

1948
Annual Reports - Calif. State Poly College SLO 1948

Archives

ANNUAL REPORT
To the State Board of Education
ON THE
California State Polytechnic College
FOR THE PERIOD
JANUARY 1, 1948 TO DECEMBER 31, 1948

FOREWARD

Archives

This report will confine itself to the actual progress accomplished by the California State Polytechnic College during the 1948 calendar year January 1, 1948 to December 31, 1948.

This report is submitted to the State Board of Education and the State Department of Education for the purpose of acquainting these two groups with the activities of this college over which they have administrative control.

Past reports have contained considerable explanation of the organization, administration, financial support and educational philosophy of the college, but it is felt that the differences between this college and other state colleges are now clearly understood. Only mention is made of these factors when it is necessary.

Following a visitation of the evaluation committee of the Northwest Association of Secondary and Higher Schools, California State Polytechnic College was granted full, unrestricted accreditation as a four year college. This accreditation was made at the annual meeting of the association held in Spokane, Washington in December, 1948.

The largest enrollment in the history of the college registered in the fall, 1948. A total of 2575 students registered at the San Luis Obispo campus and 408 at the San Dimas campus.

In September, 1948, 29 new instructors were added to the faculty bringing the total number of instructors on both campuses to 170. The college during September of last year was working under a student-instructor ratio of 19 to 1, although the state legislature authorized a ratio of 16 to 1. This difference was due to a miscalculation by the legislature and

when the college's budget was issued it was found that the instructor load had increased to 19 to 1. The college administration is working for a desired 15 to 1 ratio.

With the increase of enrollment during 1948 has come a greater demand for a co-education program. Each year, since the state legislature in 1936 authorized a co-educational program at California State Polytechnic College, the demand for such a program has increased. Due to a lack of facilities the administration has not taken action. Housing and instructional facilities are the greatest hurdles to overcome before women students can enroll in the college. It is felt that when facilities do become available, there is such an ample demand that women will make up one-fourth of the college's enrollment.

Housing continued to be a major problem at the college. With increasing enrollments, it is felt that provisions must soon be made to house at least 1800 single men on the campus.

The corner stone for the new Walter F. Dexter Memorial Library was laid in October, 1948. The building is expected to be ready for occupancy in September, 1949. Plans for a new science building are now underway which marks the beginning of a campus master building plan. An active committee is working with the State Division of Architecture in planning the future expansion of the college. A large relief map has been constructed to help the committee and state group in planning the college's future campus.

California State Polytechnic College continued to be a popular meeting place for various state organizations. Among those gathering at the college during the past year were members of the California State Veterinary Medical Association, the

California Association of Nurserymen, California Agricultural
Teachers Association, California Farm Bureau, Dairy Department,
Future Farmers and California Association of Health, Physical
Education, and Recreation.

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ANNUAL REPORT TO THE
STATE BOARD OF EDUCATION

-ON THE-

California State Polytechnic College

FOR THE PERIOD

January 1, 1948 to December 31, 1948

ENROLLMENT

Because of lack of facilities, it was necessary to limit the fall quarter enrollment in 1948 to 2983 students. This was an increase of 334 students over the total of 2609 enrolled in the fall quarter of 1947. Of this figure of 2983 students, 2575 were enrolled at the home campus in San Luis Obispo and 408 were enrolled at the branch in San Dimas. Approximately 300 applicants for admission to the San Luis Obispo campus were turned down because of lack of facilities and nearly 100 applicants were rejected at San Dimas for the same reason.

The number of regularly enrolled students at San Luis Obispo were divided fairly even between the engineering and industrial and agricultural divisions, with 1250 in engineering and 1178 in agriculture. Following are summaries of the San Luis Obispo enrollment:

<u>By Division</u>	
Agricultural Division . . .	1178
Engineering Division . . .	1250
Science & Humanities . . .	147
	<u>2575</u>
First year	875
Second year	689
Third year	741
Fourth year	242
Fifth year	28
	<u>2575</u>

ENROLLMENT BY DEPARTMENTS

<u>Agricultural Division</u>		<u>Engineering and Industrial Division</u>	
Agricultural Engineering . . .	115	Aeronautical Engineering . . .	155
Agricultural Inspection . . .	33	Architectural Engineering . . .	177
Animal Husbandry	492	Air Conditioning & Refrig. . .	271
Field Crops Production	97	Electrical Engineering	197
Truck Crops Production	38	Electronics & Radio	193
Dairy Husbandry	141	Maintenance Engineering	12
Dairy Manufacturing	33	Mechanical Engineering	216
Fruit Production	55	Printing	29
Ornamental Horticulture. . . .	80		<u>1250</u>
Poultry Husbandry	94		
	<u>1178</u>		

Science & Humanities Division

Biological Sciences	20
Mathematics	14
Physical Education	64
Physical Science	9
Social Science	40
	<u>147</u>

SAN LUIS OBISPO
ENROLLMENT BY CLASSES AND CURRICULUM LEVEL (October, 1948)

<u>Agricultural</u>	<u>Vocational</u>	<u>Technical</u>	<u>Degree</u>	<u>Special</u>
Freshmen	69	92	251	13
Sophomores	19	56	185	10
Juniors	0	65	259	9
Seniors	0	0	137	0
Fifth Year	0	0	0	13
	<u>88</u>	<u>213</u>	<u>832</u>	<u>45</u>

Total Agriculture 1178

<u>Engineering and Industrial</u>	<u>Vocational</u>	<u>Technical</u>	<u>Degree</u>	<u>Special</u>
Freshmen	13	85	302	2
Sophomores	4	94	278	3
Juniors	0	68	298	2
Seniors	0	0	98	1
Fifth Year	0	0	0	2
	<u>17</u>	<u>247</u>	<u>976</u>	<u>10</u>

Total Engineering 1250

<u>Science and Humanities</u>	<u>Vocational</u>	<u>Technical</u>	<u>Degree</u>	<u>Special</u>
Freshmen	0	0	48	0
Sophomores	0	0	40	0
Juniors	0	0	40	0
Seniors	0	0	7	0
Fifth Year	0	0	0	12
			<u>135</u>	<u>12</u>

Total Science & Humanities 147

SAN DIMAS BRANCH
ENROLLMENT BY CLASSES AND CURRICULUM LEVEL (September 1948)

	<u>Vocational</u>	<u>Technical</u>	<u>Degree</u>	<u>Special</u>	<u>Total</u>
Freshmen	12	28	126	11	177
Sophomores	8	26	105	3	142
Juniors	0	17	70	2	89
Total	<u>20</u>	<u>71</u>	<u>301</u>	<u>16</u>	<u>408</u>

COMPARATIVE SUMMARY OF REGISTRATION

SAN LUIS OBISPO CAMPUS

County	Jan. 4, 1940	Jan. 1, 1941	Mar. 21, 1946	Nov. 1, 1946	Nov. 1, 1947	October 1948
Alameda	23	25	19	35	63	85
Alpine	0	0	0	0	0	0
Amador	2	1	0	0	0	1
Butte	6	9	1	1	4	6
Calaveras	0	1	0	0	0	0
Colusa	3	5	2	2	1	2
Contra Costa	15	17	7	13	12	30
Del Norte	0	0	0	0	0	1
Eldorado	0	0	0	0	7	14
Fresno	24	23	20	65	65	73
Glenn	6	7	1	3	5	10
Humboldt	7	13	6	12	13	17
Imperial	4	12	3	7	12	16
Inyo	2	2	0	2	3	3
Kern	17	18	8	29	27	50
Kings	6	13	6	18	17	17
Lake	3	0	0	1	1	3
Lassen	0	1	2	2	3	10
Los Angeles	185	197	163	397	439	588
Madera	6	5	1	3	11	3
Marin	3	1	2	3	10	11
Mariposa	0	1	0	0	2	1
Mendocino	5	8	1	9	13	7
Merced	15	16	2	13	27	41
Modoc	4	4	0	1	4	4
Mono	0	0	0	0	1	0
Monterey	6	8	8	19	41	52
Napa	0	1	7	4	4	7
Nevada	1	0	1	3	4	5
Orange	25	39	12	40	59	78
Placer	1	5	1	4	5	7
Plumas	0	0	0	0	0	0
Riverside	24	24	11	32	35	81
Sacramento	9	7	5	13	27	38
San Benito	0	3	1	5	9	11
San Bernardino	34	34	13	28	44	54
San Diego	24	20	15	69	78	125
San Francisco	14	17	19	34	61	53
San Joaquin	19	16	14	19	28	27
San Luis Obispo	84	81	134	175	427	225
San Mateo	2	7	6	22	28	37
Santa Barbara	25	37	19	32	64	89
Santa Clara	15	18	15	43	53	53
Santa Cruz	9	9	10	28	33	32
Shasta	0	1	3	1	5	5

County	Jan. 4, 1940	Jan. 1, 1941	Mar. 21, 1946	Nov. 1, 1946	Nov. 1, 1947	October 1948
Sierra	0	0	1	2	2	2
Siskiyou	4	7	0	4	4	3
Solano	2	5	0	1	5	11
Sonoma	10	9	8	19	21	25
Stanislaus	24	19	7	15	38	43
Sutter	1	4	0	2	9	11
Tehama	2	7	2	3	5	4
Trinity	1	1	0	0	1	0
Tuolumne	0	3	2	6	3	1
Tulare	15	21	18	43	56	56
Ventura	11	9	8	34	33	46
Yolo	4	3	3	2	4	2
Yuba	6	5	1	1	7	11
Other States & Foreign Countries	29	67	67			
Other States				179	231	301
Foreign Countries				20	21	31
U.S. Territories						34
	<u>737</u>	<u>866</u>	<u>655</u>	<u>1518*</u>	<u>2185*</u>	<u>2553*</u>

* Not all students registered at the San Luis Obispo campus were included in this survey as some cards were not available at the time the study was made. In 1946 actual enrollment was 1571 and 1947 it was 2229, and in 1948 it was 2575. Had the balance been included in this study, some additional counties would be represented.

VOORHIS UNIT ENROLLMENT
BY DEPARTMENTS AND COUNTIES

September, 1948

<u>Counties</u>	<u>Ornam. Hort.</u>	<u>Agricu. Inspec.</u>	<u>Citrus Fruit Prod.</u>	<u>Deciduous Fruit Prod.</u>	<u>Crops</u>	<u>Total</u>
Alameda	0	2	1	0	0	3
Butte	0	1	0	0	0	1
Colusa	0	1	0	0	0	1
Fresno	0	3	1	0	0	4
Imperial	0	1	0	0	2	3
Kern	1	0	0	0	0	1
Los Angeles	68	84	33	0	10	195
Marin	1	0	0	0	0	1
Mendocino	0	1	0	0	0	1
Merced	0	0	0	1	0	1
Napa	0	4	0	0	0	4
Orange	8	22	18	0	3	51
Placer	1	0	0	0	0	1
Riverside	2	10	5	0	0	17
San Bernardino	3	7	8	0	0	18
San Diego	6	5	5	0	0	16
San Francisco	1	1	0	0	0	2
San Joaquin	0	1	0	0	0	1
Sacramento	0	3	0	0	0	3
Santa Barbara	0	1	5	0	0	6
Santa Clara	0	2	0	0	0	2
Santa Cruz	2	0	0	0	0	2
Sonoma	0	2	0	0	0	2
Stanislaus	1	1	0	0	0	2
Tahema	0	0	1	0	0	1
Tulare	1	4	7	1	0	13
Yuba	0	2	0	1	0	3
Ventura	0	16	26	0	0	42
Out of State	4	4	1	0	0	9
Out of Country	0	0	2	0	0	2
	<u>99</u>	<u>178</u>	<u>113</u>	<u>3</u>	<u>15</u>	<u>408</u>

SUMMARY OF ENROLLMENT DISTRIBUTION

In contrast to other state colleges, California State Polytechnic College's enrollment is wide-spread throughout the state. Fifty-three of the 58 counties in the state were represented in the fall of 1948. The counties not represented were Alpine, Calaveras, Mono, Plumas, and Trinity.

In a San Luis Obispo campus enrollment breakdown, 214 students were registered from 38 of the 48 states. New York had the most out-of-state students with 26, Nevada with 15, Massachusetts with 14, Illinois with 14, Oregon with 13, Minnesota and Pennsylvania both with 12 and Washington with 10.

Thirty-one students indicated Hawaii as their legal residence while two registered from Puerto Rico and one from Alaska for a total of 34.

A total of 31 students registered from 11 foreign countries.

A study of the foregoing registration by counties at San Luis Obispo and San Dimas shows a percentage distribution of the counties having the largest representation as follows:

<u>County</u>	<u>Percentage At San Luis Obispo</u>	<u>Percentage at San Dimas</u>
Alameda	3.3	.74
Contra Costa	1.2	-----
Fresno	2.8	.98
Kern	1.6	.24
Los Angeles	22.8	47.8
Merced	1.5	.24
Monterey	2.0	-----
Orange	3.0	12.5
Riverside	3.1	4.2
Sacramento	1.4	.74
San Bernardino	2.0	4.4
San Diego	4.8	3.9

<u>County</u>	<u>Percentage at San Luis Obispo</u>	<u>Percentage at San Dimas</u>
San Francisco	2.0	.49
San Luis Obispo	8.7	-----
Santa Barbara	3.4	1.5
Santa Clara	2.0	.49
Santa Cruz	1.2	.49
Stanislaus	1.6	.49
Tulare	2.0	3.2
Ventura	1.7	10.3

TRANSFERS FROM OTHER COLLEGES

It was in 1942, that the State Board of Education authorized the raising of curriculum level of California State Polytechnic College from a three-year technical college to a four-year degree granting college. It is interesting to note the number of students who in 1948 transferred from other colleges to complete their degree work here. Following is the list of colleges and the number of students who transferred:

University of California	18	Other California Universities	
U. of Calif. at Los Angeles.	2	and Colleges	5
State Colleges		California Junior Colleges	155
Fresno	4	Other State Colleges and	
Humboldt	5	Universities	38
San Diego	14		<u>247</u>
San Francisco	2		
San Jose	4		

ENROLLMENT OF VETERAN AND NON-VETERAN STUDENTS

San Luis Obispo, October, 1948

	<u>Veterans</u>	<u>Non-Veterans</u>	<u>Total</u>
Freshmen	405	470	875
Sophomores	468	221	689
Juniors	608	133	741
Seniors	199	43	242
Fifth Year	20	8	28
	<u>1700</u>	<u>875</u>	<u>2575</u>

ENROLLMENT OF MARRIED STUDENTS

San Luis Obispo, October, 1948

Public Law 346	644	
Public Law 16	122	
State Veterans	<u>12</u>	
Married Veterans	778*	*Approximately 47% of veteran enrollment
Married Non-Veterans	<u>32</u>	
Total Married Students	810**	**Approximately 31% of total enrollment

NUMBER OF DEGREES AND CERTIFICATE GRANTED

San Luis Obispo, 1948

<u>Agriculture</u>	<u>Bachelor of Science</u>	<u>Vocational</u>	<u>Technical</u>
Agricultural Inspection	6		
Animal Husbandry	23	5	13
Dairy Manufacturing	6		
Dairy Husbandry	3	2	1
Ornamental Horticulture	6	1	1
Poultry Husbandry	8	2	1
Agricultural Mechanics	0	2	1
Crop Production, General	7	0	1
Citrus Fruit Production	5	0	0
Deciduous Fruit Production	1	0	0
General Fruit Production	1	0	0
<u>Engineering</u>			
Aeronautical	13	0	4
Air Conditioning & Refrig.	6	0	8
Mechanical Engineering	3	0	1
Electrical Engineering	3	0	8
Electronics & Radio	<u>0</u>	<u>0</u>	<u>1</u>
Total	91	12	40

Certificate of Completion

Horseshoeing Course	11
Physical Education Athletic	
Coaching Workshop & School	134

COLLEGE TRANSFERS ATTENDING VOORHIS UNIT FALL QUARTER 1948-49

FACULTY

For the school year beginning in September, 1948, 29 new instructors were added to the faculty, bringing the total of 170 persons on the teaching staff at the San Luis Obispo and San Dimas campuses.

The following charts indicated the distribution of the teaching staff according to degrees as of December 31, 1948:

San Luis ObispoDegrees:

Ph.D., Ed.D	12
M.A., M.S.	62
A.B., B.S.	58
No degree	<u>17</u>
Total	149

VoorhisDegrees:

Ph.D., or Ed.D	1
M.A. or M.S.	5
A.B. or B.S.	15
No degree	<u>0</u>
Total	21

INSTRUCTIONAL METHODSPROJECT SYSTEM

So that there will be a better understanding of statements made about project operation under Departmental Activities later in this report, the following information on the project system is included:

The function of training students for maximum employability and earning power is carried out by a thorough integration of the "doing" practices with the underlying theory. In classroom instruction, the formal laboratory experiences, and the actual project operations on a commercial scale are each used in their proper proportion. The project system consists of self-owned or managerial projects operated by students in such a way as to give knowledge in the commercial production and marketing of agricultural products or in the construction, rebuilding, repair or maintenance of industrial machinery or equipment. This combination of the very practical "learn by doing" and "earn while you learn" philosophies not only enables a student to earn money while doing work directly related to his major academic interest, but also creates an added incentive for the more rapid acquisition of further skills and knowledge. Many students after graduation have established fine foundation herds on their home farms from livestock raised as projects at the college. A \$90,000 revolving fund from which students may borrow at the current rate of interest without co-signers makes it possible to finance the many projects. One-third of the net profit of a project is returned to the Project fund to guarantee against individual student financial loss.

UPSIDE DOWN EDUCATIONAL SYSTEM

California State Polytechnic College has established an unique educational plan sometimes described as the "upside down educational plan." This plan is characterized by the grouping of as many technical and job-getting courses in the first two years as possible. In the third and fourth year the student takes, in addition to courses in his major, those subjects considered as general education. The net result is that a student who completes the four-year course leading to a degree will have covered substantially the same material covered in a similar major in a typical agricultural mechanics type college--but in a somewhat inverted order. This way the student comes immediately into contact with the field of his major interest and doesn't feel thwarted by numerous hurdles which seem to him unrelated to his interest. He also acquires a realization of need for some "theory" courses. This system enables a student to earn a living, using the skills he has learned, at whatever point he may complete his formal education.

INSTRUCTION LENGTHS

A student enrolling at California State Polytechnic College may elect to take a four-year degree curriculum leading to a Bachelor of Science in his major field; or a three-year technical curriculum, or a two-year vocational curriculum for which there are appropriate certificates. The two and three-year curricula are offered in the Agricultural and Engineering and Industrial divisions.

DIVISIONS OF THE COLLEGEAGRICULTURAL DIVISION

During the calendar year, 1948, this division of the college offered instruction in eleven major curricula. These departments were: Agricultural Engineering and Mechanics, Agricultural Inspection, Animal Husbandry, Citrus Fruit Production, Dairy Husbandry, Dairy Manufacturing, Deciduous Fruit Production, Field Crop Production, Ornamental Horticulture, Poultry Husbandry, and Truck Crop Production. The first two years in the majors of Agricultural Inspection and Citrus Fruit Production must be completed at the San Dimas branch. In addition to those two majors, the San Dimas branch also provides instruction in Ornamental Horticulture and Deciduous Fruit Production to those students who elect to take the first two years of their work in those majors at the southern branch. During the year, 1948, a special 12 weeks farriers course was added to this division on the San Luis Obispo campus.

The college prepares men in the field of agriculture with the principal objective being to provide graduates of this division with a full and broad understanding of basic factors involved in production, management and marketing, together with the necessary skills, experience, and related subjects to make such a graduate an efficient agricultural producer.

The educational approach used at California State Polytechnic College not only prepares men for positions in the production fields but gives thorough training in managerial skills and in the various other fields closely related to agriculture. This knowledge of all basic factors in the agricultural industry not only enables the students to reach the top in the industry but it gives him a grasp of the significance of all agricultural processes and a consequent tolerant attitude toward every problem faced by the industry.

The college herds, flocks, orchards, range and crops land are used by students to develop practical application and technique. An unique phase of the California State Polytechnic College educational philosophy is the use of the student owned and managed project as an integral part of the instruction system. Each student in the college has the opportunity to select a productive project in the particular field in which he is interested. He has managerial and financial responsibility over the project and must submit a complete record upon its completion.

Student projects are financed through a project foundation fund from which students may borrow at six percent interest, and each project returns a percentage of the net profit to this fund as a guarantee against any possible individual student financial loss. This practical system not only enables the student to earn money while doing work directly related to his major occupation and academic interest, but also gives him the "feel" of ownership and management, a proven incentive for learning. Observing the young man as a producer under commercial conditions furnishes an excellent indicator of his probable future success on the job.

ENGINEERING AND INDUSTRIAL DIVISION

Instruction in eight major departments was offered during the year in this division. These departments are Aeronautical Engineering, Air Conditioning and Refrigeration Engineering, Architectural Engineering, Electrical Engineering, Electronic and Radio Engineering, Mechanical Engineering, Printing and Maintenance Engineering. Maintenance Engineering was the only one of these departments which accepted enrollment for the first time in 1948.

Primary objective of all instruction in this division is to provide instruction that will lead to employment in maintenance, operation,

production, application and sales phases of specific engineering fields. It is not the purpose of the Engineering and Industrial Division of this college to prepare engineers interested in highly specialized research or design.

One objective of this division is to provide each student with necessary skills in his specific field so that he not only will be immediately employable but will be of value to his employer from the first day he enters employment.

However, every student in this division also receives a thorough foundation in general engineering theory as well as practices so that he may advance rapidly in his field. Engineering students receive instruction in basic science and mathematics which enables them to study and understand new developments and techniques and thereby keep astride of changing conditions in any industrial field.

Recent studies have indicated that industrial concerns are looking for engineers to take over managerial and executive positions. With this in mind, such courses such as economics, industrial management, labor relations, background of modern affairs are required of all engineering students. In addition to this students are advised to take courses that will help them in later life when they receive the opportunity to get into managerial positions.

In the process of achieving these objectives, the Engineering Division also attempts to inculcate in every student proper work habits and attitudes which will lead to successful employment. Such students have the proper attitude to start at the bottom in their specific field, and the proper background to advance to higher positions.

In order to provide practical experiences similar to those which will confront an engineering student at the time of employment, every engineering department has its own well-equipped

laboratory in which a student is given an opportunity to work with the same type of machinery, tools, equipment, etc. that is used in the specific engineering field for which he is training. Laboratory instruction in every engineering department is based on the objective of providing group or individual projects similar to those which will be encountered by the students on the job. Such projects are not routine laboratory exercises, but are practical projects conducted along commercial lines. For example, aeronautical engineering students operate group projects in the repair and overhaul of aircraft or aircraft engines in the department's shop, which was the 84th government approved repair station to be established in the United States. All such work by students must pass rigid CAA examinations prior to the time that it is returned to service as "air-worthy". All student labor during instructional shop hours is done without pay, but students assigned to work on a project outside of instructional shop hours receive hourly pay from the foundation fund, which is reimbursed at the time the aircraft or engine is sold or at the time the owner pays for the repair work.

In the Electrical Department a job such as the installation of a motor or the re-wiring of a shop or room is assigned to a group of students. They plan the job, make an estimate of the cost for labor and material, and prepare a bill of materials. When these estimates come in the job is assigned to one student who acts as foreman and carries the work through to completion. He is assigned student help from the laboratory classes, keeps all records of material and labor used, and upon completion makes the final report. Similar projects of various kinds are carried on by all departments in the Division throughout the campus.

SCIENCE AND HUMANITIES DIVISION

Beginning September, 1947, the Science and Humanities Division was established to include courses which previously were grouped under the term of related subjects. The division is now functioning as a well-knit administrative unit comprising the departments of Education and Psychology, English, Health and Physical Education, Biological Science, Mathematics, Music, Physical Science, and Social Science. The Bachelor or Science degree is offered to students who complete work in five of these departments; Biological Science, Mathematics, Physical Science, Health and Physical Education, and Social Science. At the close of 1948, it appeared that approximately eight students would meet the requirements for the degree in some one of these graduation majors during the 1948-49 school year. In most cases they will continue on into the fifth year for teaching credentials.

With the approval of the State Board of Education in the spring of 1948, California State Polytechnic College now offers work leading to a general secondary credential. Because the work of preparing students to meet credential requirements involves the integration of professional education courses with teaching majors and minors, graduate students preparing for teaching have been classified under the Science and Humanities Division for administrative purposes.

The Science and Humanities Division continues to carry out its three principle functions; the first of which is the providing for students in Agriculture and Engineering those courses very closely related to their major work. The second function is to offer courses in general education for all majors. The third function of the Science and Humanities Division is to assume the responsibility in cooperation with the Agricultural Division and the Bureau of Agricultural Education for offering work leading to the fulfillment of the requirements for credentials in Agriculture. Under the teacher-training function the division also provides the program for fulfilling

credential requirements in Health and Physical Education, and for the general secondary in subjects in which there is work leading to a graduation major within the division.

It would seem that California State Polytechnic College can make a distinct contribution to teacher training in California in the fields in which it is training at the present time, because an opportunity is given for the prospective teacher to take work in the applied aspects of the major as well as in the theoretical ones. For example, our Mathematics and Physical Science majors are encouraged to take work in Engineering; Biological Science majors are encouraged to take work in Agricultural Economics, Labor Relations, and Industrial Management. The latter two courses are designed primarily to prepare engineers to be more effective in the personal relationships in the profession. The courses are built around case studies of problems in management and labor relations. It is felt that the social studies teacher will certainly be able to handle the issues of the classroom much more intelligently if he is familiar with some of the actual problems arising from personal relationships within the community.

During the year 1947, several additions were made to the Science and Humanities offerings in order to round out the programs under the three functions. The year 1948 was devoted to coordination and stabilization of curricula, rather than to the increase in offerings or the establishment of new curricula for added vocational objectives.

PHYSICAL FACILITIES

The Walter F. Dexter Memorial Library, the most important addition to the college's physical facilities in recent years and started in December, 1947, will be ready for student occupancy in September, 1949. Total cost of the building and furnishings will be approximately \$750,000. The corner stone for the building was laid on October 15, 1948.

During 1948, construction of new facilities for physical education included the football stadium amounting to \$73,000 and the extension of the wooden bleachers was completed to bring the seating capacity of the stadium to 5200. The baseball field has a new grandstand seating 600 fans. Contracts for physical education and athletic facilities totaled \$225,000 during 1948.

A start has been made on the plans for a science building group which is estimated to cost approximately \$2,000,000. This marks the beginning of a master plan development for the campus. The master plan when completed will replace 10 old wooden structures, inadequate for present needs and anticipated growth. Many of these buildings do not comply with present fire and safety regulations and are housing equipment that would cost many thousands of dollars to replace. In addition there are approximately 36 temporary war surplus buildings used as classrooms that must be replaced in the next five years.

In July of 1948, \$248,000 was established in the fiscal budget for additions and betterments on the campus. Approximately 50 percent of the work intended has been accomplished. Such items of work range from a few hundred dollars to a top of \$85,000 for modernizing and equipping the engineering shops.

Other major items include: \$20,000 for roads, \$15,000 for painting, \$20,000 for dairy manufacturing laboratory, \$7,000 for farm fences, \$2,700 for construction of a brooder house, \$3,200 for addition to poultry building, \$2,600 for replacing lights in dormitories, \$2,000 greenhouses, etc.

Approximately \$600 has been used to develop a relief map for campus building study (master plan). Qualified students were employed to complete the topographical surveys of school property on which buildings are to be erected. Other students took survey maps and constructed a relief map and miniature buildings for purposes of

study of master plot plan. The map has already proven of inestimable value in assisting the campus development committee and the members of the Division of Architecture in planning future expansion. As the master plot plan is drawn, the value of the relief map will again be enhanced by its importance in matters of a reference source.

It is significant to note that the college is operating under severe handicaps in having so many old and inadequate buildings. The utility system is lacking in capacity. Plans are in the making for replacement and expansion of gas lines, electrical services and fire system. One of the serious problems facing the college administration is a replacement of the heating plant and utility distribution center. The present system was built in 1905 to accommodate approximately 200 students. The enrollment in September of 1948 was 2575.

HOUSING

Student housing was a problem in 1948. To realize the significance of this problem to California State Polytechnic College it should be noted that the college is a state-wide institution. On the San Luis Obispo campus only 225 of the 2575 students enrolled in the Fall quarter of 1948 were residents of San Luis Obispo. This figure of 225 is misleading, however, because a large percentage of the students were married (31 percent) and give San Luis Obispo as their home address. With this size of enrollment it was necessary that more than 1800 students find housing either through the college or privately in the city of San Luis Obispo. Since the city of San Luis Obispo can accommodate a relatively small percentage of the total enrollment, the college must provide housing for almost all out-of-town students.

Present facilities on the campus will with normal occupancy, provide for only 742 men. A maximum of 800 students are currently

housed at Camp San Luis Obispo and 75 more reside at the Las Higueras (Public Housing Administration) Housing Project, making a total of 1617 accommodations for single students. In addition there are 75 houses and 238 trailers on the campus for married veterans and their families. All are in use and a waiting list exists for any type of housing.

It is felt that provision must eventually be made to house an additional 1800 or more single men on the campus without consideration of a larger enrollment than now exists. However, it is expected that arrangements for a long-time lease on Camp San Luis Obispo will be completed in the very near future with the California National Guard and that the entire hospital area at the camp will be available for student housing for a definite period of time.

The college also provides housing for 20 faculty families and several single faculty members.

STUDENT LABOR

In addition to the opportunities for students to earn money through managerial and self-owned projects, California State Polytechnic College uses a maximum number of students to operate the college farm and handle grounds and campus maintenance on both the San Luis Obispo and San Dimas campuses.

Following are tables showing a typical month of on-campus student work as shown in the Foundation and State payroll reports for October, 1948:

STUDENT LABOR - FOUNDATION PAYROLL

FOR MONTH OF OCTOBER, 1948

	Number Employees	Payroll	Total
Project Fund			
Dairy	46	2,016.30	
Beef	1	40.30	
Hogs	2	80.60	
Sheep	2	62.40	
Horses	1	40.30	
Poultry	26	441.81	
Crops	33	368.12	
Feed	26	431.90	
	137		3,481.73
Cafe-Dorm--SLO			
Cafe	157	5,109.60	
Dorm-Campus	82	1,321.75	
Dorm-Camp	32	865.50	
Dorm-Los Higuera	2	45.00	
Health Center	5	148.90	
Repairs-Camp	19	84.00	
	297		7,574.75
Cafe-Dorm--SD			
Cafe	28	468.43	
Dorm	14	573.45	
	42		1,041.88
Vet Hill--SD			
Vet Hill--SD	4	28.80	
Vet Housing	3	153.50	
Special Projects	55	1,064.88	
Auto Shop	4	255.00	
Repairs and Renewals	1	6.00	
Admin. Office-SLO	1	38.25	
	68		1,546.43
GRAND TOTALS	544		13,644.79

STUDENT LABOR - STATE PAYROLL

FOR MONTH OF OCTOBER, 1948

<u>SAN LUIS OBISPO</u>				<u>VOORHIS</u>			
Function	Number Employees	Payroll	Total	Number Employees	Payroll	Total	
<u>Adm.</u>	1	18.38					
Totals	1		18.38				
<u>Instr.</u>							
Ag.	53	764.90		4	140.38		
Ind.	74	1,948.32					
S & H	60	988.67		6	87.70		
Lib.	10	230.62		3	47.10		
P & M	2	104.26					
Totals	199		4,036.77	13		275.18	
<u>M & O</u>							
Bldgs.	48	1,057.48		10	300.00		
Grds.	26	710.70		23	334.50		
Repairs	39	633.75		1	68.25		
Autos	8	374.26		1	48.00		
Security	23	442.88					
Totals	144		3,219.07	35		750.75	
<u>Farm</u>							
General	33	493.42		6	152.86		
M.A.	2	75.00					
Poultry	2	47.63					
Orchards	10	281.46		7	60.77		
Total	47		897.51	13		213.63	
TOTALS	391		8,171.73	61		1,239.56	
<u>A & B</u>							
Projects	58	541.75		13	425.03		
Totals	58		541.75	13		425.03	
GRAND TOTALS	449		8,713.48	74		1,664.53	

GENERAL FARM OPERATION

In 1948, about 350 acres of state land and 49 acres of project leased land were farmed and produced a good harvest. A summary of production for 1948 follows:

<u>Acres</u>	<u>Land</u>	<u>Crop</u>	<u>Amount</u>	<u>Value</u>
98.8	State	Sudan	\$10 per acre	\$ 988.00
26	State	New Permanent Pasture	\$ 6 per acre	\$ 260.00
125.2	State	Oats and Vetch Hay	443½ tons	\$9221.47
40.6	State	Oats and Vetch feed and Silage	367½ tons	\$3305.16
39.5	State	Alfalfa old and new (included in the above)		
18.7	State	Corn for silage and green feed	201¼ tons	\$1811.88
				\$15,586.51
29	Leased	Oats and Vetch Hay	26 tons	\$ 390.00
30	Leased	Oats and Vetch Hay	37 tons	\$ 832.50
				\$1,222.50

SCHOLARSHIPS

In addition to the scholarship program which has been in effect at California State Polytechnic College, the Standard Oil Company of California last year introduced a series of scholarships for worthy students in the agricultural programs of the high schools. The Standard Oil scholarships amounted to \$8,000. These constituted two, \$2,000 scholarships and four, \$1,000 scholarships. They were divided equally between the 4-H Clubs and the Future Farmers of America.

In 1948, four of the scholarship winners have enrolled at California State Polytechnic College. Attending were winners of both of the \$2,000 scholarships and two of the \$1,000 scholarship holders.

STUDENT WELFARE SERVICEPOSTAL SERVICE

During the past year, development has been made in the postal service on the campus in that a former temporary classroom unit was made over into a complete post office for general campus use. Each student and faculty member has a post office box assigned and all campus communications and mail for the various individuals are handled through this postal service. This service is under the supervision of the Student Welfare Department, directly controlled or supervised by a permanent employee paid from the post office fee of 50 cents per quarter, charged to the student.

STUDENT COORDINATOR

A new position was added to the Student Welfare Department in 1948--the Coordinator of Student Activities. This position has been filled and a very excellent program established. The purpose of the position is to coordinate the activities of the student body and the student organizations as sponsored by the various departments in the college.

GUIDANCE CENTER

The guidance center is an integral part of the Admissions, Guidance and Placement Division which includes the admissions, registrar's, recorder's and placement offices in addition to the guidance center.

The center has numerous functions: Giving Entrance placement tests, counseling service, other testing services, occupational information, interviewing students who wish to change majors or levels of instruction and personal counseling.

This service is provided to all students (veteran and non-veteran) who request it and also to those referred to the center by faculty members.

The guidance center provided available information about each student to the deans of divisions and instructors of each department. In the past year the guidance center has handled the following number of cases:

380 veterans who have completed advisement

250 non-veterans who have completed advisement

500 informal interviews

TEACHER TRAINING

In 1947 the California State Polytechnic College was approved to prepare teachers for the Special Secondary Credential in Vocational Agriculture, the Special Secondary Limited Credential in Agriculture, and Special Secondary Credential in Health and Physical Education. In the spring of 1948 the State Board of Education added authorization to recommend candidates for the General Secondary Credential with teaching majors and minors in the following fields: Biological Science, Health and Physical Education, Mathematics, Physical Science, and Social Science.

It was not possible for any of the students interested in obtaining a General Secondary Credential to complete their work during the calendar year of 1948; however, at least 10 students will be eligible for General Secondary Credentials with majors in the above mentioned fields in June, 1950. In addition, several of the students getting agricultural credentials will at the same time fulfill the requirements for the General Secondary during the calendar year of 1949. It is the plan of the college to improve the instruction and pattern in these credential areas during the coming year.

All teacher training activities are coordinated under the committee on teacher education. Representation on this committee is college-wide and includes the dean of the agricultural division, the dean of science and humanities division, department heads in the fields represented by the General Secondary majors and minors, the dean of instruction, the dean of admissions, guidance and placement, the agricultural teacher trainer, and the Chief of the Bureau of Agricultural Education. The purpose of this committee is to insure that teacher education remains a college-wide function and that the work in the various programs is integrated so that candidates receive balanced preparation for service in the public schools of California.

LIBRARY

One of the outstanding events of the college year took place on October 15, 1948, when the Walter Friar Dexter Library Building was dedicated with appropriate ceremonies. Members of the State Board of Education and their wives were introduced during the program. Dr. Roy E. Simpson, the State Superintendent of Public Instruction, the Assistant Superintendent, Dr. Aubrey A. Douglass, and President McPhee addressed the large group of faculty and students that were in attendance. Mrs. Walter F. Dexter, widow of the late Dr. Dexter assisted Mr. McPhee in placing the cornerstone.

The college is looking forward to using the facilities that will be available in the new building. The library staff hopes to occupy the new quarters in September of 1949.

The book budget for the library was increased to \$18,000.00 for the fiscal year 1948-49. During the calendar year 1948, 4,025 books were added to the library collection. In 1948, 8,888 more books were loaned than were circulated during the previous year. The total number of books loaned to students and the faculty in 1948 was 31,252 books and pamphlets.

In July 1948, one of the professional librarians assumed the responsibility of maintaining the Audio-Visual Library and supervising the services of this department. The budget for the purchase of films for 1948-49 was \$4,000. The purchase of two new motion picture projectors, as well as additional slide projectors, assisted materially in improving the Audio-Visual services available to the instructional staff.

One junior typist clerk was added to the cataloging department in July. An additional junior typist clerk was appointed to assist at the circulation desk.

Some progress was made during 1948 in the re-cataloging of the book collection.

A staff manual was prepared to assist new members joining the library staff in becoming familiar with the policies of the college and the library.

The faculty library committee assisted the librarian in preparing detailed plans of furnishings for the new library. The staff has been engaged in making tentative plans in connection with meeting the changed conditions that will result from their occupation of the new library building.

DEPARTMENT FUNCTIONS AND FACILITIESAGRICULTURE

Agricultural Engineering and Mechanics: The Agricultural Engineering and Mechanics department serves the double function of teaching courses in the various mechanical and engineering phases of agriculture to students majoring in other departments of the Agricultural Division, as well as serving the requirements of students taking their major work in the field.

A total of 1063 students were enrolled in courses offered by this department in the Fall, 1948. Of these, 110 were majors in either the four-year degree curriculum in Agricultural Engineering or the two-year vocational or three-year technical curriculum in Agricultural Mechanics. Eight full-time and two half-time instructors make up the staff.

Physical facilities include three shops approximately 50' x 75', and an all-metal Agricultural Machinery Storage and Farm Shop building, 120' x 180' with a 60' x 60' wing. This building also serves as a headquarters for all the farming operations of the 2000 acre college farm, as well as a repair and maintenance shop for the tractors, farm machinery, and other mechanical equipment used on the farm.

This makes a particularly desirable combination since a great deal of this kind of work is done by students, either as a regular part of their class work or in their spare time outside of class. Students majoring in Agricultural Engineering and Mechanics have a splendid opportunity to gain additional experience of a practical nature as well as earning part of their expenses by doing repair and maintenance work on the wide variety of farm equipment owned by the school.

In March 1948 the old farm repair shop was remodeled and equipped to accommodate two new courses in horseshoeing and farm blacksmithing. The course in horseshoeing was designed as a twelve week terminal course to train finished horseshoers, for which there is a great demand, not only in California but in other states as well. This course was established at the request of the American Horse and Mule Association and the California Thoroughbred Breeders Association. Three special classes of 12 men each were graduated from this course as finished shoers and platers between March and December. These courses are also offered as electives to our regular students.

In June, 1948, the California Farm Equipment Dealers Association requested this college to train men in the merchandising, sales and management, shop and service, parts and inventory, and the finance and credit phases of the farm machinery business. The dealer group appointed an education committee which has met several times with members of the college staff in designing courses in this field, not only for regular students, but for dealer groups who might come in for intensive blocks of training during the summer.

It is hoped that an intensive program dealing with the merchandising, sales and management phases of the business be started in the summer of 1949. The program will consist of business mathematics, report writing and a combination of psychology and public speaking which is important to the selling aspects of the implement business.

Animal Husbandry: This department provides instruction for students intending to enter the field of livestock production, agricultural education, and related fields. A total of 487 students registered in the fall of 1948.

Breeding herds maintained by the college include 100 registered beef cows, 150 registered ewes, and 75 brood sows; three breeds of beef, three breeds of sheep and three breeds of hogs are represented. Buildings include beef breeding barn and steer shed, plus feed lots to accommodate 250 head of steers throughout the year; central swine farrowing house, and individual feeding pens to accommodate 75 brood sows and approximately 800 fat hogs throughout the year; sheep barns and feeding shed to accommodate the sheep breeding flock and approximately 400 fat lambs per year. In addition to pasture and hay land available on the college farm, approximately 600 acres of additional land adjoining the college are leased for this department.

Students enrolled in this department carry supervised livestock programs to supplement their classroom and laboratory work. These projects involve the feeding, care and marketing of either beef, sheep or swine. Each year these student projects include about 250 head of beef cattle, 600 head of sheep and 800 head of swine, marketed yearly by the students and for about \$56,690 in 1947-48.

The department also has available for instructional purposes a Thoroughbred Breeding unit, operated cooperatively on the campus with the California Thoroughbred Breeders Association since 1941. Thoroughbred mares were given to the college by members of the association. Offspring from these mares are raised to yearlings and sold at the annual California Thoroughbred sales. Proceeds from the sale of these yearlings help to defray the cost of maintaining this instructional unit. *Zuncho, a Thoroughbred sire imported from South America, was donated to the college by Walter T. Wells. The unit provides students with instruction in care, handling, and breeding of light horses. Five head of Thoroughbred yearlings were raised by students and sold by the college foundation. Five head were sold at the

annual California Thoroughbred Breeders Sale at Santa Anita in July for \$4,800. Profits from these sales help maintain the cost of operating the breeding unit.

Six full-time and two half-time instructors were assigned to the department.

During the 1946-47 fiscal year animal husbandry students received \$12,470 as their share of the profits from student-owned and operated projects. The foundation received \$6,239.52 as its share of the profits from these projects. Approximately \$6,800 was paid out to students for wages for operation of the beef, swine, sheep and horse breeding herds and foundation owned livestock and the feed room operations. An average of 12 students were employed part time during the year at approximately \$40 each per month.

Forty students fed out and marketed 130 head of beef cattle including: Reserve Grand Champion carload of steers at Great Western livestock show; also Champion Angus and Champion Shorthorn steers of the open division at the Great Western; Champ Shorthorn load of steers at the Grand National Livestock show, and the Champion Junior Calf, Reserve Champion Senior Calf, and Reserve Champion Junior Calf at the same show.

Sixty students fed out over 360 head of hogs as projects. Included were: Grand Champion barrow and Reserve Grand Champion pen of barrows at the California State Fair; and miscellaneous ribbon winners in hog classes at both the Grand National and Great Western Livestock shows.

Forty-four students fed out project sheep in three classes: rams, show fat lambs and commercially fed lambs. Three students were assigned the rams and sold them at the California State Ram Sale in May. Thirteen students fed fat lambs and exhibited them

at the Great Western Livestock Show, the State Fair, Los Angeles County Fair, and the Grand National Livestock show. At the San Francisco show, student owned lambs took the Open Division grand championship carload (of 50 lambs) and Open Division reserve champion individual. Twenty-eight students fed out 300 head of feeder lambs purchased in Nevada. The lambs were sold in South San Francisco on the open market at \$25.50 per 100 weight, the highest price paid per pound on that market up to that date. The lambs graded over 95 percent choice, the remainder, good. In cooperation with the California Wool Growers Association the sheep department sponsored a sheep shearing school at which over 90 students and sheepmen improved their shearing technique.

Thoroughbred mare Cheeky Sue was donated to the school by D. S. Jeppson of Chatsworth in 1948.

Fruit, Field and Truck Crops: The Crops department with 190 students enrolled this year consists of three sub-departments, Field Crops, Fruits and Truck Crops.

The field crops program with 98 enrolled is designed to train students for farming where field crops is the major interest as well as for farms where livestock is combined with field crops. Many students majoring in field crops have also received employment in fields related to crop production, such as fieldmen and buyers. Field crops has been a favorite major also for those training to become agriculture teachers under the Smith Hughes program. The farm lands of the college continue to be utilized as a training area for practice and observation in crop production. During the past year for the first time sugar beets were included. Two acres were grown and harvested entirely by the students, and the forty tons of beets grown delivered at the local loading platform.

Inadequacy of water for irrigation during the 1948 season considerably limited the growing of field crops.

The outdoor laboratory for growing varieties and kinds of field crops for student study and identification has been considerably expanded in area, a Dallis hut has been installed as a field house and water available from domestic supply has been installed in ample quantity. The Division of Agronomy of University of California at Davis has been very helpful in providing seeds of many promising kinds not available from commercial seed companies. Forty field plots of various kinds and mixtures of irrigated pasture plants have been established. Eight varieties of alfalfa including the new African and Indian are growing for study and observation. All the new disease resistant cereals as well as the standard kinds for California are grown for field observation and laboratory study.

Two new courses were added to the curriculum of field crops. The course in Commercial Seed Production was given on a practical basis through cooperation of local growers of grain seed crops and especially through the cooperation of the Waller Franklin Company of Guadalupe growers of flower and vegetable seeds. Dr. Jim Harrington, vegetable seed specialist with the University of California at Davis was also helpful in planning the course. A member of the Crops staff has represented the California State Polytechnic College and the agricultural teachers of California as a member of California Seed Council for the past seven years.

The advanced course in forage crops entitled Irrigated Pastures was offered as elective and more than 50 students completed the course. Extensive variety plantings of irrigated pasture plants at the college as well as irrigated pastures in nearby farms in this

part of the state, give students opportunity to come to know the pasture plants and to study pasture management and operation in the field.

There was a considerable expansion in the work of the department in presenting courses in crop production to students other than those majoring in crops. The Forage crops course, for example, offered in the spring, enrolled more than 250 students. To take care of the expanding program Gordon Van Epps was added to the staff in September. Van Epps is a graduate in Agronomy of the Utah State College and received his masters degree there last year.

The fruits, sub-department with an enrollment of 53 major students, and 112 students other than majors taking the general fruit course has shown increasing enrollment and expanding interest. The program is taught in a practical manner and most of the various orchard operations in the college's twenty-five acres of orchard and vineyard is carried on in instructional laboratories. The work which must be carried on at times other than laboratories is done by hiring the fruits majors for all operations. During the year many new variety trees and vines were added. The plantings now include more than 160 varieties. The class in pomology has now completed successfully the grafting of 50 large roadside black walnut trees on the college roads to adapted English kinds. During the year Stark brothers donated 25 trees of the special patented varieties which they control. And the University of California donated a group of their new group varieties including Delight Scarlet and Perlette. These have grown well and offer promise as varieties adapted to the central area. Several growers of grapes, stonefruits, nuts and dried fruits have donated commercial packages of fruits which were useful in instruction in the marketing and production courses.

Several leading commercial companies active in pest control sales have donated field scale quantities of their products which were used in the laboratory instruction in pest control. The Wine grape plot originally established in cooperation with the Division of Viticulture, University of California yielded well and Cobernet Sauvignon, probably the choicest wine grape in the plot, continued to show up at yield levels amongst the highest in the state of California. The Division of Viticulture took samples which were studied in the enological laboratory at Davis.

For the first time recently a course in Citrus and Avocado production was offered at the San Luis Obispo campus. The three acre orchard of avocados and citrus offered excellent laboratory conditions. This course is for one quarter only and is designed to train deciduous fruit majors and students planning to teach agriculture in the fundamentals of citrus and avocado production. Those training to enter citriculture as a vocation are trained, of course, in the Citrus fruit major at Cal Poly at Voorhis Unit.

In cooperation with the Soils instructors several mineral deficiencies in the orchard have been determined and marked responses secured by application of the deficient minerals.

New pear varieties planted during the year have been established on the old Home variety which resists pear blight, a disease prevalent in this community. A new method of spraying with copper compounds has very successfully checked blight in the older trees. A new irrigation system was established consisting essentially of "invasion" metal pipe originating as war surplus which now permits adequate irrigation of citrus, walnuts, avocados vineyard and apple plantings. A power duster also was purchased during 1948 and permits more effective instruction and pest control in orchard and vineyard.

The beekeeping course offered under the fruit major in the spring using the college apiary of twenty hives for laboratory instruction enrolled 35 students. Beekeeping is taught here on a practical level. Some interest has been shown by the commercial beekeepers in obtaining trained helpers from this program and one student has been placed. The instructor is a member of the California State Beekeepers Association and attends their annual meetings. Leading commercial beekeepers have donated five three pound packages of bees and three queens for the college apiary.

Dairy Husbandry and Dairy Manufacturing: The dairy unit maintains a purebred Guernsey, Holstein and Jersey herd of around 200 head. This includes approximately 50 animals that are owned by 25 students and operated as projects. This is one of the outstanding college herds in the United States as indicated by a herd average of 523 pounds of butterfat per cow per year and a high score on conformation. It includes several national champions in production. The herd produces around \$6500 worth of dairy products and \$1000 worth of surplus stock each month.

The dairy department has a monthly student payroll of around \$1600 each month. The dairy projects and this large payroll helps a considerable number of students in paying college expenses. The college offers majors in both the dairy husbandry and manufacturing fields.

Modern barns house the dairy herd, and at the present time, a college creamery is being equipped with the most modern dairy manufacturing machinery. This will be a valuable additional facility for students in this major field.

There are now approximately 175 students majoring in either the dairy husbandry or dairy manufacturing fields. There has been

no difficulty whatever in placing dependable, well-trained dairy students. For a number of years, there has been a material shortage of skilled dairy workers and a larger number of graduates are needed by the industry.

All work about the dairy barns and creamery is done by students with the exception of a dairy herdsman and one full-time milker. Three students milk over 25 head of the highest producers, three times daily. Students do a considerable amount of other work including handling, processing and distribution of the dairy products and feeding and caring for the dairy cattle.

Last year, the dairy department had a gross income of approximately \$90,000 and showed a net income after operating expenses had been paid, and, of course, in addition the entire dairy serves a very valuable educational purpose. There are now three full-time instructors in the dairy department and a fourth is now needed.

The average of 523 pounds of butterfat per cow during last year is more than double that of 262 pounds for the average California cow. The college Holstein herd during 1948 made a new national average of 639 pounds of butterfat per cow. Breeding stock is being shipped throughout the West and as far distant as Ohio. Last year, two Polytechnic Holstein bulls were purchased cooperatively by the United States Department of Agriculture and the University of Ohio. Semen for artificial insemination has also been shipped as far as Kansas.

The dairy department staff also assisted with numerous dairy events such as fairs, field days and Future Farmer activities.

Ornamental Horticulture: In addition to instruction offered to more than 80 students majoring in the department, the Ornamental Horticulture unit has a very practical function in that it handles the campus grounds maintenance. Students propagate and grow all trees, shrubs and flowering plants used on the campus.

The unit consists of 5000 square feet of glasshouse, 2400 square feet of lath house and 1800 feet of cloth house space. A propagation or head house of 1600 square feet is the main center of activity. Over 10,000 plants are now in the nursery, with another 10,000 in the cloth and lath houses. The glasshouses are used for student training in pot plant raising and propagation of shrubbery plants.

One glasshouse is devoted entirely to the propagation of plants by cuttings. Attached is a potting room which is adjacent to concrete cold frames used for hardening off cuttings.

Eight new concrete soil bins with a capacity of over eight cubic yards each have been constructed in the propagating area. These new bins have been constructed so that the soil is dumped into the bins from above and can be removed at the level of a concrete slab where canning of plants and soil mixing is done.

Twenty-five student projects were operated during the year. Total gross sales amounted to over \$1,000. Projects included cut flowers, pot plants, lining-out stock, bedding plants both ornamental and vegetables and gallon-can plants. Project operation included growing of annuals, herbaceous perennials and woody perennials.

During the year, 112 students were on student labor payrolls receiving a total of \$5,200 for operating the nursery and grounds maintenance. Under direction of the campus head gardener, students of this department did most of the shrubbery and tree spraying,

pruning, and fertilizing, and irrigating both lawns and shrubbery. In the nursery students perform such operations as watering, pest control, propagation of plants, and general nursery practices.

The department also has electrically heated combination hot beds and cold frames; an electric 50 cubic foot refrigerator for storing and holding bulbs, cuttings, scion wood, and deciduous plants; a new four cubic foot propagation oven; and a soil shredder; as well as recording thermometers, hygrometers and numerous other small items obtained through war surplus.

Gifts in the form of plant materials have been received by many donors.

During the year the department was host to the Tri-County chapter of the California Association of Nurserymen, and aided in planning a short course for nurserymen which will be held at the college in 1949.

Poultry: Providing instruction to about 110 poultry majors is only part of the function of this department which also provides instruction in poultry husbandry to several hundred other agricultural majors who take such courses to round out a diversified experience in all farming operations.

A flock of 4200 laying and breeding hens is maintained for student project work. During 1948 the plant did more than \$56,000 in business from sales of eggs, chicks, dressed poultry and other products. An intensive trap nesting and pedigree breeding program is carried on and each year approximately 120,000 hatching eggs and 40,000 baby chicks are sold, mostly to Future Farmers and former Cal Poly students. About 10,000 birds are raised and marketed locally each year by students as project activity.

During the year seven new breeding pens were completed for project and student use. Two new brooder houses and a storage building were also completed to supplement the teaching and student project facilities.

During the year the turkey program was expanded to include the following varieties: Narragansetts, Bourbon Reds, Beltsville White, Black, and Small Type Baby Beef Bronze.

The poultry flocks now include pedigreed White Leghorn flock, also New Hampshires, Barred Rocks, Dark Cornish as well as cross-breds raised for fryers.

Individual student projects were increased to 95 during the year, with each student project consisting of either 150 laying or breeding hens each or 250 or more chicks each. The student operator of the project shares the net profit on the project with the project fund, with the average student earning from \$10 to \$15 per month. About 30 students were paid by the hour for labor out of project funds for processing and selling products.

Related Agriculture Sciences: Two fields, Soil Science and Veterinary Science, are included under the Agricultural Division. The work covered in both of these fields is closely related to the activities of the agricultural majors.

Soil Science courses are required of all students in the agricultural division. As well as supplying essential technical information for students in agriculture, the soils courses provide a substantial background for individuals especially interested in Soil Science.

Veterinary Science is offered to supplement the major work provided in the Animal Science Departments of the Agricultural Division. Keeping college herds and flocks healthy provides opportunities for laboratory classes and at the same time gives students valuable experience and practical training.

ENGINEERING AND INDUSTRIAL DIVISION

Aeronautical Engineering: Extensive shop, laboratory, hangar and flight strip facilities provide actual maintenance and operations experience for the student in this department. The combination of these shop courses with classroom work gives the future engineer the practical as well as the theoretical background necessary for a complete understanding of the fundamentals of aircraft and aircraft engine construction, operations, maintenance and design.

Extensive work was accomplished in the layout and setting up of equipment and machinery for more productive utilization by the students. The engine shop and hangar tool rooms were reorganized for more efficient operations during 1948.

A concrete apron of 60,000 square feet was constructed in 1948 in front of the hangar. A drainage system for the roof of the hangar was also installed.

Work has progressed on the conversion of war surplus material for use in laboratory and shop work.

Two new instructors were added to the staff making a total of seven full time instructors.

Architectural Engineering: Courses offered in the department of Architectural Engineering are designed to prepare the student for activities in the engineering and structural phases of the architectural profession and the building industry. Purely architectural subjects are offered only to the extent of providing the student with a sympathetic understanding of the problems of architectural practice and design.

Graduates find employment as junior draftsmen and junior engineers in architect's offices, large construction firms, contracting companies and building material organizations. Some graduates find placement opportunities as estimators, construction supervisors, structural designers and detailers, building contractors and sales engineers.

Departmental facilities include well-lighted drafting rooms and studios with appropriate library catalog facilities. Equipment and conditions throughout the department are designed to carry out an atmosphere paralleling that found in the architectural profession and the building industry. Reproduction facilities are available for blue printing and other methods of reproduction.

More than 130 students were enrolled in this department in the fall of 1948.

The staff consists of two registered architects and one assistant instructor.

Electrical Engineering: The Electrical Engineering Department offers the student adequate training in the technical and practical phases of electrical works to that when he enters industry he will have developed some of the skills necessary to carry on laboratory work.

The technical curriculum offers considerable practice to the student in actual construction and installation of the electrical

equipment on campus.

The following are a few of the jobs completed during the past year:

The old Agricultural Education Building was rewired to some extent and new larger size power cables were installed to improve voltage regulation.

One dormitory was rewired and new lights installed.

Considerable electrical work was done in the welding shop in the way of circuits for equipment.

The illumination engineering class drafted the circuits and specifications for flurescent lighting in the E. E. Laboratory. The installation was made by the electrical construction classes.

Electric lines and equipment were maintained and repaired by electrical construction classes.

Mechanical Engineering: The enrollment in Mechanical Engineering increased to 216 for the fall quarter, 1948. Of these, 42 were enrolled in the technical and vocational levels training for technical positions in operation, maintenance or junior engineering. The remainder of the students are working toward an mechanical engineering degree with emphasis on Production Engineering, Welding, or Mechanical Equipment of buildings, according to the individual students choice. The limited design courses given in the senior year are for the purpose of providing background in applications of Mechanical Engineering to special types of problems rather than to train design or research engineers.

Overhaul of a large Diesel engine to be installed in the Power Plant is well underway with Mechanical Engineering students doing most of the overhaul work during supervised class periods. Two small gasoline engine test units have been completed by

students in project work and are being used in laboratory classes. A 100 horsepower engine test dynamometer is being built by a student as a senior project. This unit will be installed and ready for use by the start of the 1949-50 academic year.

The new hydraulics laboratory is nearing completion. Some preliminary tests have proved the soundness of the design and workmanship of the students who originated and carried out the project with limited funds and the minimum of instructions from the faculty.

The new strength of materials laboratory has been utilized since the start of the 1948-49 academic year in teaching a new laboratory course to all mechanical, aeronautical, electrical, and architectural students. Additional equipment now on order will broaden the scope of the new course.

Equipment and instruments are being purchased for a new laboratory to be used for fuels and lubricants testing. This testing is now included in the freshman Mechanical Engineering Laboratory course. When sufficient equipment is on hand and space is available, the testing of fuels and lubricants will be conducted in a separate laboratory course. This will permit extension of the present freshman laboratory course to include other basic tests and demonstrations fundamental to Mechanical Engineering.

All laboratories are planned so they may be easily moved to the new Power Plant and Mechanical Engineering Laboratory building when it is constructed.

One new instructor was added to this department during 1948.

Air Conditioning and Refrigeration: This department is the largest of any in the industrial division. About half of these were degree engineering students and the other half were technical students. The department also gives heating and ventilating courses for mechanical and architectural students and dairy refrigeration and steam for dairy manufacturing and dairy production students. About 180 students in these departments took work in the refrigeration and air conditioning department.

Because of the rapid growth of the department three new teachers were added during 1948 making a total of 10.

The department has attracted national attention. It has students from all parts of the United States, Hawaii, Cuba, and Puerto Rico.

The laboratories of the department now include a refrigeration laboratory, a heating and ventilating laboratory, an air conditioning tests and measurements laboratory, and a sheet metal shop. These laboratories have a combined floor space of 6720 square feet and contain equipment and instruments valued at \$90,000. All of the equipment has been installed by students of the department. An altitude test chamber and a variable temperature and humidity reversible cycle air conditioning system are being installed this year. The latter will be the first system of its type.

In addition to the regular laboratory work students maintain all of the refrigerating systems on the campus and a considerable portion of the heating equipment. There are 58 refrigerating systems on the campus other than those in the refrigeration laboratory. Also, installations as needed by other departments are designed, constructed and installed by students. During 1948

the following installations were made for other departments: Two refrigerating systems, two hot water radiant panel heating systems, one forced draft hot air heating system, four ventilating systems, three exhaust systems, and several small sheet metal jobs.

Electronic and Radio Engineering: By the fall quarter 1945 students had enrolled in this comparatively new major in the Engineering and Industrial Division. It prepares students to fill positions, exclusive of planning and pure research, carried on by engineers in the fields of communications and electronics. Facilities include five laboratories, a shop, instrument stock room, small parts stock room and department offices. As part of the project system, the students operate a small radio repair shop and service approximately 500 radios for the campus community. The average repair charge on these radios was \$5.

One new instructor was added to the staff in 1948 bringing the total to five full-time instructors. Several students are employed on an hourly basis to build the much needed laboratory equipment.

A new laboratory for work in Industrial Electronics was started during the year. This laboratory will handle heavy equipment including a 37.5 KW Induction Heating unit and Electronic control units.

A small room has been set aside to house the receivers and transmitters used on the amateur bands, and amateur station W6BHZ. With the station in operation, it is now possible to do laboratory work in radiation, as well as give the students an opportunity to contact by radio amateur radio operators from all parts of the world.

In recognition of the outstanding work and curriculum of this

department, which completed its third year in 1948, the Institute of Radio Engineers organized a student branch of the society on the campus. This recognition by the leading professional engineering society in the fields of radio and electronics places the department on a par with the accepted engineering schools in the country.

The department has obtained a federal license to operate the Mark. XVI Radar set obtained from the government. This radar station including the 75 foot tower was erected by the students and the set is being operated as station W6-XDM. This station is operated so that the students may have experience in operational problems, maintenance and installation problems and experimental work with a radar station. Work with this radar supplements the textbook work on general radar instruction.

Printing: A completely equipped printing plant is operated by students majoring in printing and publishing. They produce a weekly newspaper, monthly Future Farmer magazine, and all other student body publications, including programs, ruled forms, etcetera. Graduates will be qualified to operate their own print shops, newspaper publishing plants, or work in management or supervisory capacities in various fields of the allied printing industry. One of two degree courses of its kind in the country, this department is offering instruction endorsed by the California Newspaper Publishers association and by the International Typographical Union which permits the use of its apprentice training manuals as text books.

One new instructor was added to the department last year, and another is expected to report this year.

During 1948 considerable new equipment was added, including the following: type cases and composing stones, complete new series of linotype matrix in various sizes, many new fonts of type faces, Ludlow type casting machine, Kluge automatic press, precision line-up table, 14 x 20 Multilith Press. Two additional linotype machines are expected to be added during the coming year.

Students in this department do all the mechanical work involved in the publication of the 10 page weekly college newspaper, monthly college magazine, athletic programs, a monthly magazine sent to 12,500 Future Farmer members, a pictorial brochure featuring the student Poly Royal show, and many smaller printing jobs for student organizations. Students doing work outside regular laboratory hours receive hourly pay which is included as part of the cost of every job and is charged to the student organization ordering the work. Students received about \$2000 in such project wages last year. During their senior year courses in estimating, plant organization and layout, bookkeeping and management are offered. Publishers and printing concerns of the Pacific Coast are showing an intense interest and are seeking to employ graduates in excess of the present capacity of the course.

RELATED INDUSTRIAL DEPARTMENTS

Welding: This department gave instruction in both oxy-acetylene and arc welding to approximately 500 students each quarter. Three full-time and three student instructors carried on the program.

The arc welding section was reorganized, designed, and built by students of the welding classes. The capacity of the shop was enlarged from eight to 14 arc welding stations plus one demonstration area. This increased instructional efficiency.

Eight hundred square feet of floor space was added as a stock and tool room. A material and tool control system was thereby provided. The over-all operating program was improved considerably by this system as well as a great improvement in wash room facilities.

A new 500 pound capacity acetylene generator was installed by students of the welding classes. This brings the acetylene generating capacity up to the load requirement.

Machine Shop: During the year, two additional machine tools were added to the 73 machines already in the machine shop. The new ones - a flat lapping machine and a tapping machine were obtained from the War Assets Administration through the State Department of Education. Two of the machines already in the machine shop were cleaned and overhauled, and put in first-class condition.

The most important work in 1948, however, was the reorganization of the grading system. All grading of students' work was made as objective as possible, using a point system based on precision measurement of the project. To this

end a number of precision grading fixtures were built which can instantly indicate errors in work as small as 0.0005". Each grading fixture was designed to check one or more dimensions on a certain class project. This grading system has greatly speeded up the grading of class work, reduced grading errors almost to zero, and has entirely eliminated the occasional complaint from students about the reliability of their grades. Any student can, if he so desires, check the grading of his work and arrive at the same grade score as did the teacher.

During the year a number of small tools were added to the shop tool room, broadening the types of work possible to turn out in the machine shop. A good deal of maintenance and repair work was done for the school. Assistance was also given many departments in the design and construction of testing and laboratory equipment. Twenty instructional films were also added to the shop film library improving and speeding up the instruction in machine tool operation.

Three full-time and four part-time instructors are now employed in the department to handle a per quarter enrollment of 28 classes totaling approximately 430 students.

The shop now has the following facilities: a bench shop for 20 students where hand operations can be taught; a machine shop where a beginning class of 20 and an advanced class of 12 can be handled at the same time; a lecture room for talks, tests, and films; and adequate storage facilities for tools and supplies. The shops are in a steel-framed building, clean and well-lighted, with ample room without crowding of equipment, and have locker and washroom facilities.

VOORHIS UNIT-----SAN DIMAS

Adequate classrooms, laboratories, shops, equipment, citrus groves, deciduous orchards, truck crop land, greenhouses, glass-houses, are included at the southern branch of the college to provide the first two years of work in the degree curricula and all of the instruction in the two and three year program in Agricultural Inspection, Citrus Fruit Production, and Ornamental Horticulture. Dormitories, cafeteria, student store, swimming pool, athletic field, chapel, and other facilities makes the Voorhis campus a compact unit ideally situated for the type of instruction offered.

Agricultural Inspection: Adequate facilities are provided at the Voorhis Unit for teaching men in the common practices and skills and the essential techniques in agricultural inspection. The curricula were established after each course and combination had received the approval of the State Department of Agriculture for its effectiveness in training inspectors. Graduation requirements include actual work in commercial packing houses and at inspection points. Field trips are made to shipping points, picking, propagation districts, in addition to the campus area.

Citrus Fruit Production: The San Dimas campus has facilities for teaching fruit production on a practical basis. The college-owned grove and orchards are operated primarily by students as part of their instructional program. Various irrigation methods are employed on the campus in connection with fruit production. Farm equipment, including tractors, tillage implements, spray rigs, and fumigation equipment, is owned, maintained and operated on the campus farm. A small nursery of citrus, avocado, and deciduous plantings is operated to give instruction in the problems of propagation and raising of trees.

Ornamental Horticulture: The facilities on the Voorhis campus consist of a lath house, two glasshouses, propagation frames, a subtropical canyon, a two-acre nursery, and one acre of cut flowers. Extensive landscaped portions of the campus include, in addition to the buildings, seven acres of lawn and three miles of roadway. Estates, parks, golf courses, nurseries, and flower plantings in the vicinity serve as a natural laboratory for field experience and practice.

Additional Courses: Courses in deciduous fruits, vegetable crops, poultry, and the general required related courses also are being offered at the Voorhis Unit.

NEW FACILITIESINSTRUCTIONAL

Lath House: This 50' x 90' building made of a new type lath was completed at the close of the summer, 1948. The lath is made of light aluminum strips. These are supported by aluminum stringers fastened to redwood framework. Four men who were enrolled as students during the school year 1947-48 were hired during the summer to work with one of the instructors in the Ornamental Horticulture Department for the purpose of erecting the lath house according to the plan which had been worked out by the Architecture Design class the previous year. This procedure not only saved the state approximately 50 percent of what the building would have cost to have had it built by a contractor, but it also provided work experience to students planning to enter this field who would otherwise not have had such an opportunity for experience.

Crop Land: Approximately 50 acres of level land was rented during the fall of 1948 to provide additional facilities for the growing of crops. This land joins the Voorhis Unit on the west and is handy for instructional purposes. Cereal and truck crops are being grown there this year. Water is limited, so only a few acres are planted to truck crops. This additional acreage of open level land has also been of great assistance to the farm tractors and farm machinery classes, as well as for the various crops classes.

Student Housing: August 31, 1948, saw the completion of a 44 family apartment unit that had been allocated to the Voorhis Unit by the Public Housing Authority through county and state agencies. This was the last project of its kind to be completed in the United

States under the P.H.A. program. The 44 apartments are made up of five different buildings, two buildings having 14 two room apartments each and the other three buildings comprise 16 three room apartments. Availability of family housing on the campus permitted many veteran students to enter training who for the past two years have not been able to attend school because of no accommodations for their families in the area. The college manages the housing unit for the Housing Authority of the County of Los Angeles who is the official local agency that has the contract with the Public Housing Authority and the state. State funds that were provided in Chapters 29 and 391 were secured by the county to supplement the funds furnished by P.H.A. to erect the housing unit.

NEW COURSES AND CHANGES

The only significant addition that was made to the curriculum at San Dimas during the current year was the addition of Chemistry made up of courses PSc 4, 321, 322, and 323. It was necessary to add Chemistry in order for the many students attending San Dimas who are transfers from other colleges to secure a full schedule during the year or years that they must be at San Dimas to complete major courses which are offered only at San Dimas. Complete Chemistry laboratory facilities were installed during the fall quarter. Some 75 different students are taking advantage of these offerings during the year.

There is an ever increasing demand on the part of prospective students of the Southern California area for Animal Husbandry, Dairy and Poultry courses. At the present time, there are not facilities to provide this type of program even if it were decided that such courses should be offered. In addition to the increasing demand for work in fields mentioned above other than those which are now

offered at San Dimas, there are an increased number of requests for specialized courses in the major fields that are now offered from which students may choose electives.

EVENTS DURING THE YEAR 1948

More than 250 California veterinarians attended a three day professional conference held on the California State Polytechnic College campus from January 5-7. Sponsored by the California State Veterinary Medical Association, the conference program included well-known veterinary medical authorities from throughout the United States as speakers.

Students of Chico State college cooperated in 1948 with students of California State Polytechnic College by selecting a coed to reign as queen over Poly's Sixteenth annual Poly Royal, April 30 and May 1.

President Julian A. McPhee was in Washington, D.C. from January 23 to January 28 attending two educational meetings. As president of the American Vocational Association, McPhee was a delegate to the American Council on Education. The second meeting was a conference of American Vocational Association officials.

Word was received on February 2 from the New York headquarters of the Institute of Radio Engineers (IRE) stating that California State Polytechnic College was officially recognized as a radio engineering school. Only two other western schools, University of California and Stanford, are recognized by the IRE.

Joe W. Jarvis, supervisor of Agricultural Development of the Union Pacific Railroad, was the principal speaker at a banquet at the Cal Poly chapter of the Young Farmers on February 12.

Working on the premise that every member of the faculty should be well-versed in all phases of the educational program at Cal Poly, the administration developed a plan to indoctrinate every member of the staff with a thorough background of purposes and methods used by each of the eleven agricultural departments, eight engineering departments and five science and humanity departments.

One of the college's famed Holstein cows set a new world's record in February for milk production in her class. She is Polytechnic Bess Blossom who produced 808 pounds of butterfat and 21,126 pounds of milk in 365 days being milked twice a day.

Fifty-five California State Polytechnic College musicians presented musical programs before audiences totaling more than 10,000 persons during a week-long tour of seven Sacramento Valley counties March 8-13.

The six man rodeo team representing Cal Poly at the University of Arizona's annual intercollegiate rodeo took second place against competition from colleges throughout the United States.

The California Polytechnic college dairy herd of Holsteins was placed as the second highest production Holstein dairy herd in the United States, according to word received during March from the National Holstein-Friesian Association. The herd of 22 made the remarkable average of 16,195 pounds of milk, with 606.1 pounds of butterfat, an average test of 3.7 percent.

Because of the demand for trained horseshoers, California State Polytechnic College inaugurated a 12-week course similar to the only other such course in existence which is given at Michigan State college. The course for training farriers was added as part of the course offerings at Cal Poly at the insistence of the Horse and Mule Association of America, the California Thoroughbred Breeders' Association and many individual breeders and veterinarians in the state.

More than 60 members of the Tri-County chapter of the California Association of Nurserymen attended a conference held on the campus of California State Polytechnic College on May 21. Representatives from Ventura, Santa Barbara, and San Luis Obispo counties discussed nursery instruction and problems.

The Federal Communications Commission on May 24 assigned an experimental Class One radar license to the electronic and radio engineering department at California State Polytechnic College.

State legislators and state administrative officials visited the California State Polytechnic College campus on May 19. The visitors were invited by State Senator Chris N. Jespersen to see the college's expansion problems and long-range building program plans.

Robert LaFollette, former United States senator from Wisconsin and now vice-president of the Sears Foundation and Edward Condon, president of the Foundation, visited the campus on May 28.

On June 4, 135 students graduated from California State Polytechnic College, the largest class in history. Eighty-three degrees were issued, 29 three-year technical certificates, 11 two-year technical certificates and 12 vocational certificates. The first honorary degree ever issued by the college was conferred upon Senator Chris N. Jespersen. He received an honorary degree of bachelor of science. Speaking at the forty-ninth annual commencement was William Blair, president of the State Board of Education. In attendance was Dr. Roy E. Simpson, superintendent of public instruction and director of education.

The annual business meeting of the California State Veterinary Medical Association was held on the campus of California State Polytechnic College in June. Dr. S. T. Michael of San Francisco was elected president of the organization.

More than 250 agricultural teachers from all sections of the state convened at Cal Poly for their annual five day conference in June. The event was sponsored by the California Agricultural Teachers Association. Starting on June 28, the college offered additional summer courses for academic credit to many of the teachers.

A total of 721 students enrolled for the regular summer quarter at California State Polytechnic College, the largest in the history of the school.

Polytechnic Bess Colantha, one of the three full sisters in the California State Polytechnic College Holstein herd, set a new

national record in June. At three years, six months of age, she completed a record of 28,157 pounds of milk and 1010.7 pounds of butterfat.

A professional book collection valued at \$5,000 was donated to the college library by Charles E. Teach, retiring San Luis Obispo superintendent of schools.

Nearly 100 livestock specialists in the state convened in July at California State Polytechnic College for a three-day session. Those attending received schooling and refresher courses as they apply to future judging in livestock rings in California. The event was sponsored by the college, the University of California and the Western Fairs Association.

On July 24, Governor Earl Warren made a two-hour tour of California State Polytechnic College campus. He was the guest of Julian A. McPhee, president of the college.

Registration for the second summer session at the college, which began July 24, reached 518 students.

The quarterly meeting of the California Farm Bureau Federation Dairy Department met on the campus of the college on August 20. Close to 75 dairymen from California attended the session which was highlighted by reports from the farm bureau dairy legislative committee.

Twenty-two animals, owned by eight students of the college comprised the college's entry in the state fair livestock show.

Over 150 physical education instructors from the public schools of California met on the campus of California State Polytechnic College from August 16 to August 27 for their annual workshop. The event was carried on in cooperation between the California Association of Health, Physical Education and Recreation and the college.

The largest student enrollment, 2575, in the history of the college registered in September.

Mrs. Walter Friar Dexter fitted a cornerstone into place for the new library named for her late husband, Dr. Walter F. Dexter, state superintendent of instruction from 1937 until his death in 1945. The cornerstone laying took place October 22 on the California State Polytechnic College campus at a ceremony attended by members of the State Board of Education, members of the State Department of Education, faculty and students. Speakers included William L. Blair, president, State Board of Education; Roy E. Simpson, state superintendent of instruction; Aubrey Douglass, associate superintendent; and Julian A. McPhee, college president.

Members of the State Board of Education held a two-day meeting on the campus of the California State Polytechnic College on October 22 and 23.

Approximately 40 college students entered livestock raised under the college project system in the Grand National Livestock Show in the San Francisco Cow Palace in October.

Nearly 500 members of the Future Farmers of America gathered on the college campus October 11-13 for the twentieth annual state FFA convention. Approximately 185 high schools were represented by delegates.

A dairy cattle judging team from the college placed third in a field of six teams from western colleges competing in the Pacific International Livestock Exposition in Portland, October 8 and 9.

Alumni returned to the California State Polytechnic College campus on October 8 and 9 for an annual Homecoming celebration and adopted a new constitution.

Members of the college chapter of the Institute of Radio Engineers attended the West Coast convention of the national organizations in Los Angeles during October.

Seventeen business managers and comptrollers of California state colleges met on the Cal Poly campus on October 18 and 19.

California State Polytechnic College students won top honors at the Grand National Livestock Exposition early in November at the San Francisco Cow Palace and at the Great Western Livestock Show late in the month in Los Angeles. The college livestock judging team won second place in competition with western colleges.

Dr. Roscoe Balch, member of the college veterinary staff and Henry E. Gran, member of the biological science department, assisted scientists of the Hooper Foundation in research work on the virus which causes sleeping sickness in horses.

John Harrison and James Smith, animal husbandry students at the college, received awards for accomplishment in the field of agriculture from the Santa Fe Railway on November 10.

Dr. Hubert H. Semans, dean of Science and Humanities Division at the college, was elected secretary of the California Council on Teacher Education at a conference at Yosemite in November.

Twenty-six freshman and sophomore students received 1948-49 Sears-Roebuck Foundation Scholarships for interest in the agricultural field. The scholarships were first awarded by the foundation in 1938. Students from Cal Poly were the first from any college west of the Rockies to receive the scholarships.

California State Polytechnic College was granted full, unrestricted accreditation as a four-year college by the Northwest Association of Secondary and Higher Schools at the annual meeting of the association on December 11 in Spokane, Washington. A 250 page application for membership had been submitted to the association in November. An evaluating committee visited the campus, inspecting facilities and interviewing personnel.

Miss Dona Grace Burbage, freshman at Humboldt State College, was introduced to students at Cal Poly at an assembly on December 17. She will reign over Cal Poly's 1949 Poly Royal celebration April 29 and 30.

The dairy herd at California State Polytechnic College had the highest production per cow in the history of the college during 1948. The 1948 record is approximately double the state average per cow and is one of the highest college herd averages in the nation. The 72 cow herd averaged 12,610 pounds of milk and 523.7 pounds of butterfat per cow for a butterfat percentage of 4.2. The figures were compiled for the Dairy Herd Improvement Association's yearly production test. During 1948 the college herd of Guernsey, Holstein and Jersey breeds produced a total of 910,445 pounds of milk.

A total of 2492 students registered for the winter quarter at the college. The figure was higher than the 1947-48 winter quarter total of 2119 but was a decline from the all-time high of 2575 students recorded in the fall of 1948.

ACTIVITIES 1949--SAN DIMAS

The Ornamental Horticulture Department, Voorhis Unit, was granted permission in January to exhibit in the Southern California Spring Flower Show, held April 22 - 25 at the Fanny D. Morrison Horticulture Center, Brookside Park, Pasadena.

Mrs. Lavina Penley, Librarian, attended a meeting for the southern section of the school librarians association of California at Pomona College, February 7. Mrs. Penley is one of the directors of the association.

Mr. P. W. Rohrbaugh, Citrus department instructor, flew to Corpus Christi, Texas, January 22 at the invitation of Dr. D. W. Jones, president of the Texas College of Arts and Industry, for consultation on the plan and development on a new branch of the college as an institute of citrus and vegetable courses training center.

Dean Harold O. Wilson attended a meeting of the San Bernadino County Agricultural Teachers Association and gave a short talk on the agricultural program of the Voorhis Unit.

The Ornamental Horticulture club heard Mrs. Harry Hood, one of the leading Ecologists of the state, at its dinner meeting here February 5.

Dean Harold O. Wilson was appointed in February to serve as a member of the advisory committee for the 33rd annual National Orange Show.

Art Getweiller of the United Wholesale Florists Association spoke to the Ornamental Horticulture club February 19.

Cal Poly citrus judging team won first in its division at the annual National Orange Show in San Bernadino, March 13.

Dean Harold Wilson and George J. Peavey attended a district meeting of the American College Public Relations Association held at Cal Tech, March 30. Dean Harold Wilson and George Peavey attended the second annual school administrators conference at Claremont College, April 17.

An exhibit sponsored by Cal Poly was shown at the state exposition building, Exposition Park in April.

Dean Harold Wilson attended a conference on vocational and technical education in junior colleges at the San Bernadino Valley College, April 6 and 7.

Mrs. Lavina Penley represented Voorhis Unit at an all-day meeting of the California Library Association held at Occidental College April 17.

Approximately 500 teachers and administrators attended the Southern California Educational Conference representing the five branches of vocational education which met on the campus May 15.

During the month of August the Bureau of Agricultural Education staff held a regular meeting at the Voorhis Unit.

During the week of August 9 - 15 an Ornamental Horticulture school was conducted by members of the Voorhis Unit agriculture department for 28 agricultural teachers of Southern California.

On August 21 Dean Wilson officiated at the Sear's swine show in Ventura.

During the week of August 23 the California State Department of Agriculture held a state conference for representatives of their office and representatives of the commercial trades.

During the Los Angeles County fair, September 1948 the Young Farmers Association Chapter at the Voorhis Unit cooperated with the Bureau of Vocational Agriculture Education in conducting Camp Condee for Future Farmer members of Southern California.

Cal Poly sponsored an educational exhibit at the Los Angeles County Fair, September 17 to October 3 in Pomona. Illustrations of work done on the campus were shown.

On December 10 and 11, 1948, Cal Poly Chapter Young Farmers Association was host to 150 representatives of the southern region of the Young Farmers Association.

During the month of December the Voorhis Unit cooperated with the San Luis Obispo campus in preparing a float for the Pasadena Tournament of Roses.

THIS REPORT IS SUBMITTED AT THE QUARTERLY MEETING
OF THE STATE BOARD OF EDUCATION CONVENING AT SACRAMENTO,
APRIL 1, 1949.

RESPECTFULLY SUBMITTED,

Julian A. McPhee

President, California
State Polytechnic College