CALIFORNIA COMMUNITY COLLEGES
AND
MT. SAN ANTONIO
COMMUNITY COLLEGE DISTRICT

#301-86-01
This is a proposal to extend and apply an articulation model developed under a prior Fund for Instructional Improvement grant (301-84-01). This project will 4+2+2 articulation agreements with five high schools, Mt. San Antonio College, two California State Polytechnic Universities and two ROPs and adult education programs. The agreement will provide a systematic process which will permit students to move from one program, course, or educational level to the next without loss of time or resources.
Agriculture and Natural Resources Coordinated Curriculum/Articulation

This project will develop 4+2+2 articulation agreements with five high schools, two R.O.P’s and adult education programs, Mt. San Antonio College, and two California State Polytechnic Universities. The agreements will provide a systematic process which will permit students to move from one program, course, or educational level to the next without the loss of time or resources.

The articulation model developed by Mt. San Antonio College under the Fund For Instructional Improvement Project No. 301-84-02 will be used as the procedure for developing the agreements.

Formal articulation agreements using the articulation model will be developed for the five high schools and two R.O.P’s. The universities’ agreements will be developed under existing college articulation policies between the institutions.

An ongoing review of the agreements will occur to insure equal access for students and that the articulated classes stay within the requirements of the industry. An advisor handbook and student brochures will also be developed.

The proposed budget for this project is $11,519 out of local funds and $13,532 from the Fund For Instructional Improvement, for a total of $25,051.

All materials developed will be shared with other academic and vocational areas on campus as well as with the directors of adult and vocational education programs in the district. In addition, all materials will be submitted to the Chancellor’s Office for further dissemination.
1. Specific Educational Program Being Addressed

EDUCATIONAL PROGRAM OR SERVICE ADDRESSED

This project comes under Priority No. 1 of the Board of Governor’s Basic Agenda for 1986 - Promote excellence in Community College programs, services, and employees through the joint effort of the state and the community college system. It is also within the regular framework of the Fund for Instructional Improvement CED Code 84381 A and B in providing an alternative curriculum and approach to teaching and a process for staff development.

The purpose of this project is to coordinate agricultural and natural resources curriculum at the secondary, post secondary, state college, and university level. This project will develop a non-traditional and traditional articulation agreement that will clearly communicate to students what basic skills and competencies are required to be successful. A group of courses will be identified and suggested for credit by examination (secondary) and direct transfer credit (CSU). This is an adaptation of the 2+2, an articulated agriculture program for grades 11-14 at Bakersfield College. We propose a completely different approach, called 4+2+2, that does not involve facilities. 4 (grades 9 through 12) + 2 (postsecondary - grades 13 and 14) + 2 (CSU - grades 15 and 16).

The project will be in conjunction with five high schools, two R.O.P’s, one community college, and two CSU institutions:

- Covina High School
- Chino High School
- Don Lugo High School
- J. W. North High School
- Fullerton High School
- La Puente R. O. P.
- Baldy View R.O.P.

- Raena Van Hee
- Wayne Pitzler
- Craig Sievers
- B. J. Crane
- Carey Trexler
- Ray Bryden & Kathryn Stuckey
- Al Fint
Local industry advisory committees will be consulted to approve any changes and make recommendations. Local high school, community college, and CSU administrators will be consulted to insure consistent direction for administrative acceptance. Local high school and community college academic faculty will be used as consultants to insure academic breadth. Letters of commitment from committee members are attached or are being mailed. Those not attached will be forwarded.
2. Specific Problems Being Addressed

SPECIFIC PROBLEMS

The traditional approach to articulation between high schools and colleges in agricultural and natural resources programs has been dependent upon statewide committees, word of mouth or chance that vital information will filter down from administrators, counselors, advisors, or state organizations to agriculture and natural resources students and instructors. This problem stems from the lack of cooperative written articulation agreements, standard skill and competency identification, a tool for measuring skills and competencies, and the development of available written information that is disseminated to prospective students and instructors.

The area of articulation suggests that 4+2+2 agreements need to be developed to clearly communicate the requirements of students as high school freshmen through graduation from a college or university and insure enough flexibility for those students who wish to enter the program at the community college level or any year in high school. This will insure that students who choose a non-college high school curriculum can pursue college or a career in agriculture and natural resources.

If we are to insure that the mission of community colleges is carried out, administrators, instructors, advisors, counselors and others involved with students and their future must recognize that all students are not the same and that we will be serving a traditional student; but for the most part, we will be serving high school drop-outs, re-entry students, minorities, and traditional students pursuing a non-traditional career. We must have the capabilities needed to assist these students with the identification and accomplishment of their goals.

We expect the following outcomes:

1. A 4+2+2 articulation working model that is accepted by secondary, postsecondary, and CSU systems.

2. The identification of the skills and competencies needed to enter the Animal Science, Horticulture Science, Agricultural Mechanics, and Agriculture Orientation classes at Mt. San Antonio College.

3. A skill and competency exam that can be evaluated by faculty and used as a challenge exam for Animal Science, Horticultural Science, Agricultural Mechanics, and Agriculture Orientation classes at Mt. San Antonio College.

4. An advisor handbook that can be disseminated to district high schools for counselors, instructors, and advisors that can be updated yearly.

5. Student brochures outlining the opportunities and requirements of the 4+2+2 program.
6. A closer working relationship between high schools, community colleges and universities that will improve and insure a better retention rate as well as increased transfer rates.

7. An ongoing articulation committee comprised of all three segments which will update and improve agreements yearly.

8. An articulation model that can be adapted and introduced to additional high schools statewide and within the Mt. San Antonio College District.

9. Increase awareness of the opportunities in the agriculture and natural resources industry for students who wish to pursue a career in this vital, high-tech industry.

10. An articulation model that addresses the needs of students who are non-traditional, re-entry, minority, and returning high school and college dropouts who now wish to improve their academic or vocational standing.
3. Population To Be Served

POPULATION SERVED

Students enrolled at Covina, Don Lugo, Chino, La Puente, Nogales, Sonora, J. W. North High Schools, La Puente and Baldy View R.O.P’s, and Mt. San Antonio College will be the direct beneficiaries of this project. The number of students directly affected by this program will be 2,000. Indirectly, all students will be affected by the increased opportunity. Total enrollment at participating institutions is 6,800.

Faculty in agriculture and natural resources will also benefit from this project as it will provide them with a model for reference and will prepare them to evaluate student skills. The total number of faculty involved with this project will be twenty-four.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mt. San Antonio College</td>
<td>1 Coordinator of Agricultural Sciences, 7 Ag &amp; Natural Resources Instructors</td>
</tr>
<tr>
<td>Covina High School</td>
<td>1 Ag &amp; Natural Resources Instructors, 1 Administrator</td>
</tr>
<tr>
<td>Chino High School</td>
<td>2 Ag &amp; Natural Resources Instructors, 1 Administrator</td>
</tr>
<tr>
<td>Don Lugo High School</td>
<td>1 Ag &amp; Natural Resources Instructor</td>
</tr>
<tr>
<td>La Puente/Nogales High Sch.</td>
<td>2 Ag &amp; Natural Resources Instructors, 2 Administrators</td>
</tr>
<tr>
<td>Fullerton High School</td>
<td>1 Ag &amp; Natural Resources Instructor, 1 Administrator</td>
</tr>
<tr>
<td>J. W. North High School</td>
<td>1 Ag &amp; Natural Resources Instructor, 1 Administrator</td>
</tr>
<tr>
<td>Cal Poly Pomona</td>
<td>1 Dean of Agriculture</td>
</tr>
<tr>
<td>Cal Poly San Luis Obispo</td>
<td>1 Dean of Agriculture</td>
</tr>
</tbody>
</table>

Indirect beneficiaries will be all programs in agriculture and natural resources statewide, non-agriculture and natural resources high schools in the Mt. SAC District and additional-agriculture and natural resources colleges and universities who take advantage of the agreement.
4. Objectives

OBJECTIVES

I. Plan, prepare, and conduct orientation workshops to identify necessary skills and competencies.
   Months: 1 - 3   Budget: $5,182

II. Modify, review, and create curriculum content relevant to skills and competencies.
    (High school and Mt. SAC faculty only.)
    Months: 3 & 4   Budget: $3,388

III. Prepare workshop materials and conduct two workshops to develop articulation agreements and competency evaluation tools.
     Months: 4 - 5   Budget: $7,281

IV. Prepare materials for and have two workshops with representatives from Cal Poly SLO and Cal Poly Pomona to establish articulation agreements in Animal Science, Horticulture Science, Ag Mechanics, and Forestry. To complete the articulation model 4+2+2.
    Months: 4 - 8   Budget: $4,912

V. Develop an implementation plan for Mt. San Antonio College and participants that can be disseminated to each school for approval.
   Months: 11 & 12   Budget: $2,788

VI. Develop the Advisor Handbook and brochures for review by the committee and printing.
    Months: 11 & 12   Budget: $1,500

VII. Evaluate each objective and activity as the project progresses.
     Months: 3-6, 9, & 12   Budget: Spaced across previous objective costs.
5. Workplan Narrative

ACTIVITIES

Objective I  Months 1-3

Project director and consortium members will hold workshops for consortium members to:

A. Orient members to the project.
B. Examine and review skills and competencies of the Animal Science, Horticultural Science, and Ag Mechanics program at Mt. San Antonio College.
C. Compare those competencies with secondary curriculums and recommend adjustments and changes based on industry recommendations.
D. Develop new areas of skills and competencies needed.

Personnel: Coordinator of Agriculture Science

Consortium Members

Consultant

Classified Staff

Materials Needed: Literature

Written

Facilities: Conference Room at Mt. Sac for two days

Objective II  Months 3 & 4

Project director, Mt. Sac faculty, high school faculty assigned to subject matter will:

A. Modify, revise, and create objectives specifying competency skill areas for Animal Science, Horticulture Science, Ag Mechanics, and Agriculture Orientation.
B. Establish skills and competencies and examine textbooks and other media used in the classes.

Personnel: Project director

MSAC Faculty

High School faculty

Classified Staff

Materials Needed: Curriculum outlines

Needed Textbooks

Evaluation: Faculty members in each discipline, Animal Science, Horticulture Science, Ag Mechanics, Agriculture Orientation will evaluate both levels of curriculum and establish basic competencies and skills for the exam.
Objective III   Months 4-5

Project director/consortium members will:
A. Prepare workshop materials clearly identifying the required competencies for challenge exams in Animal Science, Horticultural Science, Ag Mechanics, and Ag Orientation for the credit by exam process
B. Conduct two workshops for consortium members to assist in developing and instituting the articulation model developed by Karen Meyers of Mt. San Antonio College.
C. Complete rough drafts of the articulation agreement for review by administrators and universities.

Personnel:   Project Director
Consultant
Consortium members
Classified staff

Equipment   Overhead and video equipment
Materials   Written reports
Facilities Needed   Conference Room at Mt. Sac

Evaluation   Formative reports

Objective IV   Months 6-10

Project director, consultant, and MSAC staff will:
A. Meet with representatives from Cal Poly Pomona and Cal Poly SLO and establish updates and initial articulation agreements between both CSU institutions and MSAC as well as review and approve high school articulation agreements.
B. Present all articulation agreements to the official articulation officers at each level for review and formal approval.

Personnel:   Project Director
MSAC staff
Two CSU Deans
Classified Staff
Articulation Officers
Consultants

Materials   Copies of existing articulation agreements
Written project progress reports
Summary and chart of projected agreements

Facilities   Conference Room - MSAC, Cal Poly SLO

Evaluation   Formative reports
Objective V  
Months 11 & 12

Project Director and Consortium members will:
   A. Present to local administrators for approval articulation agreements as well as present them to local school boards and the MSAC Board of Trustees for approval and implementation.
   B. Ratify agreements with Cal Poly San Luis Obispo and Pomona.

Personnel:  Project Director
             Consortium Members
             Consultant
             Classified Staff

Materials  Needed Agreements
           Written Reports

Facilities  Conference Room

Evaluations  Formative Reports

Objective VI  
Months 11 & 12

Project Director and consortium members will:
   A. Suggest and develop written and informative materials that will be included in the advisor handbook.
   B. Suggest and develop written and informative materials that will be included in the student brochures.
   C. Finalize and prepare for printing the advisor handbook and student brochures.

Personnel:  Project Director
             Consortium Members
             Consultant
             Printing Personnel
             Classified Staff

Materials  Needed Paper
           Written rough drafts of handbook and brochures

Facilities  Conference Room at Mt. SAC

Evaluation  Final drafts and reports

Objective VII  
Months 3, 6, 9, & 12

Project Director and consortium members will:
   A. Develop formative and summative evaluation tools which will measure the effectiveness of each objective
   B. Prepare quality reports.
   C. Prepare a final report, and advisor/counselor handbook, 4+2+2 articulation agreements, and student brochures for dissemination.
Personnel
- Project Director
- Consortium Members
- Classified Staff
- Coordinator of Agricultural Sciences

Evaluation
- Quality reports
6. Expected Outcomes

EXPECTED IMPACT AND TRANSFERABILITY

I. Impact on Other Disciplines

Instruction will be improved by the development and review of basic competencies and skills in Animal Science, Horticultural Science, Agricultural Mechanics, and Agricultural Orientation to:

Provide a better understanding of duplicate curriculum at the secondary and postsecondary levels.

Reduce duplication and repetition of curriculum at the secondary, postsecondary, and CSU levels.

Provide other programs on campus and statewide with a working 4+2+2 articulation model.

II. Continued Support

Continued support by consortium members and additional members will be insured by the development and success of this model. To say that the project will be a continued success should be reserved until the model can be tried and fairly evaluated. Without a doubt, it is needed and will be successful. But without continued support for review and yearly updates, the project’s continued success cannot be predetermined, although this type of project will sustain itself based on the need for student populations at the postsecondary and CSU levels.

III. Adoption by Other Institutions or Programs

It is expected that the model will have statewide impact.

This model will be utilized by other high schools and colleges in the State of California.

The model will be presented at the annual meeting of the California Agricultural Teachers Association for review and dissemination statewide.

This model will be introduced to non-agricultural high school districts for review and possible adoption for non-traditional students.
7. Evaluation Plan

EVALUATION PLAN

The evaluation of this project will be based on the development of formative and summative reports. The project director will submit quarterly reports to the Mt. San Antonio College’s Dean of Natural Sciences and to the Dean of Vocational Education, and the Chancellor’s Office. The project director will be responsible for fulfilling all objectives, including the dissemination of challenge exams and written communications.

The summative evaluation method will assess how well the desired outcomes of the project were achieved.

Each participating school will evaluate the workshops based on how well each member utilized the workshop objectives.

Brochures and handbooks will be developed and each school will evaluate their effectiveness.
8. Dissemination Plan

INFORMATION FOR DISSEMINATION

It is the aim of this project to develop agreements and materials for each consortium institution and provide enough materials for every high school in the Mt. San Antonio College District.

The entire packet of materials will be sent to the Chancellor's Office for distribution. In addition, Mt. San Antonio College will be available to conduct workshops for other interested parties. The material will be available to other vocational programs and all agriculture and natural resources programs.
9. Budget Narrative

[NO “BUDGET NARRATIVE” ACCOMPANIES THIS DOCUMENT.]