

"Plants, Man, and Environment". Should action of this type be coordinated with other Ag colleges? With two-year colleges? With community colleges?

We are beginning a new curriculum this fall entitled: "Horticultural Therapy". It will involve seven semesters of course work in plants, soils, and other basic subjects related to horticulture and including psychology, sociology, and communications which are fundamental to the latter part of the training which will be taken the last semester at the Menninger Foundation in Topeka. This institution specializes in treating the mentally disturbed. Men and women trained in Horticultural Therapy will be assuming positions in state hospitals, homes for the aged, veterans' hospitals, correctional institutions, and day-care centers, all with increasing needs. During the last semester of the program, students will work under psychiatrists at the Menninger Foundation with patients with various needs.

The above curriculum is one example of the changing place of agriculture in today's society. Should we take a more active role in the esthetic areas, which might include hobby-type work such as small home gardens or flower production for therapeutic purposes? This could give physical exercise and mental *relaxation* to the many people in cities and suburbs and might be one of our most important areas of effort.

Considering the above challenges and opportunities, let us resolve that our instruction will continue to play a significant role in our modern and future societies.

Lessons must be taught effectively and efficiently. They must include not only facts, but concepts which really matter to today's youth. Content must be altered to keep pace with the changing needs of our urbanized society, both in the local community and in the national and world areas.

The Role of the Agricultural College in an Urbanized Society

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Theme: California Community and State Colleges
Some Administrative Problems and Promises Encompassing Agricultural Education

First, I must give credit to deans of agriculture and heads of agriculture departments from fourteen community colleges and four state colleges for presenting their opinions relevant to my topic. These people have been most cooperative and generous with their time.

The California Community Colleges and California State Colleges appear to be making progress in spite of the growing urbanization of the state. Although large chunks of prime to submarginal agricultural real estate continues to fall under the developer's shovel, the rate of loss is decreasing. True, most of the great southern California citrus industry has fallen victim to burgeoning populations and adverse environmental conditions, such as smog. The fruitful Santa Clara Valley's prune orchards and vineyards have given way to what constitutes California's major population explosion of the '60's.

Nonetheless, California remains the number one agricultural state in the union from the standpoint of agricultural products with an agricultural income of over \$3½ billion per annum. The rate of population increase is slowing down, partly due to environmental pollution in Southern California's areas of greatest population increase and equally because of declining employment opportunities relative to the rest of the Country.

In light of these developments, some may think it surprising that, during this quarter of a century since the cessation of World War II hostilities, the number of California higher education institutions offering agriculture, as well as agricultural enrollment, has risen dramatically. Only Modesto, Chaffey, Fullerton, and perhaps another junior college or two offered production agriculture; and College of San Mateo and San Francisco Junior Colleges provided training in ornamental horticulture during the pre-war years. Now thirty-seven community colleges with an enrollment of 7,145 students and four state colleges with 4,039 students provide this training, according to NACTA's own survey.¹ Add to this the 3,166 students on three campuses of the University of California and one can see that with 14,350 students enrolled in agriculture, these programs are very much alive in California colleges and universities, located in the nation's most populous state.

At one time, on a state level, the junior and state colleges both answered to the California State Board of Education. This Board, burdened with the problems of a vast elementary and secondary educational system, had little time for the colleges. Many remember the 1950's, before the Trustees of the state colleges and chancellor's office assumed control in the 1960's, as the Golden years. Now, with the community colleges reporting to a like hierarchy, which began operation in 1967, some wonder if the consequent erosion of local control will stifle innovation

and the development of programs tailored to local needs. Only time will tell. In the meantime, money for colleges is very tight, with decreased support per student for the state colleges and with community college support failing to match inflationary pressures.

Agriculture has not been singled out for de-emphasis, although less than five percent of the population actually produces agricultural or horticultural products. The message is pretty well disseminated that over one-third of the state's population make a living in food processing, agriculture, business and industries related to or dependent upon agriculture.

However, a system called P.P.B.S. (Program Planning Budget Systems) is being thrust upon the community colleges of the state. The costs of agricultural and natural resources instruction will soon be precisely compared with that of every other type of curriculum. The financial requirements for agricultural instruction are relatively high. There was a fear expressed by most of the respondent community college teachers that such comparisons, coupled with declining state financial support, could jeopardize some agricultural and natural resources offerings or even programs. On a more optimistic note, some colleges felt that P.P.B.S. should point up the strength of their agricultural programs which are in competition with marginal ones in other occupational areas. A state college agriculture dean equated P.P.B.S. with "accountability and responsibility, which should be discharged through imaginative, relevant programs." He felt that P.P.B.S. information would win increased support for agriculture. Agricultural programs in the California state colleges will soon undergo an in-depth study by a dean of the School of Arts & Sciences of a land grant university. This survey may help some programs and jeopardize others. One question is, can or will a land grant liberal arts dean understand and appreciate California state college type agricultural programs?

Some community colleges conjectured that the new state administrative structure for the community colleges is tending to discourage close liaison between high schools and community college agriculture programs. Even if not well founded, it points up the necessity for community college and high school agricultural personnel to work closely with each other for the mutual welfare of both. The state colleges are in frequent communication with high school agricultural people and increasingly so with community college agricultural and natural resources people, as more and more entering state college students come from community colleges rather than directly from high school.

There is some concern that the Community College's Chancellor's Office is giving very little direction to community college agricultural programs. Others are relieved that regimenta-

tion does not exist and that momentum and drive arise primarily at the local level.

With a declining rural and soaring urban population trend, effective recruitment becomes essential. Each two year college, with one exception, reported increasing enrollments ranging from "slight" to "tremendous". In general, growth seemed to be substantial. This was even more dramatically true in the state colleges. In the community colleges and state colleges, some successful recruitment techniques were reported, as follows:

- (1) Maintenance of strong rapport, including meaningful service to agricultural teachers and students.
- (2) Frequent visitations to high schools and community colleges (in the case of state colleges).
- (3) Activities which bring agricultural teachers and students onto campus.
- (4) Recruiting by satisfied, loyal, and successful graduates.
- (5) Letters, brochures, and other informational and promotional literature mailed to agricultural teachers and students.
- (6) Advisory committee contacts.
- (7) Provision of work experience and summer jobs for incoming students.
- (8) Student "ambassadors" returning to their high schools or community colleges for recruiting purposes.
- (9) Successfully placed graduates.
- (10) Close rapport and liaison among agriculture teachers and students, resulting in high esprit de corps.
- (11) Degree initiation of high school F.F.A. members by college agriculture clubs on the college campus or on high school campuses.
- (12) Invitation of high school agriculture students to use college facilities to prepare for contests.
- (13) College personnel serves on high school agricultural advisory committees and high school personnel on college advisory committees.
- (14) Hire high school instructors for extended day programs.
- (15) Good newspaper publicity.
- (16) Let people know you are offering a natural resources program, as this program requires little promotion in order to grow.
- (17) Atractive visual aids to support recruiting talks by college agriculture teachers and/or students.
- (18) Get the word around about successful agricultural and natural resources job opportunities and actual placement of graduates.

Everyone knows that in these times of recession, jobs for college graduates are far less plentiful than they were only a couple of years ago. Elementary and secondary teachers, once in short demand, are now a glut on the market. Space engineers with Ph.D.s are unemployed. However, most colleges reported that, with the possible exception of animal sciences, placement was brisk. Work experience courses and the utilization of potential employers' facilities for instruction were cited as effective permanent placement devices.

The community college people, however, were generally not pleased with the placement facilities, techniques, or services of their colleges.² This is evidenced at Shasta College, where the Research Director has inaugurated a new course called Capstone. He applied for Federal funds under Title I, Part C, Sec. 131(b) of Public Law 90-576 and CRCU Small Grant Projects. The project was not funded, but the technique was implemented anyway. In agriculture, fourteen out of sixteen students were successfully placed prior to June 1.

The request indicates that few community colleges tend to recognize and take steps to phase out the "fade out" problems in their highly enrolled vocational programs. Many have high enrollments the first year and much lower the second. It is alleged that such departed students are termed as "hire-outs" by the community colleges, although the institutions probably don't know what has happened to them. Only follow-ups will indicate what is true, and most community colleges don't want to spend money to find out something they'd rather not know.

Fade outs occur less frequently in block programs, in which instructor and student contacts are close. But there are too many objections to block programming, resulting in the demise of many of them.

In the resulting flexible programs, students are in a program with a title which bears little resemblance to their subject preparation. Others declare a transfer major, take a large proportion of vocational courses, and never transfer. Consequently, they are not recognized as vocational students. The proposal is to recognize the major through the course work completed, rather than the mere declaration of a specific vocational objective.

Students with over 30 units of work in a transfer major closely related to a designated vocational major will be identified, classified, and offered the opportunity to take a Capstone course.

A Capstone or final course has been developed for agriculture and natural resources.³ According to the head of the agricultural department, "Once a student has completed the majority of the required courses for Natural Resources, then he is invited to attend a class called Conservation Administration with the whole intent of getting a job for the student upon the termination of his formal community college education." Two important things happen on this program. First, the student is taught how to get a job through interviewing techniques and other methods; and the second major factor is that potential employers are brought into the class and the student is exposed to a multitude of different opportunities directly from the employer discussing job openings, in his particular area, with the student. As mentioned above, with fourteen out of sixteen being placed in good jobs, which could be permanent, "Capstone" is proving itself.

Regional and statewide planning for vocational offerings in the community college is receiving national attention. A major thrust of the National School Board Association's Community College Section concerns such planning.

In its January, 1971, Newsletter, its Executive Secretary writes:

"This office continues to read the signs that every state in the nation must establish either an agency, coordinating council, commission, position, committee or some entity responsible for immediate and long-range statewide planning for Community Colleges.

Tightening money problems, accountability, changing technology, urban problems plus disadvantaged and minority needs demand that we expand our horizons from local to statewide in scope.

Duplicating programs and services already staffed and equipped by a college within reasonable commuting distance - when one college could easily handle the students from both districts for that major is hardly stressing accountability.

"You handle cosmetology and we will offer nursing. You provide a machine shop program and we will promote an auto mechanics curriculum". This is the kind of dialogue that should be taking place locally and statewide. Justifiable duplication of programs is entirely defensible only so long as sufficient student demand is evident. Admittedly speaking, statewide planning forces us to give up some local control. However, it is better that we recognize the need for greater accountability or face the prospects of a continued taxpayer's revolt and eventual dictation from the Federal government as regards withholding aid to those states who refuse to plan statewide".⁴

Six community colleges of northeastern California, including Shasta College, have embarked upon a proposal for area vocational planning. They have set up a Northern California Area Planning Council and signed an Area Vocational Agreement.

Under the agreement:

(1) Each college agrees to release up to six students from its district to attend other member colleges for the purpose of taking vocational programs not offered at that college.

(2) Each college agrees to accept at least six students from other member colleges for the purpose of taking vocational programs offered at this college but not at their college of original residence.

(3) These students will be accepted on a free exchange basis, but with no additional charges for interdistrict attendance.

(4) The program is funded through a total sum of twenty-five cents per A.D.A. for the total A.D.A. of each college.

(5) A counsellors handbook is being developed for all high school and community college counsellors in the six district area to help these people direct students toward the colleges which offer the programs which the students desire.

(6) A \$56,000 E.P.D.A. grant, under which a consulting firm called the Ins-Group, is working with the Vocational Council, high school and junior college counsellors and others in setting up and evaluating the program, writing the informative brochure for counsellors, and providing in-service training for counsellors.

(7) After the experimental first year has been completed, it is hoped that exchange can be on a much freer and less restricted basis.

The program should provide expanded vocational opportunities for northeastern California youth and result in fewer but strong programs.

All people in the district are not enchanted by regional planning. One agriculture department chairman expressed fears that this would eliminate or bar some programs from community colleges which should have them. After all, the name is

community college, not regional college, and in California, the district itself may be almost as large as a New England state.

An appreciable number of community college and state college agriculture departments, divisions or schools have developed into an Agriculture and Natural Resources structure. One of the first to do so, in 1966, was Shasta College, under the guidance of its Associate Dean of Instruction for Vocational Education.

Shasta College's Agriculture and Natural Resources Department meets certain needs of non-farm students, or better, non-agricultural majors. For instance, the majority of students in such courses as Natural Resources 60, Environmental Conservation, is populated mainly by majors in other than Agriculture or Natural Resources. Fitting like hand in glove into the Natural Resources Curriculum, these courses serve the entire college and community.

The Ornamental Horticulture and Horse Husbandry curriculums serve, in addition to regular day students, adult enrollees from the community. Classes are held in the evenings and on weekends for a vast majority who are taking the courses primarily for pleasure and home use.

The Agricultural and Natural Resources Department of a community college neighboring Shasta College provides an appreciable number of courses which meet the science breadth (general education) requirements. Through these means a large amount of initial enrollment is gained, but even more important, some of the people switch to an Agricultural or Natural Re-

sources major.

Thus, the Agricultural and Natural Resources Programs of California's State and Community Colleges reach forth to serve the urban as well as the rural population. Helping keep food prices within the reach of Americans is one of the most significant and meaningful services which they can render to city dwellers and everyone else.

Through Natural Resources courses, all with environmental foundations, these programs educate people to personally contribute to the ecologic health of this planet and in some cases leadership rolls toward the goal of unpolluted air, water and soil.

The programs train and educate students who will devote their lives to the protection of the recreational areas of our land and to earn their livelihood from this toil.

In this and many ways too numerous to mention, all of the Nation's Agricultural and/or Natural Resources facilities, curriculum and personnel serve rural and urban people in this, our so called urbanized society.

1 National Association of Colleges and Teachers of Agriculture, NACTA Fall, 1970, Enrollment Survey.

2 Walter Brooks, "Experimental Procedure for improving identification, retention, and job placement of students in vocational education," Shasta College, Redding, California, 1971, pp. 1-4.

3 Bill Burrows, letter to Loren D. Phillips, June 4, 1971. 3 pp.

4 William H. Meardy, "Community College Section, National School Boards Association Newsletter," January, 1971, pp. 2-3.

PARTICIPATING CALIFORNIA COLLEGES

Community Colleges

1. Antelope Valley College
2. Butte College
3. City College of San Francisco
4. College of the Desert
5. Fullerton Junior College
6. Los Angeles Pierce College
7. Merced College
8. Merritt College
9. Mt. San Antonio College
10. Napa College
11. Orange Coast College
12. San Joaquin Delta College
13. College of the Sequoias
14. Sierra College
15. West Hills College

State Colleges

1. California State Polytechnic College
Kellogg-Voorhis Campus
2. California State Polytechnic College
San Luis Obispo
3. Chico State College
4. Fresno State College

Respondent

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Ted Sypolt, Coordinator, Vocational Education
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Opportunities for Agricultural Colleges in an Urban-Industrial Environment

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Colleges of Agriculture today are at a crossroads, but it is a crossroads which the colleges themselves have helped construct. This crossroads is the dilemma of identifying the clientele of agricultural colleges in future years and subsequently determining the direction and orientation of college teaching, research, and extension programs. The very existence of the crossroads can be attributed, in large measure, to the contribution by the colleges to the industrialization of agriculture and the migration of laborers off the farms to urban areas. A central question for agricultural colleges today, then, pertains to the role they will play in an urbanized society. Stated differently, what role can a college of agriculture play in an economy which is becoming less oriented to farming?

There appear to be a number of opportunities available to agricultural colleges and a variety of clientele to be served. Three broad areas of opportunity for new or continued college programs include study of (1) the production and distribution systems for food and fiber, (2) human and community resource development, and (3) the development and conservation of our natural resources. This paper will be confined to these three arc-

as, and primarily the first. It will be argued that these areas provide considerable flexibility for a program which is relevant in an urban society.

A primary area of continuing opportunity is within the domain which the colleges are most familiar — the production and distribution systems of food and fiber. This is where many of our resources are currently expended, but it is my contention that there is considerable opportunity here in both existing and in new areas even in an urban society. Agricultural colleges will likely continue to serve the needs of their former clientele, but can be expected to further expand their service to the agri-business complex, and also to become more fully involved in the problems of the final consumers of food and fiber. A brief review of agriculture's industrial process should add clarity in identifying college responsibilities to these three groups.

When many agricultural colleges were established, especially the land grant colleges, agriculture was an important segment of our economy both relatively and absolutely. The terms "agriculture" and "farming" were freely substituted. Today, however, agriculture encompasses a broad, complex set of production and distribution systems with farming being but one phase. Three primary developments within commercial agriculture are there-