular, students who reported more risk factors on the DLP tended to have lower GPAs, a higher tendency to drop out, and tended to have lower SLE-Q scores.

	Graduated	Drop	GPA	SLEQ	DLP Risk
		(Yes/No)		Score	Factors
Graduated (<i>n</i> = 979)	1	320 ^{**}	.293**	.048	051
Drop (Yes/No) ($n = 395$)		1	503**	016	.096**
GPA (<i>n</i> = 654)			1	.139**	103**
SLE-Q score ($n = 979$)				1	111**

^{**.} Correlation is significant at the 0.01 level

b. Correlating individual risk factors from the DLP to GPA and SLE-Q results

Each item from the DLP was correlated with GPA, Drops, and the SLE-Q to identify which specific risk factors had relationships with student GPA, Drops, and SLE-Q results. The table below displays the relationship of specific risk factor items to GPA and the SLE-Q.

Two items (Ability to work independently and OK to miss deadlines within a day or two) showed statistically significant relationships with GPA. Specifically, students who *disagree* that it is OK to miss deadlines and those who *agree* that they could work independently were more likely to have good GPAs. Several other DLP items were related to SLE-Q scores but not to GPA, and those also appear on the table below. No individual items were related with Drops, and were consequently excluded from the table below. Items marked with "Reversed" indicate that negative responses (e.g. Strongly Disagree) are considered the favorable response. Please note: Only statistically significant relationships are displayed.



	GPA (<i>n</i> = 654)	SLE-Q (n = 979)
GPA		.139**
SLE-Q Score	.139**	
Total Risk Factors	103**	111**
English Ability		.119**
Computer Skills		.083**
Work independently	.089*	.143**
OK to miss deadline (reversed)	.086*	.081*
Computer and Internet access		.090**
Dropped out in past (reversed)		086**
Worried about online (reversed)		.095**
Planned hours on degree		.070*

^{**.} Correlation is significant at the 0.01 level

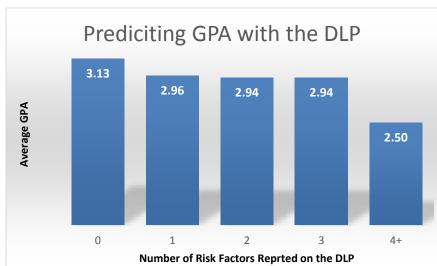
3) Predictive Ability

a. Using the number of risk factors on the DLP to predict GPA

Results on DLP predicted student performance (GPA), whereby students with fewer risk factors were more likely to have higher GPAs.

Multiple regression was run on the DLP, SLE-Q, and GPA data of 654 students to determine whether there was reason to believe student performance (GPA) could be predicted from SLE-Q and DLP results. According to the analysis, these variables were statistically significant and predicted student performance (GPA), F (2,650) = 9.071, p < .0005, R^2 = .027. Both variables added statistical significance to the prediction, p < .05.

The chart below displays the average GPA for a student who reported a given amount of risk factors on the DLP. For example, out of 654 students, the majority of students displayed 1 risk factor or less (n = 554).

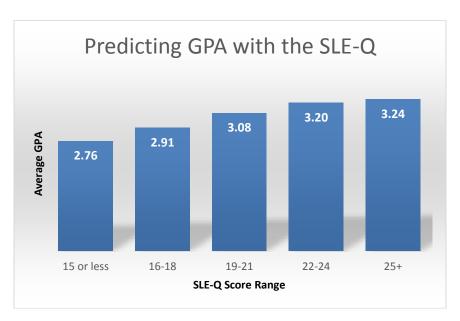




^{*.} Correlation is significant at the 0.05 level

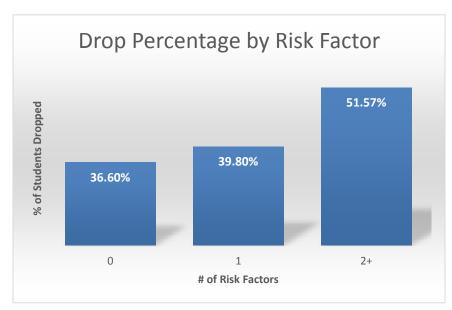
b. Using the SLE-Q score range to predict GPA

Results on the SLE-Q predicted student performance (GPA), whereby students with higher SLE-Q scores were more likely to have higher GPAs. The chart below displays the average GPA for the SLE-Q scoring ranges.



c. Using the number of risk factors on the DLP to predict Drops

Results on the DLP predicted student Drops, whereby students with more risk factors were more likely to drop. The chart below displays the percentage of students who dropped at a given level of risk factors.





Data Integrity

In order to provide you with the most accurate results, the data provided was cleaned and checked to make sure statistical analyses would be appropriate.

Data Cleaning

The data was cleaned to remove and correct records that may skew your results.

- 3005 total records were found. Records that did not include performance data (graduation dates and/or GPA) were excluded from the analyses. 1086 of the remaining records had accompanying performance data.
- Of those 1086 records, 88 duplicates were removed as well as 18 other records which did not have Distance Learning Profile data. 980 viable records remained which contained both DLP and graduation data.
- Of the 980 records used for analysis, 654 had usable GPA data. Any record displaying a GPA of "0" was not used.

Data Check

Wonderlic performs a data check before running all analyses to make sure that all data is usable. After testing for normal distribution, all tests of normality were appropriate for the SLE-Q, DLP, and San Joaquin performance measures.

