

DOCUMENT RESUME

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ABSTRACT

A study was conducted at California's College of the Canyons to determine whether evidence existed of disproportionate impact by age, gender, ethnicity, or disability in placement recommendations made based on the college's writing sample assessment test. The sample consisted of 617 students who took the writing test and writing sample test for the fall 1995 and spring 1996, while the standard for disproportionate impact was taken from Equal Employment Opportunity Commission guidelines that the selection rate of any given subgroup should not be less than 80% of that of the majority group. Study findings included the following: (1) no significant disproportionate placement was found for gender; (2) due to the small size of the disabled population, no determination could be made; (3) there was a significant disproportionate placement found for students age 25 or older in the English preparatory course preceding the college level course; and (4) there was a significant disproportionate placement found for Hispanic students for the college level English course. Since placement is advisory rather than mandatory, the college advocates the use of other measures to determine students' placement. Future research is recommended to determine why differences exist for older and Hispanic students. Includes the essay evaluation guide and data tables of placement results. (TGI)

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College of the Canyons

Disproportionate Impact Study Writing Sample Test

This research is designed to provide preliminary data in monitoring for disproportionate impact of placement into basic skills courses for various demographic groups.

The study is designed to answer the following research question: Does placement into different levels of basic skills courses differ significantly for students in particular age, gender, ethnic or disability groups based on an assessment instrument, method or procedure?

Method

Design

Tested Population. Students who took the APS Writing Test and the Writing Sample Test for Fall 1995 and Spring 1996 enrollment were included. Only those students who scored on or one point above or below the APS Writing Test cut scores were included in the tested population. These are the only students for whom the Writing Sample Tests are read and scored. They are also the only group for which the results of the Writing Sample Test are used in the placement recommendation process. A total of 617 students were included in the tested population.

Eligible Population. Using the "recommended placement" made by the English faculty after reading a student's Writing Sample Test, students were divided into four groups; those recommended for English 011, English 035, English 090 and English 101. See the Essay Evaluation Guide on page 4 which provides descriptions of the level of competence expected for each course placement recommendation.

Special Population Groups. We obtained demographic information from the CAPP score sheets for each student. All of the 617 students in the tested population indicated their age and gender; 607 indicated their race/ethnicity and disability.

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Results

Analysis of the Data

The analysis was conducted by comparing the percent of students in the special groups for the tested population to the percent of students in special groups who were recommended to enroll into each of the four English courses based on the Writing Sample Test recommended placement.

We examined the Writing Sample Test placement recommendations for age, gender, race/ethnicity and disability, applying the Equal Employment Opportunity Commission 80% guideline related to hiring practices. The EEOC 80% rule is used to determine if an investigation of the procedures should be undertaken. The 80% rule is calculated by forming a ratio between the percent of students in each group who would be placed according to the cut score. For example, in Table 1, where females are used as the majority group, the percent of male students eligible/tested (.0393) is divided by the percentage of female students eligible/tested (.0356). The result is 110.4%, well above the 80% rule cut-off. If **fewer than 80%** of the minority group students would be placed, it indicates that the placement scheme should be reviewed to determine if discriminatory practices or a biased test are being employed.

Findings

Gender	No significant disproportionate placement found. See Tables 1 through 4.
Disability	Cell sizes for tested students fell below 20, making them too small to make a determination. See Tables 5 through 8.
Age	Significant disproportionate placement found for older students (age 25 and above) for English 090. The proportion of older students to be placed falls slightly below the 80% cut-off (76.1%). See Tables 9 through 12.
Race/Ethnicity	Significant disproportionate placement found for Hispanic students for English 101. See Tables 13 through 16.

Discussion

While disproportionate impact was found in only two of the 36 possible course levels and special population groups, the college is concerned about the findings. Practices, which are in accord with the state matriculation regulations, are in place to

ensure that the placement recommendation from this one placement test isn't the only measure used to recommend course placement in English. Multiple measures are used by college counselors, including, but not limited to, the score a student receives on the APS Writing Test, grade received in last high school English course, recency of last high school English course, and overall high school GPA. Students are reminded that placement advice is advisory, not mandatory. Finally, students are encouraged to seek additional advice from counselors or faculty members if they desire it. Through these practices, the college has reduced to a minimum any possible harm from the possible disproportionate impact of the Writing Sample Test itself.

Future Research

Further research is needed to determine why differences exist between certain groups. Are the differences related to the nature of the instrument or are they due to socioeconomic or other factors?

A study of differential prediction may be helpful in determining whether the Writing Sample Test predicts differentially for certain groups of students.

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Office of Institutional Development
October 1996

ESSAY EVALUATION GUIDE

This information is provided to help Counselors & Program Advisors interpret the essay score.

Course Recommendation: **English 101**

Score: 7

A level 7 **English 101** essay will be fluent and clearly organized. The thesis is clearly stated and well supported. The essay shows a sophisticated command of language and sentence variety and is free of errors in sentence structure, grammar, and mechanics. It displays originality and depth of thought.

Course Recommendation: **English 101**

Score: 6

A level 6 **English 101** essay will have clarity of expression and organization. The thesis is clear and the contents of the essay related to it. The paragraphs are developed, and the essay is of sufficient length to demonstrate control of the essay process. The essay shows a good command of language and sentence variety and is free of all but a few errors in sentence structure, grammar, and mechanics.

Course Recommendation: **English 090**

Score: 5

A level 5 **English 090** essay will be less fluent and organized than a level 6. There is an attempt to state a thesis and organize the essay, but paragraphing may be unevenly developed. There is sentence variety, though there may be some awkwardness in syntax. The essay may have some problems in diction, grammar, mechanics, and sentence structure.

Course Recommendation: **English 090**

Score: 4

A level 4 **English 090** essay will be less organized and fluent than a level 5. The thesis, if present, may not control the content of the essay. Some organization is apparent, but paragraphing may be underdeveloped or repetitive. There is less variety in sentences than the level 5 essay and more awkwardness in syntax. The essay usually has some problems in diction, grammar, mechanics, and sentence structure, but these do not interfere with readability.

Course Recommendation: **English 035**

Score: 3

A level 3 **English 035** essay will fit one or more of these categories: it may have poor organization; the thesis, if present, may not be developed; paragraphs may be minimal or rambling; it may have confused syntax, fragments, or run-on sentences; it may have frequent, serious errors in diction, grammar, and mechanics, which begin to interfere with readability; and/or it may have some superficial development, but will tend to be shorter than a level 4 essay.

Course Recommendation: **English 035**

Score: 2

A level 2 **English 035** essay will fit one or more of the following categories; organization may not be apparent; thesis may be missing or too vague for development; it may show no grasp of paragraphing, or paragraphing may be random; it may have confused syntax or excessive fragments or run-on sentences; it may have numerous, serious errors in diction, grammar, or mechanic, which make the essay difficult to understand; and /or it will ramble associatively.

Course Recommendation: **English 011**

Score: 1

A level 1 **English 011** essay will fit one or more of the following categories: it may contain only a few chaotic sentences; the sentence structure and/or the syntax will be garbles; its grammar, mechanics, and diction errors make the essay largely unreadable; and/or it will not address the prompt.

Table 1.
Writing Sample Test
Students Assessed and Recommended to Enroll
by Gender into English 011
 80% Rule Index: Females used as majority group

<u>Gender</u>	<u>Tested Population*</u>		<u>Recommended to Enroll</u>		<u>% Points Difference</u>	<u>Eligible/ Tested</u>
Female	337	54.6%	12	52.2%	-2.4%	.0356
Male	<u>280</u>	<u>45.4%</u>	<u>11</u>	<u>47.8%</u>	+2.4%	0.393
TOTAL	617	100.0%	23	100.0%		

80% Rule Index: 110.4%

Table 2.
Writing Sample Test
Students Assessed and Recommended to Enroll
by Gender into English 035

<u>Gender</u>	<u>Tested Population</u>		<u>Recommended to Enroll</u>		<u>% Points Difference</u>	<u>Eligible/ Tested</u>
Female	337	54.6%	41	49.4%	-5.2%	.1217
Male	<u>280</u>	<u>45.4%</u>	<u>42</u>	<u>50.6%</u>	+5.2%	.1500
TOTAL	617	100.0%	83	100.0%		

80% Rule Index: 123.3%

Table 3.
Writing Sample Test
Students Assessed and Recommended to Enroll
by Gender into English 090

<u>Gender</u>	<u>Tested Population</u>		<u>Recommended to Enroll</u>		<u>% Points Difference</u>	<u>Eligible/ Tested</u>
Female	337	54.6%	176	55.0%	+0.4%	.5223
Male	<u>280</u>	<u>45.4%</u>	<u>144</u>	<u>45.0%</u>	-0.4%	.5143
TOTAL	617	100.0%	320	100.0%		

80% Rule Index: 98.5%

Table 4.
Writing Sample Test
Students Assessed and Recommended to Enroll
by Gender into English 101

<u>Gender</u>	<u>Tested Population</u>		<u>Recommended to Enroll</u>		<u>% Points Difference</u>	<u>Eligible/ Tested</u>
Female	337	54.6%	105	56.8%	+2.2%	.3116
Male	<u>280</u>	<u>45.4%</u>	<u>80</u>	<u>43.2%</u>	-2.2%	.2857
TOTAL	617	100.0%	185	100.0%		

80% Rule Index: 91.7%

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Table 5.
Writing Sample Test
Students Assessed and Recommended to Enroll
by Learning Disability into English 011
 80% Rule Index: Non-Disabled used as majority group

<u>Learning Disability</u>	<u>Tested Population</u>		<u>Recommended to Enroll</u>		<u>% Points Difference</u>	<u>Eligible/ Tested</u>
Yes	30	4.9%	3	13.0%	+8.1%	.1000
No	577	93.5%	20	87.0%	-6.5%	.0347
No response	<u>10</u>	<u>1.6%</u>	<u>0</u>	<u>0.0%</u>	-1.6%	
TOTAL	617	100.0%	23	100.0%		

80% Rule Index - 288.2%

Table 6.
Writing Sample Test
Students Assessed and Recommended to Enroll
by Learning Disability into English 035

<u>Learning Disability</u>	<u>Tested Population</u>		<u>Recommended to Enroll</u>		<u>% Points Difference</u>	<u>Eligible/ Tested</u>
Yes	30	4.9%	10	12.0%	+7.1%	.3333
No	577	93.5%	71	85.5%	-8.0%	.1230
No response	<u>10</u>	<u>1.6%</u>	<u>2</u>	<u>2.4%</u>	+0.8%	
TOTAL	617	100.0%	83	100.0%		

80% Rule Index - 270.9%

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Table 7.
Writing Sample Test
Students Assessed and Recommended to Enroll
by Learning Disability into English 090

<u>Learning Disability</u>	<u>Tested Population</u>		<u>Recommended to Enroll</u>		<u>% Points Difference</u>	<u>Eligible/ Tested</u>
Yes	30	4.9%	14	4.4%	-0.5%	.4667
No	577	93.5%	299	93.4%	-0.1%	.5182
No response	<u>10</u>	<u>1.6%</u>	<u>7</u>	<u>2.2%</u>	+0.6%	
TOTAL	617	100.0%	320	100.0%		

80% Rule Index - 90.1%

Table 8.
Writing Sample Test
Students Assessed and Recommended to Enroll
by Learning Disability into English 101

<u>Learning Disability</u>	<u>Tested Population</u>		<u>Recommended to Enroll</u>		<u>% Points Difference</u>	<u>Eligible/ Tested</u>
Yes	30	4.9%	2	1.1%	-3.8%	.0667
No	577	93.5%	182	98.4%	+4.9%	.3154
No response	<u>10</u>	<u>1.6%</u>	<u>1</u>	<u>0.5%</u>	-1.1%	
TOTAL	617	100.0%	185	100.0%		

80% Rule Index - 21.1%
 Cell size too small.

Table 9.
Writing Sample Test
Students Assessed and Recommended to Enroll
by Age into English 011
80% Rule Index: "18-24 year-olds" used as majority group

<u>Age</u>	<u>Tested Population</u>		<u>Recommended to Enroll</u>		<u>% Points Difference</u>	<u>Eligible/ Tested</u>
Under 18	109	17.7%	1	4.3%	-13.4%	.0092
18 - 24	334	54.1%	10	43.5%	-10.6%	.0299
25 and over	<u>174</u>	<u>28.2%</u>	<u>12</u>	<u>52.2%</u>	+24.0%	.0690
TOTAL	617	100.0%	23	100.0%		

80% Rule for "Under 18" - 30.8%
Cell size too small

80% Rule for "25 and over" - 230.8%

Table 10.
Writing Sample Test
Students Assessed and Recommended to Enroll
by Age into English 035

<u>Age</u>	<u>Tested Population</u>		<u>Recommended to Enroll</u>		<u>% Points Difference</u>	<u>Eligible/ Tested</u>
Under 18	109	17.7%	8	9.6%	-8.1%	.0734
18 - 24	334	54.1%	44	53.0%	-1.1%	.1317
25 and over	<u>174</u>	<u>28.2%</u>	<u>31</u>	<u>37.3%</u>	+9.1%	.1782
TOTAL	617	100.0%	83	100.0%		

80% Rule for "Under 18" - 55.7%
Cell size too small

80% Rule for "25 and over" - 135.3%

Table 11.
Writing Sample Test
Students Assessed and Recommended to Enroll
by Age into English 090

<u>Age</u>	<u>Tested Population</u>		<u>Recommended to Enroll</u>		<u>% Points Difference</u>	<u>Eligible/ Tested</u>
Under 18	109	17.7%	63	19.7%	+2.0%	.5780
18 - 24	334	54.1%	184	57.5%	+3.4%	.5509
25 and over	<u>174</u>	<u>28.2%</u>	<u>73</u>	<u>22.8%</u>	-5.4%	.4195
TOTAL	617	100.0%	320	100.0%		

80% Rule for "Under 18" - 104.9%
80% Rule for "25 and over" - 76.1%

Table 12.
Writing Sample Test
Students Assessed and Recommended to Enroll
by Age into English 101

<u>Age</u>	<u>Tested Population</u>		<u>Recommended to Enroll</u>		<u>% Points Difference</u>	<u>Eligible/ Tested</u>
Under 18	109	17.7%	37	20.0%	+2.3%	.3394
18 - 24	334	54.1%	94	50.8%	-3.3%	.2814
25 and over	<u>174</u>	<u>28.2%</u>	<u>54</u>	<u>29.2%</u>	+1.0%	.3103
TOTAL	617	100.0%	185	100.0%		

80% Rule for "Under 18" - 120.6%
80% Rule for "25 and over" - 110.3%

Table 13.
Writing Sample Test
Students Assessed and Recommended to Enroll
by Race/Ethnicity into English 011
80% Rule Index: Whites used as majority group

<u>Race/Ethnicity</u>	<u>Tested Population</u>		<u>Recommended to Enroll</u>		<u>% Points Difference</u>	<u>Eligible/ Tested</u>
American Indian/ Alaskan Native	8	1.3%	0	0.0%	-1.3%	.0000
Asian/Pacific Islander/ Filipino	54	8.8%	4	17.4%	+8.6%	.0741
Black/Non-Hispanic	24	3.9%	1	4.3%	+0.4%	.0417
Hispanic	144	23.3%	12	52.2%	+28.9%	.0833
White/Non-Hispanic	351	56.9%	5	21.7%	-35.2%	.0142
Other	26	4.2%	1	4.3%	+0.1%	.0385
No Response	<u>10</u>	<u>1.6%</u>	<u>0</u>	<u>0.0%</u>	-1.6%	---
TOTAL	617	100.0%	23	100.0%		

80% Rule for American Indian - no data
80% Rule for Asian/Pacific Islander/Filipino - 521.8%
80% Rule for Black - 293.7%
80% Rule for Hispanic - 586.6%
80% Rule for Other - 271.1%

Table 14.
Writing Sample Test
Students Assessed and Recommended to Enroll
by Race/Ethnicity into English 035

<u>Race/Ethnicity</u>	<u>Tested Population</u>		<u>Recommended to Enroll</u>		<u>% Points Difference</u>	<u>Eligible/ Tested</u>
American Indian/ Alaskan Native	8	1.3%	2	2.4%	+1.1%	.2500
Asian/Pacific Islander/ Filipino	54	8.8%	10	12.0%	+3.2%	.1852
Black/Non-Hispanic	24	3.9%	5	6.0%	+2.1%	.2083
Hispanic	144	23.3%	30	36.1%	+12.8%	.2083
White/Non-Hispanic	351	56.9%	33	39.8%	-17.1%	.0940
Other	26	4.2%	0	0.0%	-4.2%	.0000
No Response	<u>10</u>	<u>1.6%</u>	<u>3</u>	<u>3.6%</u>	+2.0%	----
TOTAL	617	100.0%	83	100.0%		

80% Rule for American Indian/Alaskan Native - 266.0%
80% Rule for Asian/Pacific Islander/Filipino - 197.0%
80% Rule for Black - 221.6%
80% Rule for Hispanic - 221.6%
80% Rule for Other - no data

Table 15.
Writing Sample Test
Students Assessed and Recommended to Enroll
by Race/Ethnicity into English 090

<u>Race/Ethnicity</u>	<u>Tested Population</u>		<u>Recommended to Enroll</u>		<u>% Points Difference</u>	<u>Eligible/ Tested</u>
American Indian/ Alaskan Native	8	1.3%	4	1.3%	0.0%	.5000
Asian/Pacific Islander/ Filipino	54	8.8%	25	7.8%	-1.0%	.4630
Black/Non-Hispanic	24	3.9%	13	4.1%	+0.2%	.5417
Hispanic	144	23.3%	67	20.9%	-2.4%	.4653
White/Non-Hispanic	351	56.9%	194	60.6%	+3.7%	.5527
Other	26	4.2%	14	4.4%	+0.2%	.5385
No Response	<u>10</u>	<u>1.6%</u>	<u>3</u>	<u>0.9%</u>	-0.7%	----
TOTAL	617	100.0%	320	100.0%		

80% Rule for American Indian/Alaskan Native - 90.5%
80% Rule for Asian/Pacific Islander/Filipino - 83.8%
80% Rule for Black - 98.0%
80% Rule for Hispanic - 84.2%
80% Rule for Other - 97.4%

Table 16.
Writing Sample Test
Students Assessed and Recommended to Enroll
by Race/Ethnicity into English 101

<u>Race/Ethnicity</u>	<u>Tested Population</u>		<u>Recommended to Enroll</u>		<u>% Points Difference</u>	<u>Eligible/ Tested</u>
American Indian/ Alaskan Native	8	1.3%	2	1.1%	-0.2%	.2500
Asian/Pacific Islander/ Filipino	54	8.8%	13	7.0%	-1.8%	.2407
Black/Non-Hispanic	24	3.9%	5	2.7%	-1.2%	.2083
Hispanic	144	23.3%	31	16.8%	-6.5%	.2153
White/Non-Hispanic	351	56.9%	119	64.3%	+7.4%	.3390
Other	26	4.2%	11	5.9%	+1.7%	.4231
No Response	<u>10</u>	<u>1.6%</u>	<u>4</u>	<u>2.1%</u>	+0.5%	----
TOTAL	617	100.0%	185	100.0%		

80% Rule for American Indian/Alaskan Native - 73.7%
 Cell size too small

80% Rule for Asian/Pacific Islander/Filipino - 71.0%
 Cell size too small

80% Rule for Black - 61.4%
 Cell size too small

80% Rule for Hispanic - 63.5%
 80% Rule for Other - 124.8%



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