

DOCUMENT RESUME

ED 377 928

JC 950 066

AUTHOR Takahata, Gail
 TITLE San Diego City College Title III Evaluation.
 INSTITUTION San Diego Community Coll. District, CA. Research and Planning.
 PUB DATE Jul 93
 NOTE 33p.
 PUB TYPE Reports - Research/Technical (143) --
 Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS *Academic Persistence; College Outcomes Assessment; Community Colleges; *Critical Thinking; Grade Point Average; High Risk Students; Nontraditional Students; *Outcomes of Education; *Program Effectiveness; Program Evaluation; Questionnaires; Student Development; Two Year Colleges; *Two Year College Students; *Writing Instruction
 IDENTIFIERS *San Diego City College CA

ABSTRACT

A study was conducted at San Diego City College (SDCC) in California to evaluate the college's Critical Thinking and Writing Center, one of the components of SDCC's comprehensive plan to improve student outcomes. Five indicators of student success were examined for two semesters using a student tracking system: retention, semester-to-semester persistence, success in English classes, percentage of units completed, and semester grade point average (GPA). During the second semester of tracking, a survey was administered to students attending the Center and to peer tutors to assess their evaluation of the Center's services. The fall 1991 findings indicated that the treatment group had significantly higher retention and persistence rates than the comparison group; was 3.5 times more likely to return to the Center for a second semester; succeeded more frequently in English classes; completed a higher percentage of units; and earned a higher mean semester GPA. The spring 1992 findings showed that students who returned to the Center were more successful than those who did not return in the following areas: retention and persistence; English class success; completed units; and semester GPA. The student and tutor surveys indicated that increases in the number of tutors, hours of operation, and physical space were desired. The survey instruments are included. (MAB)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

SAN DIEGO CITY COLLEGE TITLE III EVALUATION



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
G. Takahata

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BY GAIL TAKAHATA
RESEARCH & PLANNING OFFICE
SAN DIEGO COMMUNITY COLLEGE DISTRICT

JULY 1993

JC 950 066

San Diego City College Title III Evaluation Fall 1991 - Spring 1992

Executive Summary

Introduction

In Spring 1990, San Diego City College received a five-year grant under the Title III program to improve outcomes for its students. This report summarizes the findings of an evaluation of the Critical Thinking and Writing Center, one of the components of City College's comprehensive plan to improve student outcomes.

Methodology

A review of the literature produced about a dozen indicators of student success, which were then narrowed to five because of time and economic constraints. The five indicators selected were: retention, semester-to-semester persistence, success in English class, percentage of units completed, and semester grade point average (GPA). A student tracking system was developed to follow student progress on the indicators. Students were tracked for two semesters; complete data from the third semester are not yet available. During the second semester (Spring 1992), a survey was administered to students attending the Center and to peer tutors to assess their opinions of Center services. Students in the treatment group attended the Center during the Fall 1991 term for an average of about one hour per week. Students in the control group attended once for an average of 20 minutes.

Findings/Discussion

First Semester (Fall 1991) Findings

Students in the treatment group had a significantly higher retention (96.7%) and persistence (91.8%) rate than students in the comparison group (86.1% and 78.7%, respectively). The treatment group was 3.5 times more likely to return to the Center for a second semester, were more successful in their English classes (67.8% compared to 53.8%), completed a higher percentage of the units they enrolled in (84.3% compared to 71.3%), and earned a higher mean semester GPA (2.45 compared to 2.30).

Second Semester (Spring 1992) Findings

Second semester results showed that students who returned to the Center were more successful (with respect to the five indicators) than students who did not return to the Center. Center "Returners" had a significantly higher retention (98.8%) and persistence (91.4%) rate than Center "Nonreturners" (61.7% and 77.3%, respectively). Center Returners were more successful in their English classes (67.8% compared to 50.0%), completed a higher percentage of the units they enrolled in (83.4% compared to 61.6%), and earned a higher mean semester GPA (2.55 compared to 2.20).

Student and Tutor Survey

In general, students and tutors rated Center services very highly. On a five point scale (5 being the highest), the mean rating for eight of the ten student items and seven of the eleven tutor items were between four and five. The only aspect of the Center that students would change would be to expand it: increase the number of tutors, hours of operation, and physical space.

Summary and Conclusions

Strategies used at the Center were successful in improving outcomes for at-risk students at City College. Students in the treatment group were more likely to be ethnic minorities, lower income and nonacademic students compared to students in the comparison group but were more successful in terms of retention, persistence, success in English classes, percentage of units completed and semester GPA.

Table of Contents

	<u>Page</u>
Executive Summary	i
Introduction	i
Methodology	i
Findings/Discussion	i
First Semester (Fall 1991) Findings	i
Second Semester (Spring 1992) Findings	ii
Student and Tutor Survey ✓	ii
Summary and Conclusions	ii
 <i>San Diego City College Title III Evaluation</i>	
<i>Fall 1991 - Spring 1992</i>	1
 Introduction	1
Methodology	2
Findings/Discussion	3
First Semester Findings (Fall 1991)	3
Retention	5
Persistence	6
Success in English Class	6
Percentage of Units Completed	6
Semester GPA	7
Second Semester Findings (Spring 1992)	8
Center Returners and Nonreturners	10
Retention	11
Persistence	11
Success in English Class	12
Percentage of Units Completed	12
Semester GPA	13
Two-semester Center Attenders & Two-semester Nonattenders	13

Table of Contents

	<u>Page</u>
Retention	14
Persistence	15
Success in English Class	15
Percentage of Units Completed	16
Semester GPA	16
Student Survey	16
Tutor Survey	18
Summary and Conclusions	19

List of Tables, Figures, and Appendices

<u>Table</u>	<u>Title</u>	
1	Demographic and Background Characteristics of Comparison and Treatment Group	4
2	Demographic and Background Characteristics of Center Returners and Nonreturners - Spring 1992	10
3	Demographic and Background Characteristics of Two-semester Center Attenders and Nonattenders	14
 <u>Figure</u>		
1	Student Success Indicators Treatment and Comparison Groups - Fall 1991	5
2	Mean Units Attempted and Completed Treatment and Comparison Groups - Fall 1991	7
3	Mean Cumulative and Semester GPA Treatment and Comparison Groups - Fall 1991	8

List of Tables, Figures, and Appendices

<u>Figure</u>	<u>Title</u>	<u>Page</u>
4	Attended Center - Spring 1992	9
5	Student Success Indicators for Center Returners and Nonreturners - Spring 1992	11
6	Mean Units Attempted an Completed Center Returners and Nonreturners - Spring 1992	13
7	Student Success Indicators for Two-semester Center Attenders and Nonattenders - Spring 1992	15
8	Mean Rating of Center Services Student Survey, Spring 1992	17
 <u>Appendix</u>		
A	Student Survey	21
B	Tutor Survey	23

San Diego City College Title III Evaluation Fall 1991 - Spring 1992

Introduction

Located in the "urban core" of San Diego, City College serves a racially, culturally, and economically diverse population. Over half of City College's students are ethnic minorities, enrolled in occupational programs, and lower income (SDCCD Research and Planning Office). More than 50% of the entering freshmen score below college-level on the English reading and writing placement tests and about 70% score below college-level math (ibid). It was because of the diversity and underpreparedness of its students and the instability of fiscal conditions that City College administrators and English faculty decided to apply for a Title III grant in fall, 1989.

City College's Title III grant included three components:

1. implementing a decision support system to assist with strategic planning, student tracking and program evaluation;
2. improving linkages between academic programs and support services; and
3. developing its institutional advancement capabilities to identify and tap into new sources of funding.

In order to strengthen the linkages between programs and student support services (component 2), grant funding is being used to develop three areas:

1. Faculty advising and mentoring - This component provides training and support to instructor-counselor teams to improve the scope and quality of faculty advising and mentoring. A corps of peer mentors is being trained to provide additional support to at-risk students.
2. English as a Second Language (ESL) - This component provides for ESL curriculum development to interface with the English curriculum; a comprehensive orientation, assessment and placement program using multiple measures to place ESL students; and instructional support materials (interactive videodisc, the Writing Center).

3. Writing and critical thinking across the curriculum - This component provides for the improvement of academic quality by bringing together "research" and "practice." Innovations include: developing writing and critical thinking across the curriculum strategies, classroom-based research, faculty tutoring and mentoring of students, identification and use of teaching/learning styles to improve the success of underprepared students, interactive video disc and other technologies, etc. Many of these innovations were developed and implemented in the Writing and Critical Thinking Center.

This study summarizes the evaluation of the Writing Center services. City College faculty worked with Research and Planning staff to develop an evaluation plan for the Writing Center component of Title III. Research and Planning staff met several times with staff affiliated with the Center and developed an evaluation plan to identify outcome measures and necessary instrumentation. Determining standards for success was left to the Research and Planning staff. These standards were used to evaluate the success of the program.

Methodology

A review of the literature produced about a dozen indicators of student success, which were then narrowed to five because of time and economic constraints. The five indicators selected were:

1. Retention - a student is retained in a class when a grade of A, B, C, CR, D, or I appears on the student's transcript at the end of the term (Matriculation Local Research Options Project, 1989).
2. Semester-to-semester persistence - a student is considered to persist from semester to semester when the student completes (is retained in) a semester and enrolls in the subsequent semester. This definition of persistence differs slightly from the Matriculation Local Research Options Project's definition which requires a grade on the transcript of the subsequent semester in order to be considered a persister.
3. Success in English class - grades of A, B, C, CR (credit) represent success. Grades of D, F, NC (no credit), W (withdraw), I (incomplete), and DR (drop) represent nonsuccess (ibid).
4. Percentage of units completed - number of units earned divided into the number of units attempted.
5. Semester grade point average (GPA).

Research and Planning staff developed a student tracking system to monitor student progress on the success indicators. Students were tracked for two semesters; complete data from the third semester are not yet available. In addition to student records, data were also gathered from Center records. These data include the amount of time spent at the Center, reasons for attending, who referred the student to the Center, courses the student was seeking help in.

The initial evaluation was designed to compare students who attended the Center with those who did not. Since it was not known until the end of the semester which students would attend the Center that semester, choosing students in English classes at the beginning of the semester to serve as a comparison group was not possible. Instead, the comparison group was derived from students who had only "minimal contact" with the Center. This was defined as students who attended the Center only once during the entire semester. The average time spent at the Center by this group was approximately 20 minutes. Students in the treatment group attended the Center on a regular basis for approximately one hour a week.

During the second semester (Spring 1992), a survey was administered to students attending the Center and to peer tutors. The surveys consisted of demographic and background questions. Students were given Likert-scale questions on their opinion of Center services, and open-ended questions assessing the most "positive" aspect of the Center, changes to the Center that were needed, and how the student would be affected if Center services were no longer available.

Findings/Discussion

First Semester Findings (Fall 1991)

To judge an institution or program on the quality of its graduates ("output") ignores the knowledge, skills, and abilities with which its graduates arrived ("input"). This "traditional" view of looking at output as a measure of excellence may merely reflect institutional selectivity, reputation, and resources, and not program excellence. "True excellence," Astin (1984) argues, "resides in the ability of the college or university to affect its students favorably, to enhance their intellectual development, and to make a positive difference in their lives." The evaluation of the Writing Center examined both inputs and outputs in analyzing the affects of Center services on the intellectual growth of students. By controlling for inputs one can better examine the effects of a particular program or environment on an outcome variable.

Table 1 displays the demographic and background characteristics of the two groups. The treatment group tended to have more factors associated with being "at-risk." These factors include a higher percentage of Latino and African American students (56.6% compared to 48.8%), students in nonacademic programs (28.3% compared to 25.3%), ESL, and lower income students (61.5% with household incomes less than \$10,000 compared to 45.0%). Relevant research literature (Bender & Richardson, 1987; Astin, 1991; Cohen, 1982) as well as local data (SDCCD Research & Planning, 1990) suggest these factors are associated with lower outcomes.

Table 1
Demographic and Background Characteristics
of Comparison and Treatment Group - Fall 1991

	Comparison	Treatment
Sample Size	122	121
Demographics/Background		
Gender:		
Male	46.7%	43.0%
Female	53.3%	57.0%
Ethnicity:		
Caucasian	19.8%	12.5%
African American	20.7%	23.3%
Asian	19.0%	20.8%
Latino	28.1%	33.3%
Other	12.4%	10.1%
Educational Objective:		
Academic Emphasis	74.7%	71.7%
Voc. Skills Emphasis	19.2%	24.2%
Other	6.1%	4.1%
Income:		
< \$10,000	45.0%	61.5%
\$10,000 - \$26,999	38.5%	27.7%
\$27,000 +	16.5%	10.8%
Age:	23	28
Cumulative GPA (Prior F91)	2.62	2.49
Cumulative Units (Prior F91)	26.9	20.9
Success Prior English	69.7%	68.4%
Success Prior English	71.9%	72.6%

Students in the comparison group had a slightly higher mean cumulative GPA (2.62 compared to 2.49) and completed more cumulative units (mean of 26.9 versus 20.9). They were also more likely to be enrolled in a degree-applicable English course (57.7%) compared to the treatment group (44.5%). The two

groups had similar success rates in prior English classes (71.9% for comparison, 72.6% for treatment).

Student reasons for attending the Center varied considerably. During the Fall 1991 semester, students in the treatment group spent an average of 15.3 hours at the Center (approximately 1 hour a week). Half of the students in the treatment group indicated that they were attending the Center to get help with organizing a paper ("theme organization"), 42.6% needed help with grammar mechanics, and 39.8% needed help with study skills (multiple responses were allowed).

Retention

The Matriculation Local Research Options Project (1989) defines a student as being retained in a class when the transcript shows a grade of A, B, C, CR, D, or I on the student's transcript at the end of the term. Almost all (117) of the 121 students in the treatment group were retained in the Fall 1991 semester (96.7%) compared to 86.1% of the comparison group (Figure 1; $F(1, 226) = 4.99$, $p < .05$).

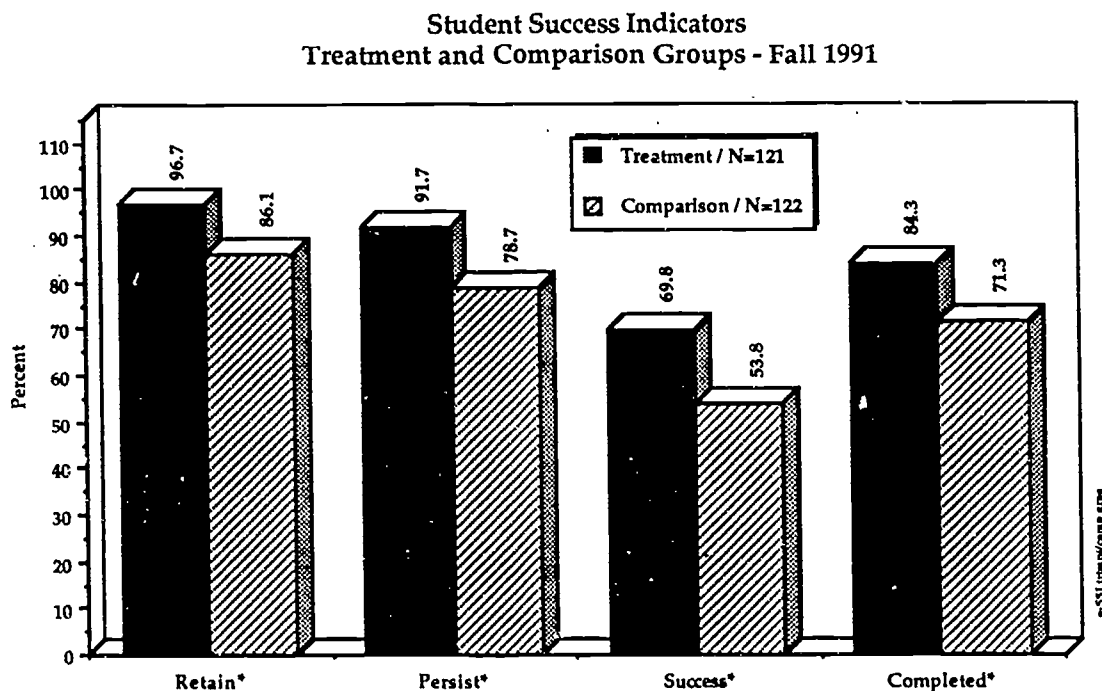


Figure 1

* Statistically significant at .05 level

Persistence

The definition of persistence used in the SDCCD considers a student who completes (is retained in) a semester and re-enrolls in the subsequent semester as a "persister." Almost 92% of the students in the treatment group persisted to Spring 1992 (Figure 1). In comparison, 78.7% of the students in the comparison group persisted to the second semester of the study. The difference in persistence rates is statistically significant at the .05 level ($F(1, 153) = 9.82, p < .05$).

Success in English Class

Students in both groups were successful in over 70% of their prior English classes (72.6% for treatment group, 71.9% for comparison group). Students in the comparison group were more likely to be enrolled in a degree-applicable English course (57.7% compared to 44.5%) than students in the treatment group. Almost 70% of the students in the treatment group were successful in their Fall 1991 English classes (Figure 1). About 54% of the students in the comparison groups were successful in their English classes.

Percentage of Units Completed

In the Fall 1991 term, students in both groups attempted approximately 12 units. Students in the treatment group earned a credit-producing grade (A, B, C, D, Credit as opposed to an F, W, DR, NC) in an average of 10.2 units as compared to 8.6 units for students in the comparison group (Figure 2). Students in the treatment group completed 84.3% of the units they were enrolled in compared to 71.3% for the comparison group. These differences were significant at the .05 level ($F(1, 225) = 6.81, p < .05$).

Mean Units Attempted and Completed
Treatment and Comparison Groups
Fall 1991

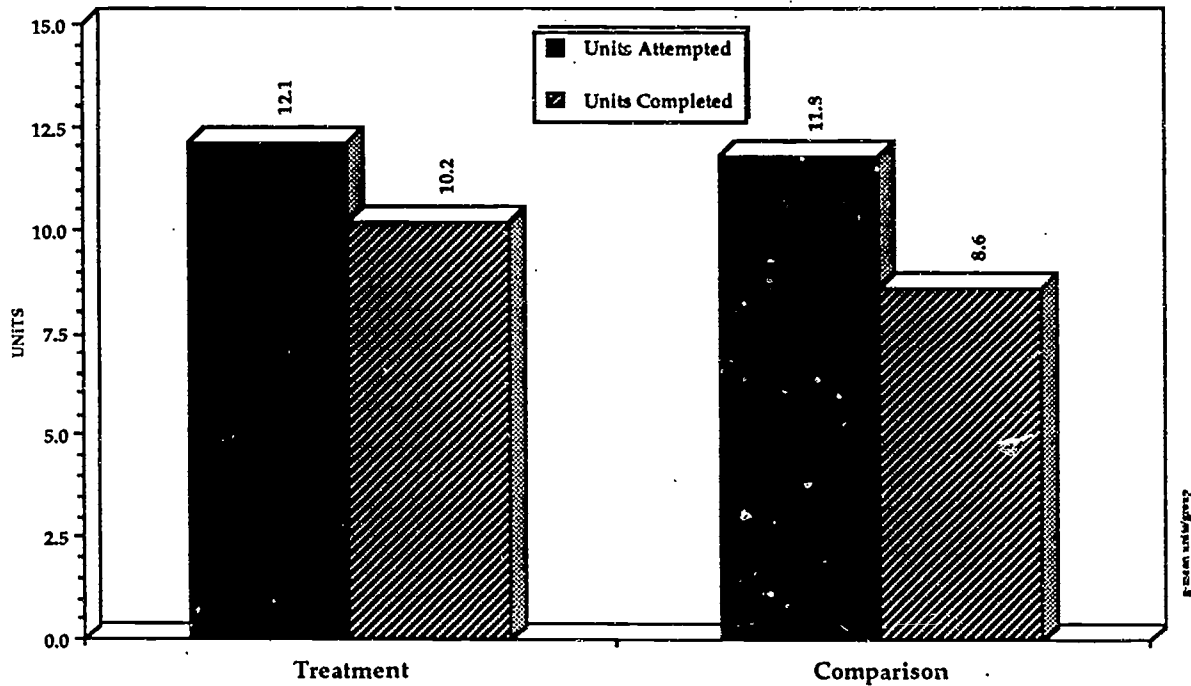


Figure 2

Semester GPA

Figure 3 on the following page displays the mean grade point average for the treatment and comparison groups prior to the Fall 1991 semester as well as their mean GPA for the Fall 1991 semester. Students in the treatment group had a lower prior mean GPA than students in the comparison group but had a higher Fall 1991 semester GPA.

Mean Cumulative and Semester GPA
Treatment and Comparison Groups
Fall 1991

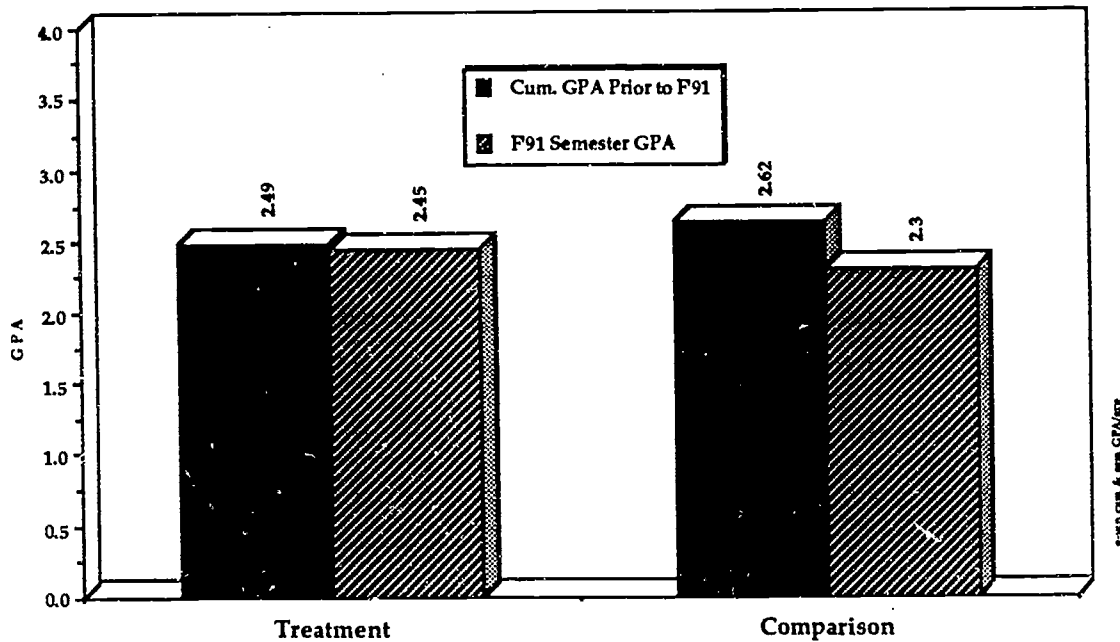


Figure 3

Second Semester Findings (Spring 1992)

After examining the first semester findings, additional questions were raised by members of the Title III evaluation workgroup:

1. Are students that attend the Center for two semesters more successful than students that attend only one semester or not at all?
2. Are the benefits of attending the Center long-term?

In order to answer these questions, the original sample was divided into four groups (Figure 4):

1. students with two semesters of Center attendance;
(average time at Center: Fall - 1 hour/week;
Spring - 45 minutes/week)
2. students that attended the Center in the Fall semester but did not return in the Spring;

3. students that did not attend the Center in Fall but did so in the Spring; and
4. students who did not attend the Center in either semester.

**Attended Center
Spring 1992**

		Yes	No	
Attended Center Fall 1991	Yes	Group 1 (N=63)	Group 2 (N=58)	<input checked="" type="checkbox"/> Center Returners <input type="checkbox"/> Center Nonreturners
	No	Group 3 (N=18)	Group 4 (N=104)	

Figure 4

Analyses of the five success indicators by the four groups were conducted. In almost every case, the two semester Center Attenders (group 1) and the students who attended in the Spring (group 3) performed about the same. Likewise, students that attended in the Fall but not the Spring (group 2) and students that did not attend in either semester (group 4) performed similarly. This suggests that the benefits associated with attending the Center are most evident during the semester of attendance for students involved in the study. This finding is consistent with research conducted by learning theorists and cognitive scientists suggesting that students tend to use special services such as tutoring to complete more immediate tasks. (Sticht, 1975)

Student success indicators for the Spring 1992 semester are presented for the following comparisons:

1. Center Returners (groups 1 and 3) and Nonreturners (groups 2 and 4); and

2. Two-semester Attenders (group 1) and two-semester Nonattenders (group 4).

Center Returners and Nonreturners

Of the 121 students in the treatment group, 52.1% (N=63) returned to the Center during the Spring 1992 semester. Less than 15% (N=18) of the students in the comparison group attended the Center during the Spring 1992 semester.

Table 2 displays the demographic and background characteristics for students in the "Center Returner" and "Center Nonreturner" groups. Students in the Center Returner group attended the Center for an average of 1 hour per week during the Fall semester and about 45 minutes per week during the Spring semester. The two groups were similar in all categories except that the Center Returners were more likely to be female (59.3% compared to 53.1% for the Nonreturners) and nonwhite (92.6% compared to 78.9%).

Table 2
Demographic and Background Characteristics
of Center Returners and Nonreturners - Spring 1992

	Returners	Nonreturners
Sample Size	81	162
<u>Demographics/Background</u>		
Gender:		
Male	40.7%	46.9%
Female	59.3%	53.1%
Ethnicity:		
Caucasian	7.4%	21.1%
African American	23.5%	21.1%
Asian	22.2%	18.0%
Latino	38.3%	26.7%
Other	8.6%	13.1%
Educational Objective:		
AA/BA degree	60.5%	59.8%
Voc. Degree/Cert.	7.4%	6.8%
Job Skills	8.6%	11.7%
Other	23.5%	21.7%
Age:	27.8	27.2
Cumulative GPA (Prior F91)	2.49	2.58
Cumulative Units (Prior F91)	20.5	25.4
Success Prior English	69.7%	68.4%
GPA Prior English	2.72	2.77

Retention

Of the students returning to the Center in the Spring 1992 term ("Center Returners"), 98.8% were retained that semester (Figure 5). "Center non-returners" (those that persisted to the next semester but did not attend the Center), 61.7% were retained for a second semester. The difference in the retention rates is statistically significant ($\chi^2 (1, N = 243) = 36.67, p < .05$).

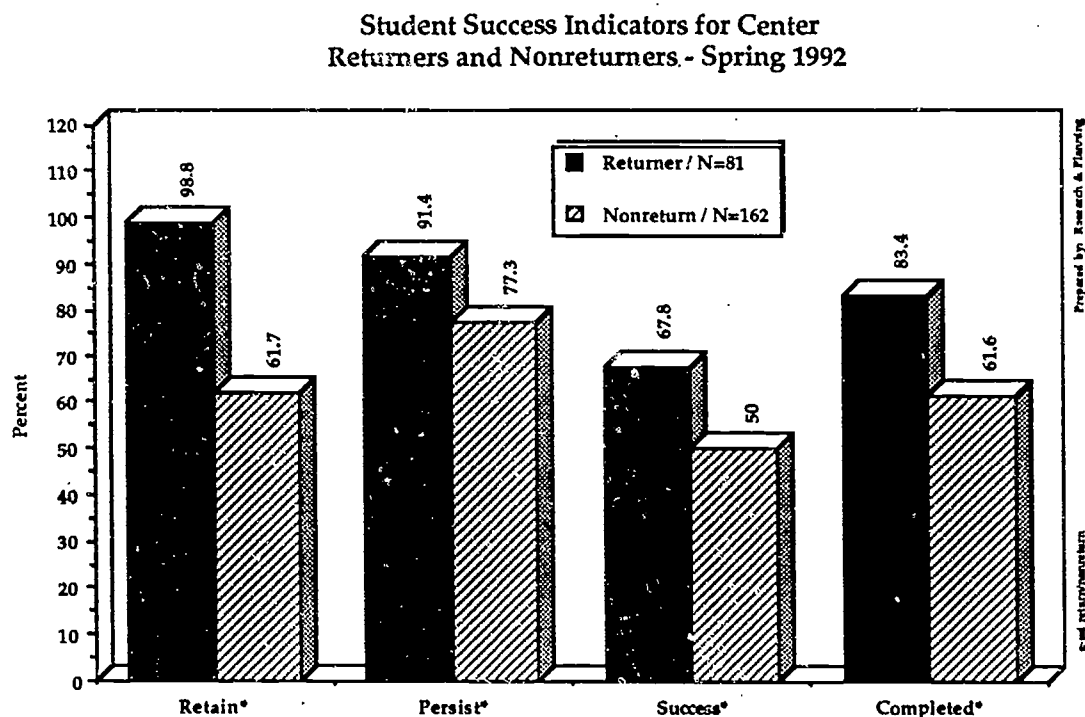


Figure 5

* Statistically significant at .05 level

Persistence

Over 90 percent (91.4%) of the "Center Returners" persisted to the Fall 1992 term (Figure 5). This compares to a persistence rate of 77.3% for "Center non-returners." Of the students who have spent one or two semesters at the Center, 82.7% enrolled in Fall 1992 compared to 56.9% of the comparison group ($\chi^2 (1, N = 241) = 21.65, p < .05$).

Success in English Classes

Over 86% of the students in the Center Returner group were enrolled in at least one English course during the Spring 1992 semester compared to about 47% of the students in the Center Nonreturner group. More than two-thirds of the students in the Center Returner group (67.8%) were successful in their English class compared to half of the students in the Center Nonreturner group (Figure 5).

Movement among Center Nonreturners could not be analyzed because a substantial number of these students did not enroll in an English class in either fall or spring. Students in the Center Returner group were more likely than non-returners to be in a **non-degree applicable** English courses in the Fall semester (55.5% compared to 44.5% in degree applicable courses). In the Spring semester, however, a higher percentage were enrolled in **degree applicable** courses (63.1% compared to 36.9% in non-degree applicable courses). About 53% of the Center Nonreturners were enrolled in degree applicable English courses in the Spring.

Percentage of Units Completed

In the Spring 1992 term, students in the Center Returner group attempted an average of 14 units and received credit for 11.7 units (Figure 6). Center Nonreturners attempted 11.3 units and completed 7.6 units. Center Returners completed 83.4% of the units enrolled in compared to 61.6% for the Center non-Returners -- a difference that is statistically significant ($F(1, 205) = 20.15$, $p < .05$).

Mean Units Attempted and Completed
Center Returners and Non Returners
Spring 1992

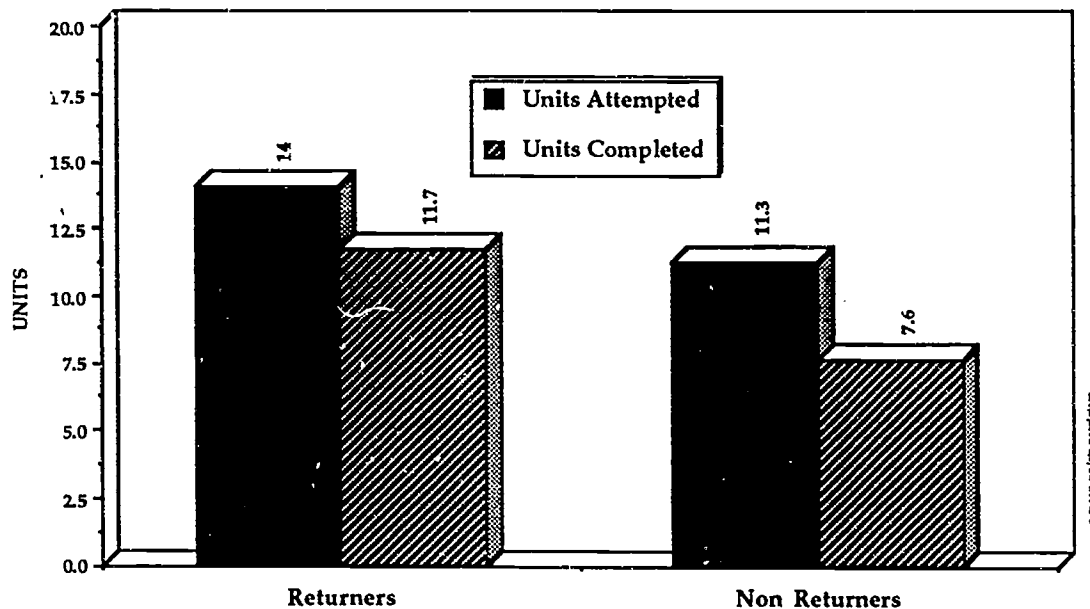


Figure 6

Semester GPA

Students in the Center Returner group earned a mean GPA of 2.55 for the Fall 1991 and Spring 1992 semesters. Center Nonreturners earned a 2.29 GPA for the Fall term and 2.20 for the Spring term. The average GPA for students at City College (overall) for Spring 1992 was 2.56 (SDCCD Research and Planning (1992)). Differences between the two groups were statistically significant ($F(1, 205) = 3.86, p < .05$).

Two-semester Center Attenders and Two-semester Nonattenders

On the following page, Table 3 displays the demographic and background characteristics of the students who attended the Center in both the Fall 1991 and Spring 1992 semesters ("Attenders" N=63) and students who did not attend the Center in either semester ("Nonattenders" N=104).

Students in the Center Attender group were more likely to be nonwhite, older and female. Attenders had a lower mean cumulative GPA (2.45) and fewer units

(18 mean cumulative units) coming into the semester than Nonattenders (2.61 and 26, respectively), but were slightly more successful in their prior English courses (73.1% compared to 70.4%).

Table 3
Demographic and Background Characteristics
of Two-semester Center Attenders and Nonattenders

	Attenders	Nonattenders
Sample Size	63	104
Demographics/Background		
Gender:		
Male	34.9%	44.2%
Female	65.1%	55.8%
Ethnicity:		
Caucasian	4.8%	20.4%
African American	23.8%	18.4%
Asian	22.2%	19.4%
Latino	38.3%	26.2%
Other	11.1%	15.6%
Educational Objective:		
AA/BA degree	65.1%	67.4%
Voc. Degree/Cert.	9.6%	10.6%
Other	25.3%	22.1%
Age:	27	23
Cumulative GPA (Prior F91)	2.45	2.61
Cumulative Units (Prior F91)	18.0	26.0
Success Prior English	73.1%	70.4%

Retention

Only one student in the group of students who attended the Center for two semesters ("2-semester Attenders") was not retained in the Spring 1992 semester (Figure 7). Almost 20% of Nonattenders were not retained in the Spring. The difference in the two groups is statistically significant ($\chi^2(1, N = 144) = 9.10, p < .05$) and suggests that Center participation is positively related to student retention.

Persistence

Sixty of the 63 "2-semester Center Attenders" persisted to the Fall 1992 semester (95.2%). In comparison, 58 of the 102 students (56.9%) in the Center Nonattender group persisted to the Fall 1992 semester (two students graduated and were not included in the persistence rate calculation). The difference in the two groups was found to be statistically significant ($\chi^2 (1, N = 165) = 26.30, p < .05$). These differences appear to be of practical significance as well. Use of the Center appears to positively impact student persistence.

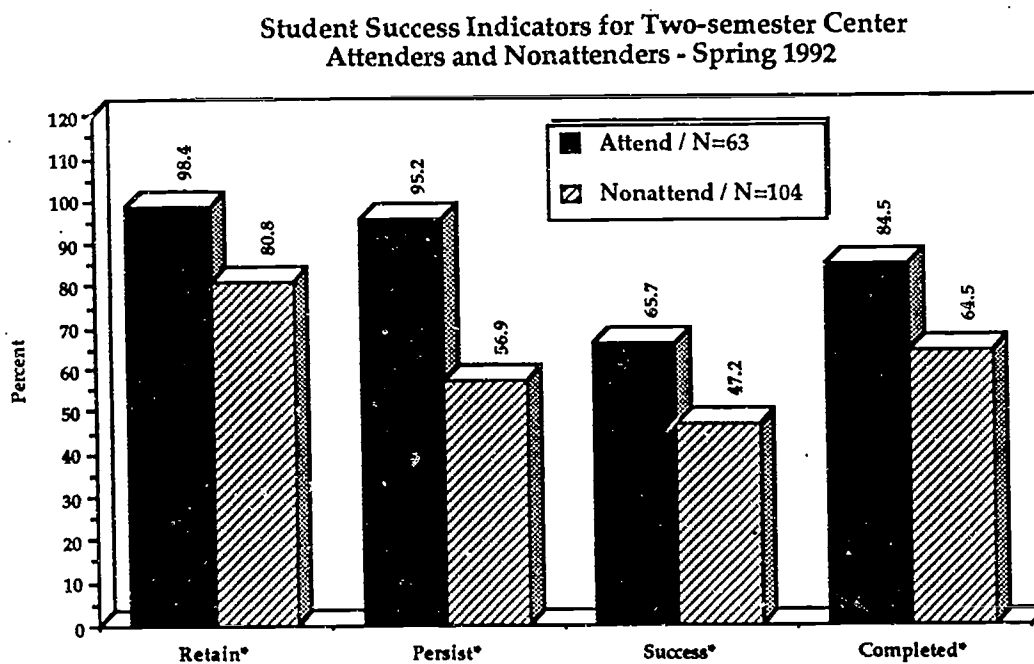


Figure 7

* Statistically significant at .05 level

Success in English

Over half of the students in both groups were enrolled in degree-applicable English courses during the Spring (53.7% Attenders, 55.6% Nonattenders). Approximately two-thirds (65.7%) of the students in the 2-semester Attender group were successful in the English course they enrolled in during the Spring (Figure 7). Forty-seven percent of the students in the Nonattender group were successful in their Spring English class.

Percentage of Units Completed

Students in the 2-semester Attender group attempted a median of 14 units and completed 12. Students in the Nonattender group attempted 12.5 units and completed 9 (Figure 7). Collectively the 2-semester Attender students completed 84.5% of the units they enrolled in compared to 64.5% for Nonattenders ($F(1, 139) = 13.75, p < .05$).

Semester GPA

Students in the 2-semester Attender group had a lower mean cumulative GPA prior to Fall 1991 than students in the Nonattender group (2.45 compared to 2.61) but earned a significantly higher GPA for the Spring semester (2.59 compared to 2.19; $F(1, 139) = 3.64, p < .05$).

Student Survey

In the Spring 1992 semester, a student survey was distributed at randomly chosen times to students attending the Center. Of the 869 students that attended the Center during the term, surveys were completed and returned by 138 students (a copy of the survey is in Appendix A).

In general, students rated the services received at the Center very highly (Figure 8). On a five point scale (5 being the highest), the mean rating for eight of the ten items was between four and five. The two items whose mean rating was below four were "area conducive to learning" (3.97) and the "effectiveness of study groups" (3.64).

Mean Rating of Center Services (N=138)
Student Survey, Spring 1992

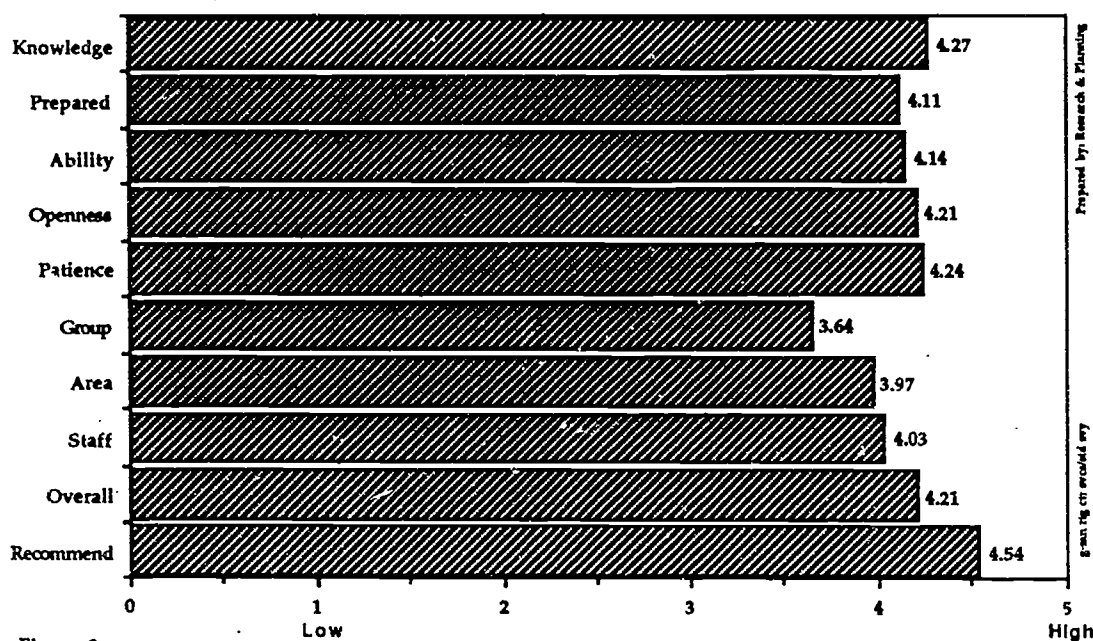


Figure 8

The highest mean rating was for the item that asked if the student would **recommend** the Center to someone who needed tutoring (4.54). Tutors at the Center also received high ratings. Students praised tutor's **knowledge** (4.27), **patience** (4.24), **openness** to constructive suggestions (4.21), teaching **ability** (4.14), and **preparedness** (4.11).

Student responses to the open-ended questions echoed the positive responses expressed in the Likert-scale questions. Almost half (48.1%) of the 108 students that responded to the question said that the most positive aspect of their experience at the Center was Center staff. Many stated that the staff were helpful, patient, friendly, and knowledgeable. Approximately 28% of the students mentioned that the most positive aspect of their experience at the Center was that they were able to improve their writing skills (27.8%), while 13.0% of the students said that they developed a better understanding of what was covered in class.

Most students (77.3%) stated that they would be greatly affected if Center services were no longer available. Students commented that they would not do as well in class and as a result would fall behind in class, get a lower grade, or drop out (42.3%). Thirty-five percent gave general comments about being "greatly"

affected if services were no longer available. Less than a quarter of the students (22.7%) stated that they would not be affected (or would only slightly be affected) if Center services were no longer available. On a separate question, about a third (31%) of the students indicated that they would have dropped their class without the help they received at the Center.

Students were about evenly divided regarding changes to Center operations. Of those that offered suggestions (N=42), most were to expand Center services such as increasing the number of tutors, subjects taught, and expanding the services to include other languages. Additionally students suggested longer operating hours and a larger facility.

Tutor Survey

Tutors agreed that the Center is a valuable support service for students at City College. As with the students, the tutors stated that they would highly recommend the Center to someone needing tutoring ($\bar{x} = 4.71$ (5 being the highest rating)). Six of the remaining items on the tutor survey received a mean ranking of greater than four:

How comfortable were you in sharing concerns with the Director of the Center? ($\bar{x} = 4.50$)

Availability of materials for tutoring ($\bar{x} = 4.36$)

Overall, how would you rate the Center's services ($\bar{x} = 4.31$)

Satisfaction you get while working ($\bar{x} = 4.29$)

Environment in which you do your tutoring ($\bar{x} = 4.29$)

How comfortable were you in sharing concerns with English Department faculty members ($\bar{x} = 4.29$)

Three of the statements with the lowest mean ratings were tutors assessment of students: interest in sessions (3.86), responsibility for their own learning (3.36) and preparedness (3.29).

Summary and Conclusions

Strategies used at the Center were successful in improving outcomes for at-risk students at City College. Although students in the treatment group were more likely to be classified as being at-risk (a higher proportion of culturally underrepresented, lower income, and nonacademic students) compared to the comparison groups, they were more successful on the five outcome measures. Students in the treatment group had a significantly higher retention rate (96.7% compared to 86.1%) and persistence rate (91.7% compared to 78.7%) than students in the comparison group during the Fall 1991 semester. Treatment group students earned a higher semester GPA, higher percentage of successful grades (A, B, C, CR) in their English courses (69.8% compared to 53.8%) and completed a significantly higher percentage of the units they enrolled in (84.3% compared to 71.3%).

Second semester findings showed that Center Returners were more successful than Center Nonreturners (students who returned to City but did not attend the Center during the Spring). Center Returners had a higher retention rate (98.8% compared to 61.7%), persistence rate (91.4% compared to 77.3%), success rate in English courses (67.8% compared to 50.0%), course completion rate (83.4% compared to 61.6%), and semester GPA (2.55 compared to 2.20) than Center Nonreturners. Center Returners were successful in moving from non-degree applicable English courses to degree applicable courses (44.5% Fall to 63.1% Spring).

Students who attended the Center for two semesters were also more successful on the five outcome measures than students who did not attend the Center in either semester. Two-semester Attenders had a significantly higher retention rate (98.4% compared to 80.8%), persistence rate (95.2% compared to 56.9%), and semester GPA (2.59 compared to 2.19) than Nonattenders. They completed a higher percentage of the units enrolled in (84.5% compared to 64.5%) and earned a higher percentage of successful grades in English courses (65.7% compared to 47.2%).

The Spring 1992 semester student survey results revealed that students were very satisfied with the services provided by the Center. On a five point scale (five being the highest), the overall mean rating of Center services was 4.21. Seventy-seven percent of the students that responded indicated that they would be greatly affected if Center services were no longer available. Students indicated that they would fall behind in their classes, drop out of the class or school, or get lower grades. The most frequent recommendations on the part of the students was to expand the Center in terms of having longer hours of operation, increasing the physical size of the Center and having more tutors.

BIBLIOGRAPHY

1. Astin, A. (1984). "Excellence and equity: Achievable goals for american education" Phi Kappa Phi Journal, 64 (2), pp 24-29.
2. Astin, A.W. (1991). Assessment for excellence: The philosophy and practice of assessment in higher education. New York: Macmillan.
3. Bender, L.W. & R. C. Richardsen (1987). Fostering minority access and achievement in higher education: The role of urban community colleges and universities. San Francisco, CA: Jossey-Bass.
4. Cohen, A.M. & F. Brawer (1982). The American community college. San Francisco, CA: Jossey-Bass.
5. State Chancellor's Office California Community Colleges (Nov. 1989). Matriculation local research options project.
6. SDCCD Research & Planning (1990). Skills testing and disproportionate impact. An analysis of the reading & writing test performance of students in the San Diego Community College District. San Diego, CA: SDCCD Research & Planning.
7. SDCCD Research & Planning (1992). [Average GPA of SDCCD Students]. Unpublished data.
8. Sticht, Thomas G. (1975). Reading for working: A functional literary anthology. Alexandria, VA: Human Resources Research Organization.

APPENDIX

- A. Student Survey
- B. Tutor Survey

Appendix A

Writing/Critical Thinking Center
Fall Term 1993

Dear Student:

(Soc Sec # _____-_____-_____)

Each semester we evaluate the Center services in order to better serve you. The information you provide will remain completely confidential. Thanks for your help.

Age _____ Sex _____ Ethnicity (Select ONE): Cambodian Chinese Japanese
 Korean Laotian Vietnamese Black Filipino Hispanic Native
American Pacific Islander White Other _____

Number of credits currently enrolled in: _____ Total credits to date: _____

Check if you're receiving services from EOPS , DSS , Veteran

In what courses were you tutored? (State Title & Course Number) _____

1. About how many hours a week have you been tutored in the Center this semester?
a = [1-10] b = [11-20] c = [21-30] d = [31-40] e = more than 40 _____
2. BEFORE coming to the Center, about what letter grade were you earning? _____
3. SINCE coming to the Center, what letter grade are you earning now? _____
4. Regardless of the grade, do you feel your skills in Writing/Critical Thinking have improved as a result of tutoring? [Yes - No]
5. Do you think you would have dropped the class without the availability of the writing Center? [Yes - No]
6. How were you referred to the Center? (please check as appropriate)
 Student
 Instructor
 Counselor
 Financial Aid Office
 Campus Newspaper / Brochure
 Other _____

(continued on other side)

7. Using a scale of ^{low} -1 2 3 4 ^{high} 5+, rate the following:
- Tutors' knowledge of the subject matter _____
 - How prepared was the tutor for the sessions _____
 - Effectiveness of the study groups _____
 - General teaching ability of the tutors _____
 - Openness of tutors to accept 'constructive' suggestions _____
 - Tutors' patience/sensitivity to your learning problem/style _____
 - OVERALL, how would you rate the tutors _____
 - How quickly were the tutors assigned to help you _____
 - How conducive to learning was the tutoring area _____
 - The helpfulness of the Writing Center staff _____
 - If someone you know needed tutoring, how strongly would you recommend the Writing Center to that person? _____

8. What was the MOST positive aspect of your experience in the Center?

9. How would you be affected if the Center's services were no longer available or severely limited?

10. What CHANGES, if any, would you make in or to the Center's services?

ADDITIONAL COMMENTS:

121091
Please return to the collection box

Appendix B

Writing/Critical Thinking Center
Tutor Evaluation
Fall Term 91

Each semester we evaluate our services in order to better serve students. Please help us by giving honest and frank answers to this survey. The information you provide will remain completely confidential. Thanks for your assistance.

Your Name _____ SS # _____

What is your: Age _____, Sex _____, Academic Major _____

Ethnicity (check one): Black [], Cambodian [], Caucasian [], Chinese [],
Filipino [], Hispanic [], Japanese [], Korean [], Laotian [],
Native American [], Pacific Islander [], Vietnamese [], Other _____

How many hours per week do you work in the Center _____

1. Using a scale of ^{low} -1 2 3 4 ^{high} 5+, rate the following:
- OVERALL, how would you rate the Center's service _____
 - Satisfaction you get while working _____
 - Environment in which you do your tutoring _____
 - Availability of materials for tutoring _____
 - Training you received prior to your tutoring _____
 - How prepared were the students for tutoring _____
 - Responsibility the students took for their own learning _____
 - How interested were the students in the sessions _____
 - If someone you know needed tutoring, how strongly would you recommend the Writing Center to them _____
 - How comfortable were you in sharing concerns with the Director of the Center _____
 - How comfortable were you in sharing concerns with English department faculty members _____

2. What was the MOST POSITIVE aspect of your experience in the Center

3. If you could make just ONE CHANGE in the Center, what would it be

ADDITIONAL COMMENTS:

