

***Pre-requisite Validation for English 3, Philosophy 2 and Humanities 3***  
***at***  
***Los Medanos College***

Prepared by

The Office of Institutional Research

Background

The curriculum committee requested that the Office of Research conducts a pre-requisite validation study to determine if English 100 should be required as a prerequisite for English 3, Philosophy 2 and Humanities 3. Prerequisites help ensure that students have the necessary skills and academic background to succeed in a course. By imposing prerequisites, student *success* in the course is also expected to increase. Matriculation regulations state that *“In order to show that a prerequisite is necessary for success in a particular course, the validation procedure must ensure that a student who has not met the prerequisite is highly unlikely to obtain a satisfactory grade in the course.”* This study addresses two questions:

1. Should English 100 be implemented as a prerequisite in English 3, Philosophy 2 and Humanities 3?
2. How unlikely are students that successfully completed English 90 (as compared to English 100) to succeed in English 3, Philosophy 2 and Humanities 3?

For this study, the recommended Design # 23 from the Matriculation State Chancellor’s Office was employed. The purpose of Design # 23 *“is to address the validation of a course used as a pre-requisite for another course”*.

The Design:

In this design, students who have successfully completed English 100 are compared to students who have successfully completed English 90 with respect to course performance in three General Education courses: English 3, Philosophy 2, and Humanities 3. With the purpose of increasing the sample size to at least 50 cases per variable, student data from fall 2001 to fall 2007 for the three courses were examined. To avoid any confounding variables in the design and to maintain the integrity of design # 23, data for each course was analyzed separately but included in the 2 x 3 table providing a total (as an ‘average’ for the three courses) at the bottom of the table.

Based on State-wide research, the subgroup of the curriculum committee recommended to the general curriculum committee the definition of “highly unlikely to succeed” as being less than 75% of the success rate of students who have successfully completed English 100.

Sample:

Students who were successful in English 100 ONLY and students who were successful in English 90 ONLY and enrolled in English 03, or Philosophy 3 or Humanities 3 were selected for fall 2001 to fall 2007 semesters, including spring semesters. The time period under study (Fall 2001 to fall 2007) yield a total sample of 2,961 students (218 enrolled in English 3, 500 enrolled in Humanities 3, and 2,243 enrolled in Philosophy 2).

**Students were further selected by having been successful in English 100 or English 90. This yielded a final sample of 2,245.** From the 2,245 students, following is the break down by GE course:

Sample of successful students in English 100 and English 90 by GE Course:  
Fall 2001 to Fall 2007 cumulative data

GE Course	Students who successfully completed English 100	Students who successfully completed English 90 ONLY
English 3	n = 139	n = 11
Philosophy 2	n =1,577	n = 100
Humanities 3	n =395	n = 23
Totals	N=2,111 (94%)	N =134 (6%)

It is important to note that in the six years of data, there were only 134 students who enrolled in the target GE courses after only successfully completing English 90; that is 6% of the total sample: 11 in English 3, 100 in Philosophy 2, and 23 in Humanities 3.

Results:

The purpose of this study is to answer the question if English 100 should be implemented as a pre-requisite in English 3, Philosophy 2 and Humanities 3. To determine this, the success rates in the three GE courses observed of students that were successful in English 100 were compared to the success rates in the same three GE courses of students that had been successful in English 90 only. The results in table 2 indicate that students with successful English 100 have significantly higher passing rates in English 3, Philosophy 2 and Humanities 3 than students with successful English 90 completion. The success rate in English 3 of students with English 100 is 65.5%, 20% points higher than students with English 90; the success rate in Philosophy 2 of students with English 100 is 25.9 points higher than the success rate of students with English 90; and the success rate in Humanities 3 of students with English 100 is 30.1 points higher than the success rate of students with English 90 (Table 2).

Table 2

Proportion of successful students in three college level courses by English level preparation at LMC: Fall 2001 to Fall 2007

GE Courses	Students who successfully completed English 100	Students who successfully completed English 90 ONLY
English 3	91/139 (65.5%)	5/11 (45.5%)
Philosophy 2	1093/1,577 (69.4%)	37/100 (37%)
Humanities 3	265/395 (67.1%)	10/23 (43.5%)
Totals	1,449/2111 (68.6%)	52/134 (38.8%)

Chi 31.16 df 16 sig .01

Chi 25.70 df 16 sig .05

This research also answered the question “how unlikely” are students with English 90 ONLY to succeeded in English 3, Philosophy 2, and Humanities 3? “How unlikely” is defined as being successful at a rate of at least 75% of the success rate of students with English 100. (For example, if the success rate of students in English 100 is 100%, then the success rate of students in English 90 only would have to be 75%). If students with English 90 are successful at a rate of 75%, then English 100 will not be established as the pre-requisite.

The results indicate however, that none of the successful rates of English 90 reached the 75% of the success rate of English 100. For example, the success rate of English 90 students for English 3 would have to be 49% to reach the 75% rate and it was only 45.5%; the success rate of English 90 students in Philosophy 2 would have to be 52% and it was

only 37%; and the success rate of English 90 students in Humanities 3 would have to be 50% and it was 43.5%. (Table 3).

Table 3

English 90 75% successful rate of the English 100 successful rate

GE Courses	Students who successfully completed English 100 ONLY	Students who successfully completed English 90 ONLY	Target percentage below which students would be “highly unlikely to succeed”
English 003	(65.5%)	(45.5%)	49%
Philosophy 2	(69.4%)	(37%)	52%
Humanities 3	(67.1%)	(43.5%)	50%
Totals	1,449/2111 (68.6%)	52/134 (38.8%)	51%

Conclusion:

The fact that students with English 100 perform significantly better in English 3, Philosophy 2 and Humanities 3 than students with English 90 only, and students with English 90 only are unlikely to succeed in the three GE courses observed, it can be recommended that English 100 can be a prerequisite for the three GE courses observed.