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## ABSTRACT

The impact of an outreach program modeled after the Berkeley Bay Area Writing Project was studied. Both projects emphasize the role of expert teachers as teacher trainers for the purpose of improving student writing. The University of California at Los Angeles (UCLA) program targets teachers of traditionally underserved students. Data sources included writing samples from 274 junior and senior high school students and questionnaire responses from 333 high school seniors in project schools. Results clearly indicate that students in the classes of teachers who are writing-project fellows (graduates of the summer training institutes) write significantly better than students not in program classes. Results also indicate that the quality of student writing is positively related to the number of project fellows they experience as English teachers. Other variables are even more powerful predictors, such as grade point average (GPA), school socioeconomic index, and school level. Findings related to the effects of the Writing Project on student GPA, postsecondary education plans, college entrance test scores, and attitudes are less clear. Implications for future studies are discussed. (SLD)

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**Impact Evaluation of a University-Based Outreach Program Modeled After  
the Berkeley Bay Area Writing Project**

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Paper presented at the 1991 Annual Meetings of the American Evaluation Association,  
Chicago, IL.

\* The work reported herein was completed while Dr. Redfield was a visiting  
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## SUMMARY

The impetus for this study was a desire on the part of the University of California, Los Angeles's (UCLA's) Graduate School of Education to evaluate the impact of an outreach program modeled after the Berkeley Bay Area Writing Project and parented by the National and California Writing Projects. These projects emphasize the role of expert teachers as teacher trainers for purposes of improving student writing. UCLA's program, administered through the Center for Academic Interinstitutional Programs (CAIP), particularly targets teachers of traditionally underserved students. While the CAIP staff have been regular in their collection of survey data, data collection has been unsystematic and evaluation efforts have been aimed at teacher participants rather than students. In short, evidence of program impact on students has been lacking.

In the present study, data sources included student writing samples and student and teacher questionnaires. Writing samples were collected from a culturally diverse population of 274 junior and senior high school students in schools targeted by the UCLA Writing Project. Questionnaire data were obtained from 333 high school seniors in schools served by the Project.

Results clearly indicate that students in the classes of teachers who are Writing Project Fellows (i.e., graduates of intensive summer institutes conducted by CAIP staff) write significantly better than students who are not. Results also indicate that the quality of students' writing is positively related to the number of Writing Project Fellows they experience as English teachers. While level of teacher involvement in the Writing Project and level of student exposure to Writing Project Fellows are significant predictors of writing quality, it is not surprising that other variables provided more powerful predictors: self-report grade point averages (GPAs), school socioeconomic index, and school level (i.e., junior high versus senior high school).

Findings related to the effects of the Writing Project on students' GPAs, postsecondary education plans, college entrance test scores, and attitudes toward writing are less clear. Findings suggest that GPAs and ethnicity are the most influential variables in students' decisions about whether and where they will continue their education after high school. In relative terms, UCLA, for instance, attracts more Asian minority students than Black or Hispanic minority students.

Aspects of the evaluation approach described in this report that should be retained in future studies include (a) the systematic collection and analysis of student products such as writing samples and (b) design consideration of moderator variables such as language spoken at home, socioeconomic status (SES), school context, and intensity and validity of

the intervention or program under evaluation. The success of future efforts to assess the impact of university outreach programs on students' decisions to enter university systems and these students' university success requires careful attention and commitment from central administration to developing mechanisms for (a) tracking cohorts of university students backward to determine the nature and extent of their involvement in targeted outreach programs and (b) tracking high school students forward longitudinally to determine how various levels of involvement in outreach programs affect their future educational planning, decision-making, and success.

## **Impact Evaluation of a University-Based Outreach Program Modeled After the Berkeley Bay Area Writing Project**

The impetus for this study was a desire on the part of the University of California, Los Angeles's (UCLA's) Graduate School of Education to evaluate the impact of an outreach program modeled after the Berkeley Bay Area Writing Project and parented by the National and California Writing Projects. These projects emphasize the role of expert teachers as teacher trainers for purposes of improving student writing. UCLA's program, administered through the Center for Academic Interinstitutional Programs (CAIP), particularly targets teachers of traditionally underserved students. While the CAIP staff have been regular in their collection of survey data, data collection has been unsystematic and evaluation efforts have been aimed at teacher participants rather than students.

The focus of this evaluation study was on student outcomes. A representative sample of the population served by CAIP was selected for study; under-represented students were included. Two major questions were addressed by the study:

- Does student writing differ qualitatively depending on teachers' levels of exposure to and participation in the UCLA Writing Project, and if so, what are the differences?
- How do self-report grade point averages (GPAs), Scholastic Aptitude Test (SAT)-Verbal scores, postsecondary plans, and attitudes differ among high school seniors with varying levels of exposure to UCLA Writing Project teachers?

### **Method**

The following data were collected: (a) writing samples and questionnaires from 274 students enrolled in Los Angeles area junior and senior high schools as well as questionnaires completed by these students' current teachers and (b) questionnaires only from 333 high school seniors and their current teachers.

## Writing Quality

The students of four junior high school and six high school teachers participated in this aspect of the study. The junior high schools were located in Glendale, inner-city Los Angeles, and Mission Viejo, California. The high schools were located in Beverly Hills, inner-city Los Angeles, and Reseda, California.

While a sampling goal was to achieve a balance between students of both UCLA Writing Project Fellows and teachers with no Project exposure, coding and analysis procedures took other levels of Project participation or exposure into account. In fact, however, the analyses demonstrated that all teachers participating in the study either were Writing Project Fellows or had never received information or other exposure to the Project. (Writing Project Fellows are graduates of intensive summer institutes conducted by CAIP staff over several weeks usually consisting of six-hour days. These graduates subsequently serve as CAIP consultants and as Writing Project teacher trainers.)

Of the two junior high school teachers in inner city schools, one is a UCLA Writing Project Fellow and the other reported no exposure to the Project. Of the two junior high school teachers from more suburban areas, one is a UCLA Writing Project Fellow and the other reported no exposure to the Project.

Two of the high school teachers who participated in the study work with bilingual students enrolled in English as a Second Language (ESL) classes. One of these teachers is a UCLA Writing Project Fellow; the other reported no exposure to the Project. Another two of the high school teachers are from inner city schools; one is a UCLA Writing Project Fellow and the other reported no exposure to the Project. The two remaining high school teacher participants are from more suburban areas; one is a UCLA Writing Project Fellow and the other reported no exposure to the Project.

Altogether, written essays and contextual information provided by the Student and Teacher Questionnaires (available upon request from the author) as well as public records were collected on 274 students. The contextual information included the extent to which the students' current and past three English teachers were exposed to or participated in the UCLA Writing Project, self-report cumulative GPAs, English grades for the past three years, grade level (i.e., junior high school versus high school), school socioeconomic status (SES) as determined by the most recent California Achievement Program (CAP) designation, and school proportion of Limited English Proficient (LEP) students, also provided by the most recent CAP designations.

In preparation for writing the essays, students read a passage by Richard Wright entitled "Hunger" (available upon request) and participated in a lesson designed by their individual teachers to make the passage accessible to them. Upon completion of the lesson, students were asked to write an essay in response to a standardized prompt. Copies of the writing prompt and teacher and student instructions are available upon request. Neither the students nor their teachers knew the prompt prior to its administration. All students were given one class period in which to write a response. Class periods were similar in length across classrooms.

Results were analyzed in two ways as detailed in the appendix:

1. They were scored holistically using a rubric modeled after that used by the California Assessment Program.
2. They were scored holistically and analytically using the Content Assessment methodology developed by Eva Baker and colleagues (1991) at the National Center for Research on Evaluation, Standards, and Student Testing (CRESST).

The Content Assessment analyses yield the following scores:

- General Impression--Content Quality (CICQ). The extent to which the student understands the content of the "Hunger" passage and integrates that understanding with personal experience in responding to the prompt.
- Principles/Concepts--Number (PN). A measure of the number of different passage-relevant concepts or principles that the student uses with comprehension.
- Prior Knowledge: Facts and Events (PK). A measure of the extent to which students incorporate relevant concrete information that is not mentioned in the passage into their essays.
- Proportion of Text Detail (TEXT). A measure of the amount of material from the passage text that is used in the essay. In the case of the "Hunger" essays, a relatively low proportion of TEXT was desired.
- Misconceptions. A measure of the amount of incorrect information, or the number of misconceptions or misinterpretations in the essay. The "Hunger" essays did not

lend themselves to appropriate scoring for Misconceptions; hence, Misconception scores were not assigned to the essays.

Interrater reliability for the two raters who did the California Assessment Program (CAP)-based holistic scoring was .62 based on 29 essays. Intrarater reliability was .82 for the rater who scored the essays that were not included in the reliability study. Intrarater reliability was based on the rescoring of 10 essays after two weeks.

Interrater reliability for the two raters who did the Content Assessment scoring, based on 50 essays, was .88, .83, .88, and .84 for the GICQ, PN, PK, and TEXT scales, respectively. After a two week period, intrarater reliability for rater #1, based on 10 essays was .90 (GICQ), .87 (PN), .93 (PK), and .96 (TEXT). Over the same period and based on the same essays, intrarater reliability for rater #2 was .74 (GICQ), .88 (PN), .87 (PK), and .93 (TEXT).

### **Self-Report Grades, Test Scores, Plans, and Attitudes**

Completed questionnaires (Senior English Student and Teacher Questionnaires; available from the author) were obtained from 333 high school seniors and their teachers. These students were enrolled in the classes of 15 teachers in schools representative of those targeted by CAIP. To determine the extent of students' exposure to Writing Project Fellows, questionnaire responses were checked against CAIP's database of Writing Project participants/Fellows. The purpose of the questionnaire data was to determine the relationships among the following: (a) the level of student exposure to Writing Project Fellows (ranging from one to four teachers); (b) the level of students' present and past three teachers' participation in the Writing Project (ranging from Fellow to no knowledge of the project); (c) students' postsecondary plans (ranging from working fulltime to some combination of school and work, to fulltime continuing education in a community college versus a branch of the California State College system versus a branch of the University of California system, particularly UCLA); (d) attitudes toward writing; (e) school socioeconomic code; (f) student ethnicity; (g) home language; (h) self-report, cumulative GPA; (i) average GPA in high school English classes; and (j) self-report score on the verbal portion of the SAT.

The students who responded to the questionnaires were not the same students as those who wrote essays for the writing analyses aspect of the study. The schools of participating teachers and their students were located in Chatsworth, Hawthorne, inner-city



Los Angeles, Reseda, San Pedro, Santa Monica, Sylmar, and Torrance, California. Data on the ethnicity and primary language of the students are shown below.

<u>Ethnicity</u>	<u>n</u>	<u>%</u>	<u>Language Spoken at Home</u>	<u>n</u>	<u>%</u>
Asian	47	14.1	English	200	60.1
Black	45	13.5	Spanish	56	16.8
Caucasian	98	29.4	Other	44	13.2
Hispanic	120	36.0	Bilingual	30	9.0

Questionnaires were administered by students' classroom teachers. Copies of the teacher instructions and student questionnaires are available upon request.

As with the writing analyses, a sampling goal was to achieve a balance between students of UCLA Writing Project Fellows and students of teachers having no exposure to the Project. While data coding and analysis procedures took all possible levels of teacher Project participation or exposure into account, analyses, in fact, demonstrated that teachers participating in this study either were Writing Project Fellows or had never received information or other exposure to the Project. Seven of these teachers reported being Writing Project Fellows and eight reported having no Project exposure. Hence, the teacher exposure/participation data were treated dichotomously.

## Results

### Writing Analyses

T-tests of independent means and one way Analysis of Variance (ANOVA) were used respectively to determine the extent to which the quality of students' writing is affected by (a) the level of CAIP training possessed by the students' current English teacher (i.e., level of teacher involvement) and (b) how many of the students' English teachers (current teacher plus past three teachers) had been CAIP Fellows. Since the current teachers of all students either were CAIP Fellows (labeled "Extensive involvement" for analysis and reporting purposes) or reported that they either had no knowledge of the UCLA/CAIP Writing Project or that they had heard of it but never participated in any way (labeled "Little involvement" for reporting and analysis purposes), the level of teacher involvement variable was treated dichotomously.

Students' essays were scored as described above in the Methods section and as illustrated in the Appendix. Each essay received five scores: Holistic, General Impression-

Content Quality (GICQ), Principles/Concepts--Number (PN), Prior Knowledge--Facts, Events, and Experiences (PK), and Proportion of Text Detail (TEXT). Except for the TEXT score, high scores reflect positive results; in the case of this study, which was based on the "Hunger" passage by Richard Wright, low TEXT scores were most desirable.

Results indicate that students of CAIP Fellows obtained significantly more positive scores on all five scales ( $p < .001$ ). These results are summarized in Table 1.

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Insert Table 1 about here

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Results further indicate that the more CAIP Fellows that students have had as English teachers, the more positive their writing scores on all five scales. Using the CAP-based holistic scoring procedure (see Appendix ), students having one or more than one UCLA/CAIP Writing Project Fellow as an English teacher, out of their most recent four English teachers, scored significantly higher than students having no history of such teaching ( $p < .05$  based on Tukey HSDs).

Except for the TEXT score, results based on the Content Assessment scoring rubric are similar to those yielded by the CAP-based holistic scoring scheme, that is, students taught by one or more UCLA/CAIP Writing Project Fellows (i.e., one or more than one "exposure") outperformed students having no such exposures ( $p < .05$  based on Tukey HSDs). The TEXT scores showed a significant positive difference between those students having more than one exposure to a UCLA/CAIP Writing Project Fellow compared to those having no exposures ( $p < .05$ , based on Tukey HSDs).

Because variables such as grade point averages (GPAs), school level (junior high versus senior high school), and socioeconomic status (SES) may also have significant influences on student achievement, writing scores were additionally submitted to multiple regression analysis. The predictor variables were (a) level of student exposure to UCLA/CAIP Writing Project Fellows (0-4 UCLA/CAIP Writing Project Fellows as English teachers), (b) level of current teacher's involvement in the UCLA/CAIP Writing Project (extensive versus little, as described above), (c) self-report GPA, (d) average English GPA based on past three English grades, (e) school level (junior versus senior high school), and (f) school SES (based on most recent code used by CAP). Each of the writing scores (holistic, GICQ, PN, PK, TEXT) functioned as a criterion variable.

Using holistic scores as the criterion variable, the first variable to enter the equation was average English GPA ( $R=.36$ ,  $R^2=.13$ ,  $p<.001$ ) -- the higher the GPA, the higher the

writing scores. The second variable to enter was teacher involvement (total  $R=.46$ ,  $R^2=.21$ ,  $p<.001$ ) --, students of UCLA/CAIP Writing Project Fellows outperformed students of teachers with little or no Project knowledge or experience ("little knowledge"). The third variable to enter was school level (total  $R=.51$ ,  $R^2=.26$ ,  $p<.001$ ), with high school students outperforming junior high school students.

For the GICQ, PN, and PK criterion variables, school level and school SES respectively were the first two predictors to enter. For the GICQ and PK criterion variables, teacher involvement was the third predictor to enter; the third predictor to enter the equation for PN was average English GPA. A fourth predictor entered the equation for GICQ (average English GPA). The only significant predictor of TEXT was Teacher Involvement, with the relationship being negative as desired. A summary of these findings appears in Table 2; a correlation matrix is provided in Table 3.

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Insert Tables 2 and 3 about here

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### Questionnaire Data

Multiple regression analyses were used to determine the relationships among variables. Separate analyses were performed for each of 13 criterion variables: students' plans following high school (fulltime continuing education versus part-time continuing education or fulltime work); type of continuing education institution student plans to attend, if applicable; type of institution to which SAT scores were sent, if applicable; and responses to items 16-25 on the questionnaire which tapped attitudes and perceptions about writing. Criterion variables for each of these analyses were: school SES, using the most recent code provided by CAP; the current English teacher's level of training and participation in the Writing Project (Fellow versus no exposure/participation); ethnicity; language spoken at home; level of students' exposure to Writing Project Fellows (ranging from one to four teachers over the last four English classes), self-report GPA; average GPA in high school English classes; and self-report score on the verbal portion of the SAT, if applicable.

Using postsecondary plans for continuing education following high school as the criterion variable, the first predictor variable to enter the equation was GPA ( $R=.34$ ,  $R^2=.12$ ,  $p<.001$ ); the higher the GPA, the more likely students were to anticipate fulltime postsecondary education. The only other variable with significant contribution to the

prediction equation was ethnicity ( $R=-.14$ ,  $R^2=.02$ ,  $p<.01$ ), with non-minority students being more likely to have fulltime postsecondary education plans than minorities (blacks and Hispanics).

When the criterion variable was type of postsecondary institution that students anticipated attending, the only significant variables to enter the equation were GPA ( $R=.48$ ,  $R^2=.34$ ,  $p<.001$ ) and average English GPA ( $R=.53$ ,  $R^2=.28$ ,  $p<.001$ ). The criterion variable was assigned the following values: 4= a branch of the University of California, including UCLA; 3= a branch of the California State University system; 2= a California Community College; 1= a trade school. While the questionnaires allowed for other responses, there were very few; most such responses referred to the military or to private institutions.

Multiple regression analysis based on only those students reporting the submission of SAT(Verbal) scores to a particular institution ( $n=133$ ) showed average English GPA as the first predictor ( $R=.58$ ,  $R^2=.34$ ,  $p<.001$ ) and overall GPA as the second ( $R=.61$ ,  $R^2=.37$ ,  $p<.001$ ). For this analysis, the criterion variable was defined as the student's first choice school and was assigned the following values: 4= UCLA ( $n=28$ ), 3= a branch of UC other than UCLA ( $n=35$ ), 2= a branch of the California State University system ( $n=52$ ), and 1= a California Community College ( $n=18$ ). Additional analyses revealed that 78% of the Asian students responding to this item named UCLA or another branch of the University of California as their first choice, and no Asian student responding to this item listed a community college. However, only 17% of black students and 37% of Hispanic students, responding to this item named UCLA or another branch of the UC system as their first choice; their first choices tended to be branches of California State University or a California Community College.

Multiple regression findings related to items 16-25 on the Senior English Student Questionnaire (available from the author) are summarized below by item. Item means are provided in Table 4.

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Insert Table 4 about here

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*Item #16: I enjoy writing.* The four significant predictors, in order, were ethnicity ( $R=.17$ ,  $R^2=.03$ ,  $p<.01$ ), with minority students enjoying writing more than non-minorities; average English GPA ( $R=.24$ ,  $R^2=.06$ ,  $p<.001$ ); GPA ( $R=.29$ ,  $R^2=.09$ ,  $p<.001$ ); and language spoken at home ( $R=.32$ ,  $R^2=.10$ ,  $p<.001$ ), with students from non-English speaking homes enjoying writing more than native English speakers.

*Item #17: I have always enjoyed writing.* The two significant predictors were ethnicity ( $R=.20$ ,  $R^2=.04$ ,  $p<.001$ ), with Asian students reporting the highest levels of enjoyment, and average English GPA ( $R=.25$ ,  $R^2=.06$ ,  $p<.001$ ).

*Item #18: I now enjoy writing more than I used to.* The two significant predictors were ethnicity ( $R=.14$ ,  $R^2=.02$ ,  $p<.05$ ), with blacks reporting the highest levels of increased enjoyment, and average English GPA ( $R=.18$ ,  $R^2=.03$ ,  $p<.01$ ).

*Item #19: I think I am a good writer.* The three significant predictors, in order, were language spoken at home ( $R=.22$ ,  $R^2=.05$ ,  $p<.01$ ), with native Spanish speakers reporting the highest levels of agreement with the statement; average English GPA ( $R=.26$ ,  $R^2=.07$ ,  $p<.001$ ); and ethnicity ( $R=.29$ ,  $R^2=.09$ ,  $p<.001$ ), with Asian students reporting the highest levels of agreement.

*Item #20: Others think that I write well.* The three significant predictors, in order, were ethnicity ( $R=.21$ ,  $R^2=.04$ ,  $p<.001$ ), with black students reporting the highest levels of agreement with the statement; average English GPA ( $R=.27$ ,  $R^2=.07$ ,  $p<.001$ ); and language spoken at home ( $R=.30$ ,  $R^2=.09$ ,  $p<.001$ ), with native Spanish speakers reporting the highest levels of agreement.

*Item #21: Writing well is important to my future success.* The three significant predictors, in order, were language spoken at home ( $R=.19$ ,  $R^2=.04$ ,  $p<.00$ ), with native English speakers reporting the highest levels of agreement with the statement; GPA ( $R=.23$ ,  $R^2=.06$ ,  $p<.001$ ); and ethnicity ( $R=.26$ ,  $R^2=.07$ ,  $p<.001$ ), with black students reporting the highest levels of agreement.

*Item #22: My writing skills seem to help me do better in other classes.* The two significant predictors were average English GPA ( $R=.14$ ,  $R^2=.02$ ,  $p<.05$ ) and ethnicity ( $R=.19$ ,  $R^2=.03$ ,  $p<.01$ ), with Caucasians reporting the highest levels of agreement.

*Item #23: I plan on a job/career that requires good writing skills.* The two significant predictors were GPA ( $R=.16$ ,  $R^2=.02$ ,  $p<.01$ ) and ethnicity ( $R=.20$ ,  $R^2=.04$ ,  $p<.01$ ), with Asian students reporting the highest levels of agreement with the statement.

*Item #24: After high school, I plan to write for pleasure.* The only significant predictor was ethnicity ( $R=.14$ ,  $R^2=.02$ ,  $p<.01$ ), with black students reporting the highest levels of agreement with the statement.

*Item #25: I would like to write for a living.* The two significant predictors were ethnicity ( $R=.23$ ,  $R^2=.05$ ,  $p<.001$ ), with black students reporting the highest levels of agreement with the statement, and average English GPA ( $R=.28$ ,  $R^2=.08$ ,  $p<.001$ ).

### Conclusions and Recommendations

While level of teacher involvement in the Writing Project and level of student exposure to Writing Project Fellows were significant predictors of writing quality, not surprisingly, in most instances, other variables were of greater significance in their predictive power: GPA was the strongest predictor of holistic writing scores and school level (high school versus junior high school) and school SES were stronger predictors of General Information and Content Quality (GICQ), Principles and Concepts (PN), and Prior Knowledge (PK) scores. Nonetheless, the results of this study make it quite clear that students in the classes of teachers who are Writing Project Fellows write significantly better than students who are not. It is also clear that students' writing improves in direct proportion to the number of Writing Project Fellows they experience as English teachers.

Findings related to the effects of Writing Project involvement on students' GPAs, postsecondary plans, test scores, and attitudes toward writing are less clear. The available data, which are limited by their self-report nature, suggest that GPAs and ethnicity are most predictive of students' decisions about whether and where they will continue their education after high school.

While this study was limited by available resources and the context in which it was conducted, it provides useful findings and important insights for future evaluation efforts. Aspects of the present approach that should be retained include the systematic collection and analysis of student products such as writing samples and design consideration of moderator variables such as language spoken at home, SES, school context, and intensity and validity of the intervention under evaluation (i.e., student exposure to Writing Project Fellows). The present approach could be improved by collecting writing or other work samples and self-report data from some of the same students, by depending less on self-report data (c.g., grades and test scores), and by obtaining student-level rather than school-level SES information.

The success of future efforts to assess the impact of outreach programs on students' decisions to enter the University system and their university success requires careful attention and commitment from central administration to developing mechanisms for tracking students in at least two ways: (a) tracking cohorts of current university students backward to determine the nature and extent of their involvement in targeted outreach programs and (b) tracking targeted high school students forward (longitudinally) to determine how various levels of involvement in outreach programs affect their future planning, decision-making, and success.