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[No information provided in this document for this section.]
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Specific Educational Program Being Addressed

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The establishment of the Summer Science Academy for disabled and minority high school students will address a local educational need to correct deficiencies of underrepresented students entering the science and engineering fields. Only one half of one percent of high school Afro-Americans and Hispanics enter post-secondary education to pursue a degree in science. Nationally, over the previous two decades, the data from scientific journals and labor market statistics indicate marginal numbers of minorities entering post-secondary institutions as declared science and engineering technician majors.

Currently Hispanic and Afro-Americans comprise 17 percent of the national labor force but only account for five percent of employed scientists and engineers. As the chart shows, the VVC staff anticipates serving a diverse group of minority students through the current and into the next decade. With increasing numbers of minority students, a model science program is indicated to meet the specific academic and vocational needs of students with special needs. As recently as the Fall semester 1993, 20 percent of the beginning chemistry students were minorities having a 95 percent retention rate upon completion of the course. This is a result of nurturing student learning and is indicative of how the faculty at VVC is able to provide nurturing approaches in meeting the academic needs of targeted students.

A bridging program that transitions students who are disabled and/or members of minority groups to the community college for academic, career, and personal counseling assistance prior to graduation will be geared to an energy and science modality should increase overall participation of disabled and minority groups.

PROGRAM COMPONENTS

Curriculum

A basic science and energy curriculum will be designed and presented to students of all of the feeder high schools. Topics will cover various science disciplines with special emphasis on state-of-the-art learning technologies to maximize skill retention and development.
Focused Recruitment Activities

A vital component of the summer science program is the recruitment and outreach effort to all of the local high schools in the High Desert. The counselor assigned to the project will begin at once to identify representatives for the high school in order to develop referrals for the project. This person will also arrange on site visits to the schools so that team presentations to potential and interested candidates to the program can be made. Once disabled and minority students have indicated a desire to attend the Summer Science Academy program, the VVC counselor will initiate steps to enroll applicants, arrange for assessment, testing, and conduct an orientation program covering specific college resources and services. Designated students will be introduced to student mentors who will serve as role models assisting them with assignments, study skills and other tasks related to the science curriculum and the college environment.

Incorporated into the college program of matriculation will be a special training component for the disabled who might require special accommodation, including modified books, recorded materials, modified laboratory equipment, and computer technology. Special adaptive equipment will be made available through the campus High Tech Center students with students with physical and learning limitations. It will also be the counselors task to insure that all students slated for the Summer Science Academy be fully matriculated in terms of meeting assessment, counseling, and peer group needs.

TARGETED STUDENTS FOR SCIENCE ENRICHMENT PROGRAM

Targeted for the Summer Science Academy are high school junior and senior minority/disabled students. There are substantial numbers of Afro-Americsans, Hispanic and disabled students among the five high desert feeder high schools. once the dynamics of the program have been clearly articulated to high school staff and targeted students, it is anticipated there should be a high degree of interest on the part of underrepresented students to participate. Student who have skill ability and the potential to pursue higher education endeavors will be urged to take advantage of this special science project. The idea is to remove attitudinal and economic barriers for disadvantaged students who otherwise would not consider an opportunities in the science and engineering fields.

[GRAPH DELETED]
FUTURE FUNDING POSSIBILITIES

VVC has an excellent record for applying and receiving funding for special projects. An effort will be made to contact local businesses in the community to enlist their support for partial or full funding for subsequent summer science enrichment programs for students with special needs.
Victor Valley

Population to be Served

[No information provided in this document for this section.]
Victor Valley

Objectives

[No information provided in this document for this section.]
1. Identify, recruit and enroll from five High Desert high schools (Apple Valley, Hesperia, Serrano, Lucerne and Victor Valley) 25 disable and minority junior/senior students into a Summer Science Academy at VVC.

1.1 Activity: 7/1/94 to 9/15/94
Contact high school counselor or support staff to outline purposes and goals for the science academy program. Identify one contact or liaison from each school. Responsible person: project counselor.

1.2 Activity: 9/15/94 to 10/31/94
Confer with high school liaison to discuss criteria for student eligibility for the science academy.

1.3 Activity: 11/1/94 to 1/31/95
Identify potential candidates for Summer Science Academy.

1.4 Activity: 2/15/95 to 4/1/95
Schedule team visits to each high school. Presentations will pertain to summer science curriculum and support services. Responsible person: project counselor/team members.

1.5 Activity: 4/15/95 to 5/15/95
Registration and enrollment for at least five candidates from each high school slated for the Summer Science Academy. (Fees paid by the grant) Responsible person: project counselor.

1.6 Activity: 5/15/95 to 5/30/95
Student assessment and orientation activities arranged by project counselor in conjunction with Learning Disabilities Specialist and Student Development Coordinator. Handouts and project information will be made available. Responsible person: project counselor/team members.

1.7 Activity: 5/31/95
Welcoming ceremonies for students, parents and faculty at a buffet dinner. Responsible persons: project counselor and team members.
2. Development of a Science Enrichment Curriculum with practical orientation to career and employment opportunities in the science field.

2.1 7/1/94 to 9/15/94
Project team to meet and confer in a concerted effort regarding curriculum development support service activities. Responsible persons: project team.

2.2 9/15/94 to 10/30/94
Draft of curriculum and other program materials completed. Responsible persons: team.

2.3 11/1/94 to 1/31/95
Science academy curriculum and supplemental materials completed for approval and dissemination. Responsible persons: Project team/Administrator.

2.4 1/15/95 to 4/1/95
Curriculum and related materials formally presented to targeted students in the five high schools. Responsible person: project team.

2.5 6/1/95 to 6/30/95
Summer Science Academy curriculum implemented in a classroom setting. Responsible person: project instructor.

3. Develop a Counseling/mentoring component to provide targeted students in the Summer Science Academy with the required assessment and supportive services to enhance participation and retention.

3.1 7/1/94 to 9/15/94
Project counselor to draft plan of operation encompassing assessment, orientation and peer advising components. Responsible person: project counselor.

3.2 9/15/94 to 9/30/94
Identify assessment measurements to determine reading and writing and interest level for science academy candidates. Responsible person: counselor.
3.3  10/1/94 to 10/15/94
Complete orientation component: identifying project resources, speakers and field trip activities. Responsible persons: project counselor/instructor.

3.4  10/15/94 to 10/31/94
Confer with faculty team instructor to identify mentors for student support. Responsible person: project counselor.

3.5  11/1/94 to 1/31/95
Project counselor and instructor to develop training modules for student mentor. These students will be required to participate in orientation sessions and willing to make presentations as team members at the high school workshop sessions. Responsible persons: project team.

3.6  2/15/95 to 3/31/95
Student mentors to accompany team members to designated high desert high schools to conduct workshop presentations address their specific role in this process. Responsible persons: project team.

3.7  4/15/95 to 6/30/95
Counselor/student mentors available to assist designated registered students for orientation and placement into the Summer Science Academy program. Responsible persons: counselor/project team.

3.8  1/15/96 to 2/30/96
In preparation for Dissemination Planning, Project team to gather and: review data on student enrollment, retention and success patterns. Responsible persons: project team.

3.9  4/1/95 to 4-10-95
Ethnic and disabled student mentors to contact and visit targeted student families for overview of Science Academy Project.
Expected Outcomes

[No information provided in this document for this section.]
In recruiting 25 students for the Summer Science Academy, it is expected that 95 percent of the participants' enrolled will complete all phases of the project. At the outset, students will be given a pre-test survey to determine their current level of knowledge in the scientific fields. Prior to completion, enrollees will participate in a post-test assessment to, measure the degree of information learned and retained. All evaluation activities will be conducted on a pass/fail basis and all the students will be given an opportunity to repeat tests and quizzes throughout the duration of the project. It is expected that not only a high percentage of students graduate from the academy but that a substantial number will continue on to higher education, pursuing either an academic degree or vocational certificate in science related fields. An effort will be made to monitor students progress and activities as they pursue higher education. When issues occur they will be identified and helped to address more appropriated ways to improve the curriculum and support services featured in this proposal. This information will also insure higher retention rates, bringing about more consistent numbers among disabled and minorities attempting to complete A.S. degrees or transfer to senior institutions.
The program design and curriculum materials in the form of a summary report, with approval of the Chancellor's Office, will be disseminated prior to 2-30-96 through: (1) presentations at state and national meetings, (2) scientific and educational conferences, and (3) the chancellor's office will be mailed appropriate copies. Science program faculty, especially Dr. Phrosene Chimiklis and WorkAbility III Coordinator/ Counselor, Thomas A. Dana are highly active in state and national professional organizations for their disciplines. These faculty will make presentations at meetings, demonstrate materials, and make material Available to interested instructors.

In addition, local media in the community plan to support the project through periodic news releases, radio and television announcements. A copy of news release dated August 7, 1992 is included in the Appendix as evidence of local news support.
[No information provided in this document for this section.]