INTENSIVE ENGLISH 1A PILOT

Impact on Course Performance Fall 2010 Participants





Undergraduate Education Institutional Research Report

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Introduction

Nearly 50% of freshmen who matriculate to the University of California, Riverside are placed into preparatory writing courses (i.e., English 3, 4, and 5). Once the preparatory writing course (or courses) is completed, a student can enter the English composition series (English 1A, 1B, and 1C) which is a requirement for graduation.

Placement into writing courses is based on the results of the Analytical Writing Placement Exam (AWPE), typically held for a few hours on a Saturday during the spring of an admitted student's senior year of high school. The AWPE appears to be an excellent diagnostic tool, the results on the exam are read with care and deliberation by an arsenal of writing lecturers across the UC system, but few tests have been conducted regarding its accuracy as a placement device. In 2008-09, nearly 2,000 students were placed into either English 4 or 5. Surely, such a large segment of the freshman population must possess an incredibly varied set of writing skills, and some may perhaps have the potential to skip preparatory writing altogether. This sentiment led Institutional Research for Undergraduate Education (IRUE) to ask whether additional information may be brought to bear on the placement process, and especially whether it might be possible to identify a segment of the preparatory writing students who could perform well in the first course (i.e., English 1A) of the college-level composition series. Soon thereafter, IRUE began using predictive modeling to complement the existing placement exam and identify students who were placed into a preparatory writing course with the potential to pass English 1A upon matriculation in the fall.

Predictive Probabilities Model

To identify students with strong writing potential among the student population held for preparatory writing courses, a predictive probabilities model was utilized. The predictive probabilities model is a multivariate statistical model that uses student background information, inclusive of their past academic performance (high school GPA and SAT scores) to model students grades in English 1A. The empirical exercise utilizes students in a previous quarter of English 1A, and regresses their grade in this course on a host of determinative variables, including high school performance and SAT scores. The estimated parameters of the model are then used for predictive purposes. Those students who score highly on the AWPE, but are just below the minimum score required for placement in English 1A are run through the model, and their grades in English 1A are predicted.



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Fall 2009

As a pilot initiative, 170 students were identified from the population of students who placed into a preparatory writing course but were predicted to do well in English 1A by our predictive modeling. These students were provided with the option to enroll in a pilot Intensive English 1A track course (we will refer to this course as English 1PA). In order to support these students, tutors were embedded in the classroom and students were required to attend weekly individualized tutorials outside of class time. To test the success of this new initiative, the students' performance is compared to that of students in the regular English 1A course. The pass rate for students enrolled in the English 1A course in fall 2009 was 94.1 percent and 90.6 percent for students enrolled in the English 1PA course. When looking at academic performance, the average English 1A course grade was 2.89 and 2.74 for English 1PA students (this result was statistically significant).

There are a variety of possible reasons for why students in English 1PA had slightly lower pass rates and course grades than their English 1A counterparts. The English 1PA students, for example, are clustered in special courses, and the lecturers know that these students were not deemed English 1A ready by the placement exam. Arguably a better test of success is to compare how these students perform in the subsequent class in the series. Thus, the evaluation followed both groups of students to English 1B in the subsequent quarter and found that both groups had a pass rate of about 95% in the course. Students who began UCR in English 1PA earned a slightly higher average course grade in English 1B than those who regularly placed into English 1A (3.02 versus 2.96 respectively). These findings show that many students who place into preparatory writing courses have the

potential to pass English 1A in the fall, as well as successfully complete the subsequent English course. As a result, the Director of the Writing Program presented these findings to the Committee on Preparatory Education, who allowed the University Writing Program to extend the pilot program another year and increase the number of students in English1PA.

Fall 2010

In the first year of the pilot program, only the top performing students on the AWPE were allowed to be candidates for the English 1PA course. In the second year, IRUE was allowed to conduct predictive modeling on even the lower performing students. Surprisingly, some lower performers on the AWPE were predicted to do quite well in English 1A, according to the results of the predictive model. The Committee on Preparatory Education allowed the University Writing Program to identify 50 students from this group of lower performers on the AWPE for placement into the pilot program. Thirty-seven students accepted the offer. A combined total of 250 freshman students (compared to 170 admitted into the fall 2009 pilot program) who would have regularly placed into preparatory writing courses participated in the English 1PA in the fall 2010 term. This study will report the findings of the students who participated in English 1PA in fall 2010.

Methodology

This quasi-experimental analysis compares the English 1A and 1B pass rates and average course grades of students who participated in the pilot English 1PA course (treatment group) and those who were directly placed into English 1A (control group). The analysis begins with a comparison of means for the treatment and

comparison groups and then uses a multiple regression model to control for a host of characteristics such as demographic characteristics, SAT scores, high school grade point average, and first-generation to attend college. This evaluation provides course grade impact estimates on participating in English 1PA.

Sample Size and Data Source

Data were collected from official third week student information data and course enrollment files in the fall 2010 and winter 2011 terms.

The sample consists of the following:

- Treatment: 250 students who participated in English 1PA, and
- Comparison: 1,267 students who enrolled English 1A.

Results

Students who participated in the English 1PA course passed the course at a slightly higher rate than the regularly-placed English 1A population (97% vs. 96% respectively). Table 1.1 reports the mean English 1A course grade for the two populations. Pilot participants had a 2.83 GPA compared to 3.07 for the comparison group—regularly placed English 1A population. The difference is statistically significant. The grade performance difference is similar to the outcomes for the fall 2009 pilot participants, but in 2010 the pass rates were essentially the same. This renders the comparison of performance in the subsequent course in the series an especially valid exercise, in that there is no differential selection from the treatment and control populations into this subsequent course. Thus, an additional analysis was performed that followed both groups academic performance in winter 2011 in their English 1B course.

Table 2.1 shows that both the treatment and comparison groups passed English 1B at roughly the same rate, which was almost 97 percent. Table 2.2 reports the average course grade in English 1B for the two populations. Pilot participants had an average course grade of 3.13 compared to 3.12 for the comparison group. The difference in GPAs that was apparent in English 1A was no longer present in the subsequent course, which demonstrates that students in English 1PA are able obtain similar levels of academic success as regularly placed English 1A students in subsequent courses.

Discussion

What began as a small pilot program in fall 2009 grew to serve 250 students in fall 2010. Program participants compared to regularly placed English 1A students have demonstrated the ability to successfully pass the Intensive English 1A track. Moreover, English 1PA students are just as successful in passing the subsequent course in the following term. These findings demonstrate that there is a pool of students who place into preparatory writing courses who have the potential to successfully pass a college-level English composition course with perhaps some support.

The use of the predictive probabilities model in both fall 2009 and 2010 English 1PA pilot program which uses students' background information, inclusive of students' past academic performance (high school GPA, SAT scores) has shown the potential that research can play in augmenting traditional placement exams. By implementing this method, we have demonstrated that utilizing additional information to place students in the appropriate writing course is not only useful, but successful.

Table 1.1: Fall 2010 English 1A Pilot Program Pass Rate

	English 1A Pass Rate
English 1PA	96.8%
English 1A	96.0%
	English 1A Pass Rate without Controls
Impact on Academic Performance	$\beta = 0.000$
(English 1A Course Grade - Pass/Fail)	t = -0.032
	sig = 0.974
	English 1A Pass Rate with Controls
Impact on Academic Performance	$\beta = 0.006$
(English 1A Course Grade - Pass/Fail)	t = 0.379
	sig = 0.705

Table 1.2: Fall 2010 English 1A Pilot Program Average Course Grade

	English 1A Average Course Grade
English 1PA	2.83
English 1A	3.07
	English 1A Average Course Grade without Controls
Impact on Academic Performance	$\beta = -0.239$
(English Composition Course Grade)	t = -4.847
	sig = 0.000*
	English 1A Average Course Grade with Controls
Impact on Academic Performance	$\beta = -0.262$
(English Composition Course Grade)	t = -5.263
	sig = 0.000*

^{*} Statistically significant at the 0.05 level

Table 2.1: Fall 2010 English 1A Pilot Program Pass Rate in English 1B

	English 1B Pass Rate
English 1PA Enrolled in 1B	96.6%
English 1A Enrolled in 1B	96.9%
	English 1B Pass Rate without Controls
Impact on Academic Performance	$\beta = 0.005$
(English 1B Course Grade - Pass/Fail)	t = 0.229
	sig = 0.819
	English 1B Pass Rate with Controls
Impact on Academic Performance	$\beta = 0.015$
(English 1B Course Grade - Pass/Fail)	t = 0.737
	sig = 0.461

Table 2.2: Fall 2010 English 1A Pilot Program Average Course Grade English 1B

	English 1B Average Course Grade
English 1PA Enrolled in 1B	3.13
English 1A Enrolled in 1B	3.12
	English 1B Average Course Grade without Controls
Impact on Academic Performance	$\beta = 0.007$
(English 1B Course Grade)	t = 0.086
	sig = 0.931
	English 1B Average Course Grade with Controls
Impact on Academic Performance	$\beta = -0.052$
(English 1B Course Grade)	t = -0.651
	sig = 0.515