CALIFORNIA COMMUNITY COLLEGES
AND
LOS ANGELES
COMMUNITY COLLEGE DISTRICT

#92-0013
<table>
<thead>
<tr>
<th>FISCAL YEAR</th>
<th>ID NUMBER</th>
<th>COLLEGE</th>
<th>DISTRICT</th>
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<tbody>
<tr>
<td>1992-93</td>
<td>92-0013</td>
<td>Los Angeles Pierce</td>
<td>Los Angeles</td>
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**PROJECT TITLE**

Computer-Based Diagnostic Grammar Test

<table>
<thead>
<tr>
<th>FUNDING CATEGORY &amp; AWARD</th>
<th>ELIGIBLE PROGRAM</th>
<th>PROJECT CATEGORY</th>
</tr>
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<tbody>
<tr>
<td>Loan = $76,792</td>
<td>A --- Nontraditional Instruction</td>
<td>Curriculum Design</td>
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<tr>
<th>PROJECT PRODUCT</th>
<th>PROJECT TOPIC #1</th>
<th>PROJECT TOPIC #2</th>
<th>ACADEMIC SUBJECT</th>
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<tr>
<td>Disabled Students</td>
<td>Computer CAI</td>
<td>English</td>
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<tr>
<th>PROJECT DIRECTOR</th>
<th>PROJECT SUPERVISOR</th>
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<tr>
<td>Norm Crozer, Director Disabled Students Prog</td>
<td>Richard Moyer, Dean of College Development</td>
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**PROPOSAL DESCRIPTION**

This proposal is a grant request. The program that this proposal addresses is the need for individualized non-traditional instruction programs for Deaf (and other language-impaired) California community college students. This proposal also addresses three items on the Board of Governors Agenda: educational standards, ESL and basic skills, and retention of underrepresented students. This proposal seeks to remedy the lack of appropriate diagnostic testing for deaf and other language-impaired community college students.
The eligible program that this proposal addresses is the need for individualized non-traditional instruction programs for deaf, learning disabled and other language-impaired California community college students. This proposal also addresses three items on the Board of Governors Agenda: educational standards, ESL and basic skills, and retention of underrepresented students.

The problem this proposal seeks to remedy involves the ability of language-impaired students to write complete sentences. These students also lack the ability to answer analogy questions commonly found in academic achievement tests. This is not surprising since one needs to be able to write complete sentences to answer analogy questions. Improving a student’s skill in answering analogy questions will likewise improve their sentence writing abilities. Improving student sentence writing abilities will provide more success in classes that involve writing. Funding and staff limitations require the use of the computer to provide the necessary analogy training.

Any language-impaired student in the California Community College System will benefit from the use of the computer-based analogy practicum. The impact of this project will be system-wide. It will also aid DSPS and other college service programs.

The objectives of this project include: 1) developing the first draft of the computer program that will improve students sentence-writing skills by improving their skills in answering analogies (completed by February 20, 1993), 2) implementing the pilot testing phase of the project to discover areas of weakness (completed by May 3, 1993), 3) revising the draft version of the project, and create the final version of the project. (completed by June 30, 1993)

The outcomes of this project will include: 1) the ability to answer analogy questions from the five most common types of analogies, 2) student sentence-writing improvement, 3) a decrease in the students’ frustration and anxiety relating to classes involving writing, 4) a lower attrition rate.

The analogy practicum produced by this project will be replicable and easy to use by any college support program needing it. No additional funds will be required to continue the project after the grant period is completed.
The evaluation plan for this project will include: 1) submission of quarterly and final reports, 2) verbal contact with the Fund on a monthly basis to indicate the current status of the project, 3) a formal site visit by the Fund Project Monitor, 4) submission of a draft copy of the project, and 5) submission of the final draft of the project to the Chancellor’s Office.

The budget for this project will be allocated for the Project Director, data-entry typist, and supplies. The total amount requested from the Fund is $5,618.
Computer-Based Analogy Practicum

1. Specific Educational Program Being Addressed

Educational Program Addressed

The eligible program this proposal addresses is the need for individualized non-traditional instruction programs. The project will focus on disabled California community college students—particularly those students whose disability results in language deficiencies (e.g., learning disabled and deaf). These students need non-traditional instruction because of their unique set of educational problems and because of the scarcity of statewide college resources and personnel.

This proposal also addresses three items on the Board of Governors Basic Agenda. First, this project will focus on educational standards by improving the retention of language impaired students who comprise one of the underrepresented student populations. Second, this proposal will address ESL and basic skills by aiding in the development of a pre-collegiate basic skills curriculum. Third, this project will make it possible for more disabled students to be successful in regular (mainstream) college classes, and that will impact the matriculation process.
2. Specific Problems Being Addressed

Specific Problems

Certain disabilities (mainly deafness and learning disabled) cause language impairments, which, in turn, negatively impact educational performance. The language-impairment of disabled students also limits the types and numbers of classes into which disabled students are able to enroll, and results in a higher than average attrition rate. College DSPS and other support programs are aware of the writing problems of their language-impaired students, but most of these programs need assistance in resolving these problems.

The language problems faced by some disabled students involves both reading and writing. This project will focus on improving the writing skills of language-impaired students. Specifically, this project will focus on improving the abilities of students to write complete and meaningful sentences.

One of the keys to improving the sentence-writing abilities of any student is to improve their abilities to complete analogy questions commonly found on academic achievement tests. This is true because to correctly answer an analogy question, the student must create a logical and coherent statement.

A major obstacle to this development centers on the method for improving the students skills in answering analogy questions. Most college support programs have neither the resources nor the personnel to accomplish this goal. Colleges need a medium that is easily replicable and easily utilized. The test medium that would best meet these requirements would be a computer-based diagnostic test. The computer can administer each test, score it, and provide a printout of the summary for each student.
3. Population To Be Served

Population to be Served

Any language-impaired student in the California Community College System will benefit from the use of the computer-based analogy practicum. Included in this population are Learning Disabled, Deaf, English as a Second Language (ESL) students, Brain Injured, and Socially Disadvantaged. While it is difficult to estimate the number of students in these groups, a conservative estimate range is 5,000 to 10,000 individuals.

The short-term impact of this project on these populations will be improved abilities to answer analogies questions. The long-term impact will be an overall improvement in abilities to write sentences
4. Objectives

Proposal Objectives

The specific objectives of this project are:

1. Develop the first draft of the computer program that will improve students sentence-writing skills by improving their skills in answering analogies. (completed by February 20, 1993)

2. Implement the pilot testing phase of the project to discover areas of weakness. (completed by May 31, 1993)

3. Revise the draft version of the project, and create the final version of the project. (completed by June 30, 1993)
5. Workplan Narrative

Work Statement

This project will produce a computer-based analogy practicum.

The process to implement this project will include 1) contacting the schools that will be participating in the pilot program, 2) composing the analogies that will comprise the data, 3) using the Project Director’s computer programming abilities to create the computer programs, 4) field-testing the first draft of the project in the pilot colleges, 5) revising the project, and 6) field-testing the revised project.

The analogies practicum will run on IBM-based computers. The practicum will address five main types of analogies:
   1) SYNONYMS
   2) ANTONYMS
   3) DEGREE
   4) PURPOSE
   5) EFFECT TO CAUSE

The students also will be required to do a writing sample that will help to verify the sentence writing abilities of the students who begin the practicum. A similar writing sample will show the quality of writing improvement demonstrated by the students.

The dissemination plan for the project will involve: 1) sending copies of the practicum to the CEO, CIO, CSSO, Academic Senate and Student Body Presidents, at each of the 106 colleges, 2) presentations at workshops, and 3) upon request at a cost basis.
6. Expected Outcomes

Expected Outcomes

The outcome of the materials developed by this project will be an improvement in analogies skills by language-impaired disabled students. Improving analogies skills will increase the sentence-writing abilities of deaf students. As the students' writing improves, there will be a decrease in the students' frustration and anxiety relating to academic success. This, in turn, will lead to a lower attrition rate.

This project will have a systemwide impact on the target populations. This project will also have an important impact on the DSPS and other college service programs by addressing this area of academic need.

The materials developed in this project will be used in the DSPS program at Pierce College far beyond the ending date of the project. The materials will be incorporated into special instruction for the language-impaired disabled students, and will be made available to all students with grammar and writing difficulties at Pierce. Furthermore, because the practicum is computer-based, no additional funding for development or implementation past the grant funding period will be necessary.

This project will have a high potential for adoption in DSPS and other college programs around the State. The potential for adaption to other institutions is assured because of the low cost of the materials and the ease with which they can be used.
Evaluation Plan

The evaluation plan for this project will follow the Fund requirements for project monitoring. These requirements include: 1) submission of quarterly and final reports, 2) verbal contact with the Fund on a monthly basis to indicate the current status of the project, 3) a formal site visit by the Fund Project Monitor, 4) submission of a draft copy of the project, and 5) submission of the final draft of the project to the Chancellor's Office.

Evaluation of this project also will happen as a result of the participating pilot programs. These programs will use a draft version of the project during the spring 1992 semester. At the end of the spring semester, these programs will submit suggestions for changes and improvements. The Project Director will incorporate these suggestions into a revised version of the practicum.
8. Dissemination Plan

[NO “DISSEMINATION” ACCOMPANIES THIS DOCUMENT.]
9. Budget Narrative

[NO “BUDGET NARRATIVE” ACCOMPANIES THIS DOCUMENT.]