

Annual Reports - Calif. State Poly College SLO 1959-60

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1959-1960 ANNUAL REPORT  
CALIFORNIA STATE POLYTECHNIC COLLEGE  
THE STATE WIDE STATE COLLEGE



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## FOREWORD

"A year of building for the future" was the way I characterized the year 1958-59 in last year's Annual Report. Carrying on a similar line of thought I might term 1959-60 a year of vision. Most of the time we must work with only quick, fragmentary glimpses of the road ahead. This year at Cal Poly developments have enabled us to see the shape of things to come.

Among these developments has been the progress of our building program at both campuses. What our faculty is achieving in improved instruction in its first year of use of new facilities gives strong promise of a continuing strengthening of our academic program as we make adequate buildings and up-to-date equipment available for use. The shape of things to come as revealed in this phase of the College's operation is most heartening.

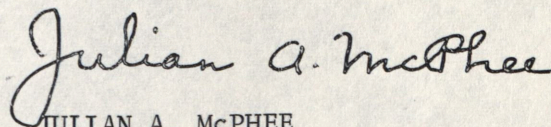
All our glimpses of the future, however, are not so pleasing. Some of the shapes which we see are distinctly those of difficult problems.

One such problem has developed in the recruiting of faculty members of the quality and kind desired. The College's occupationally centered curricula and its emphasis on practical laboratory and field applications make it necessary to obtain instructors who not only have adequate formal higher education but who have had appropriate successful experience in the fields in which they teach. The College's search for this type of instructor brings it into direct competition with industry, particularly in the engineering fields, physical science and mathematics. State salary scales and the requirement that most hiring must be done in the lower classifications are severe handicaps for the College in this competition.

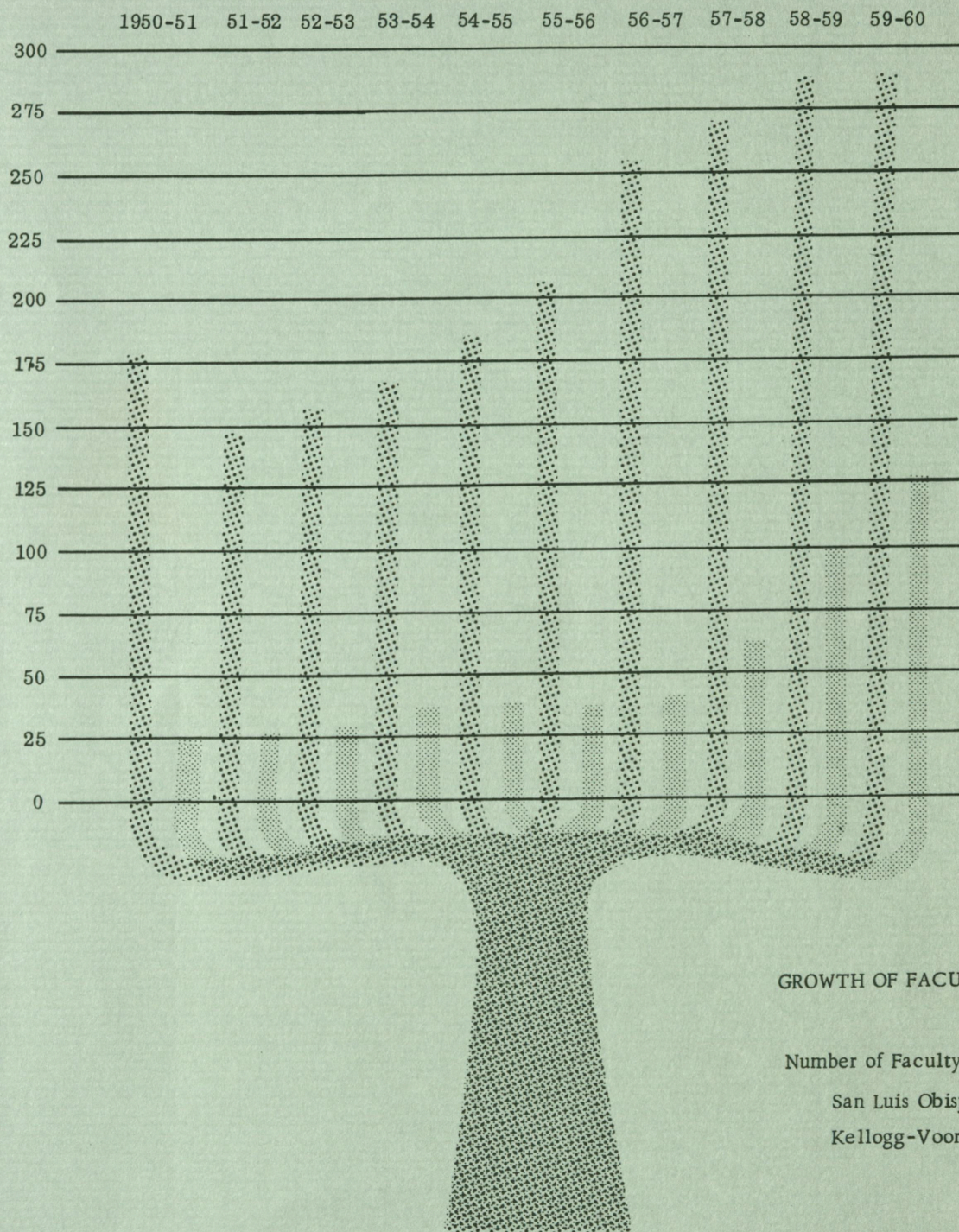
A second major problem is campus housing for students at San Luis Obispo. Unavoidably, new classroom construction will clear away all but 45 units of our housing for married students. Married students would continue to constitute no less than 20 per cent of Cal Poly's student body if housing facilities were available. I firmly believe that married students have as good a claim to the advantages of occupationally-centered education as do single students.

Nor is the problem of housing for single students at San Luis Obispo solved for all time with the opening of our six new dormitories. A deficit in housing for single students of 2,360 spaces is predicted ten years from now unless more facilities are built than are now planned.

This Annual Report is presented to the State Board of Education and the State Department of Education with my sincere thanks for their cooperation and understanding in dealing with the problems of the College. We have found in the Board and in the Department great and faithful allies for whom we are most grateful.

  
JULIAN A. MCPHEE  
President





## STATISTICS

**STUDENTS  
DEGREES & CERTIFICATES  
FACULTY**



SAN LUIS OBISPO CAMPUS FALL ENROLLMENT

By Division

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Engineering Division	1958	12	1970
Agricultural Division	1084	53	1137
Arts & Sciences Division	645	458	1103
	<u>3687</u>	<u>523</u>	<u>4210</u>

ENROLLMENT BY DEPARTMENTS

Agricultural

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Agricultural Bus. Mgt.	23	0	23
Agricultural Engineering	108	0	108
Mechanized Agriculture	116	0	116
Animal Husbandry	315	40	355
Farm Management	116	2	118
Field Crops Production	74	0	74
Fruit Production	32	0	32
Truck Crops Production	20	0	20
Dairy Husbandry	65	0	65
Dairy Manufacturing	31	1	32
Food Processing	3	0	3
Ornamental Horticulture	39	7	46
Poultry Husbandry	40	1	41
Soil Science	65	2	67
Non-matriculated	37	0	37
	<u>1084</u>	<u>53</u>	<u>1137</u>

Engineering

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Aeronautical	239	0	239
Architectural	307	5	312
Air Conditioning and Refrigeration	87	0	87
Electrical	144	0	144
Electronic	540	3	543
Industrial	94	1	95
Mechanical	439	0	439
Metallurgical	16	0	16
Printing	92	3	95
	<u>1958</u>	<u>12</u>	<u>1970</u>

2-Year Technical Students in Agriculture  
(Included in Agricultural Division totals  
shown above.)

Arts and Sciences

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Agricultural Chemistry	19	3	22
Agricultural Journalism	15	18	33
Biological Sciences	62	27	89
Business	43	12	55
Elementary Education	29	171	200
English and Speech	16	17	33
Home Economics	0	96	96
Mathematics	123	13	136
Physical Education	103	50	153
Physical Sciences	47	5	52
Social Sciences	82	37	119
Technical Arts	77	0	77
Graduate:			
Education	9	9	18
Agric. Education	20	0	20
	<u>645</u>	<u>458</u>	<u>1103</u>

	<u>Total</u>
Agric. Bus. Mgt.	2
Agricultural Engr.	0
Mechanized Agric.	32
Animal Husbandry	90
Dairy Husbandry	14
Dairy Manufacturing	6
Farm Management	23
Field Crops Prod.	17
Fruit Production	8
Truck Crops Prod.	4
Ornamental Hort.	11
Poultry Husbandry	8
Soil Science	4
	<u>219</u>

	<u>Men</u>	<u>Women</u>	<u>Total</u>
Regular Students	3687	523	4210
Limited Students	139	128	267
TOTAL	<u>3826</u>	<u>651</u>	<u>4477</u>



ENROLLMENT OF VETERAN AND NON-VETERAN REGULAR STUDENTS - SAN LUIS OBISPO

	<u>Veterans</u>	<u>Non-Veterans</u>	<u>Total</u>
Freshmen	65	1204	1269
Sophomores	236	1144	1380
Juniors	325	673	998
Seniors	186	296	482
Graduates	7	37	44
Unclassified	0	37	37
	<u>819</u>	<u>3391</u>	<u>4210</u>

COMPARATIVE ENROLLMENTS BY YEARS, REGULAR STUDENTS

(San Luis Obispo)

(Kellogg-Voorhis)

1-yr. Intervals

1938-39 --- 651  
 1939-40 --- 780  
 1940-41 --- 739  
 1941-42 --- 711  
 1942-43 --- 570  
 1943-44 --- 80  
 1944-45 --- 128  
 1945-46 --- 819  
 1946-47 --- 1571  
 1947-48 --- 2229  
 1948-49 --- 2575  
 1949-50 --- 2909  
 1950-51 --- 2767  
 1951-52 --- 2213  
 1952-53 --- 2259  
 1953-54 --- 2259  
 1954-55 --- 2745  
 1955-56 --- 3163  
 1956-57 --- 3767  
 1957-58 --- 4040  
 1958-59 --- 3942  
 1959-60 --- 4210

1-yr. Intervals

1938-39 --- 113  
 1939-40 --- 137  
 1940-41 --- 136  
 1941-42 --- 117  
 1942-43 --- 69  
 1943-44 --- Closed W. War II  
 1944-45 --- Closed W. War II  
 1945-46 --- Closed W. War II  
 1946-47 --- 280  
 1947-48 --- 393  
 1948-49 --- 411  
 1949-50 --- 438  
 1950-51 --- 405  
 1951-52 --- 331  
 1952-53 --- 413  
 1953-54 --- 423  
 1954-55 --- 384  
 1955-56 --- 385  
 1956-57 --- 506  
 1957-58 --- 790  
 1958-59 --- 1185  
 1959-60 --- 1662



## PLACE OF LEGAL RESIDENCE (Regular Students, San Luis Obispo)

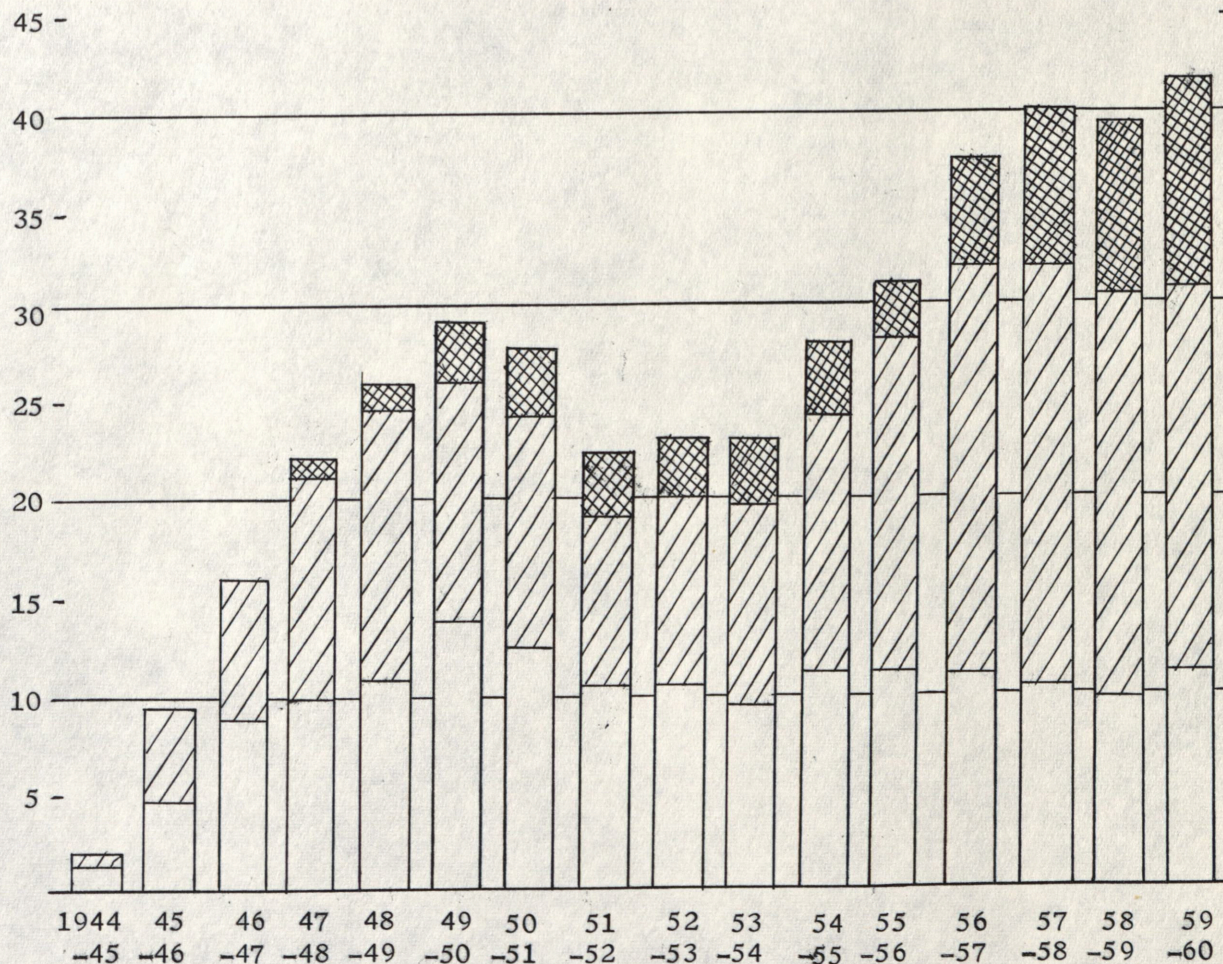
<u>County</u>	<u>Fall 1957</u>	<u>Fall 1958</u>	<u>Fall 1959</u>
Alameda	141	161	152
Alpine	0	0	0
Amador	3	4	3
Butte	18	14	9
Calaveras	0	1	1
Colusa	6	4	3
Contra Costa	101	132	110
Del Norte	0	3	3
El Dorado	8	12	14
Fresno	54	53	52
Glenn	15	8	9
Humboldt	26	23	27
Imperial	23	28	32
Inyo	6	9	15
Kern	119	136	132
Kings	28	38	44
Lake	2	3	7
Lassen	8	6	11
Los Angeles	864	808	832
Madera	23	21	28
Marin	30	25	30
Mariposa	0	2	3
Mendocino	22	16	16
Merced	28	18	21
Modoc	6	5	4
Mono	0	0	0
Monterey	61	59	68
Napa	35	30	24
Nevada	3	2	2
Orange	114	111	118
Placer	18	14	12
Plumas	4	3	3
Riverside	96	80	69
Sacramento	138	121	107
San Benito	12	6	12
San Bernardino	93	96	102
San Diego	108	115	106
San Francisco	72	87	79
San Joaquin	57	47	46
San Luis Obispo	409	293	477
San Mateo	95	113	118
Santa Barbara	147	140	199
Santa Clara	93	104	112
Santa Cruz	36	39	37
Shasta	13	21	21
Sierra	5	0	0
Siskiyou	7	8	13
Solano	43	39	37
Stanislaus	71	62	62
Sonoma	42	43	34
Sutter	7	10	12
Tehama	4	5	9
Trinity	2	2	2



<u>County</u>	<u>Fall 1957</u>	<u>Fall 1958</u>	<u>Fall 1959</u>
Tuolumne	12	8	7
Tulare	72	62	63
Ventura	69	85	94
Yolo	17	16	16
Yuba	6	5	7
Other States	276	320	264
Foreign Countries	194	198	247
U. S. Territories	78	68	73
	<u>4040</u>	<u>3942</u>	<u>4210</u>

Enrollment  
in Hundreds  
of Students

YEARLY ENROLLMENT OF REGULAR STUDENTS  
TOTAL AND BY DIVISION  
SAN LUIS OBISPO CAMPUS, 1944-1959



School Year



Arts & Sciences



Engineering



Agriculture



KELLOGG-VOORHIS CAMPUS FALL ENROLLMENT

<u>By Division</u>		<u>By Year</u>	
Agriculture	541	First Year	688
Arts & Sciences	436	Second Year	587
(including Business)		Third Year	287
Engineering	<u>685</u>	Fourth Year	<u>100</u>
Total	1662	Total	1662

ENROLLMENT BY DEPARTMENTS

<u>Agriculture</u>	
Agricultural Business Management	86
Animal Husbandry	104
General Crop Production	60
Fruit Production	46
Horticultural Services & Inspection	32
Landscape Architecture	141
Ornamental Horticulture	64
Soil Science	8
Total	<u>541</u>
<u>Arts &amp; Sciences</u>	
Accounting	32
Biological Sciences	55
Business Administration	123
English	11
Mathematics	50
Marketing & Sales	19
Physical Education	80
Physical Sciences	31
Social Sciences	35
Total	<u>436</u>
<u>Engineering</u>	
Aeronautical	80
Electronic	374
Industrial	66
Mechanical	<u>165</u>
Total	<u>685</u>
Regular Students	1635
Limited Students	<u>27</u>
Total	1662

PLACE OF LEGAL RESIDENCE

Los Angeles	954
San Bernardino	210
Riverside	129
Orange	113
San Diego	45
Imperial	36
Ventura	18
Tulare	16
Kern	10
Stanislaus	10
Santa Barbara	6
Monterey	5
San Joaquin	5
Sacramento	5
Other Counties	<u>37</u>
California Total	1599
Other States	21
U. S. Territories	6
Foreign Countries	<u>36</u>
Total	1662

ENROLLMENT OF VETERAN AND NON-  
VETERAN STUDENTS

		<u>Veteran</u> <u>Non-</u> <u>Veteran</u> <u>Total</u>		
<u>Regular</u>				
Freshmen	116	562	678	
Sophomores	186	394	580	
Juniors	115	168	283	
Seniors	45	49	94	
Limited	<u>5</u>	<u>22</u>	<u>27</u>	
Total	<u>467</u>	<u>1195</u>	<u>1662</u>	



DEGREES AND CERTIFICATES

Number of Degrees and Certificates Granted  
(June, 1959 - S.L.O. Campus)

<u>Division and Department</u>	<u>Bachelor of Science</u>	<u>Bachelor of Education</u>	<u>Technical</u>	<u>Master of Arts in Education</u>
<u>Agriculture</u>				
Agricultural Engineering	26			
Mechanized Agriculture	24		4	
Animal Husbandry	55		8	
Dairy Husbandry	6		2	
Dairy Manufacturing	4		1	
Crop Production, General	1			
Deciduous Fruit Production	1		1	
Field Crops	14			
Truck Crops	2		1	
Farm Management	13		3	
Ornamental Horticulture	8		3	
Poultry Husbandry	8			
Soil Science	17		2	
<u>Engineering</u>				
Aeronautical Engineering	54			
Air Cond. & Refrigeration	26			
Architectural Engineering	32			
Electrical Engineering	30			
Electronic Engineering	71			
Industrial Engineering	21			
Mechanical Engineering	141			
Printing	34			
<u>Arts and Sciences</u>				
Agricultural Chemistry	3			
Agricultural Journalism	11			
Biological Sciences	14			2
Education				4
Education Agriculture				23
Elementary Education	24	17		
English	4			2
Health and Physical Education	18			5
Home Economics	8			
Mathematics	61			2
Physical Sciences	20			1
Social Sciences	16			2
	<u>767</u>	<u>17</u>	<u>25</u>	<u>41</u>

Total of S.L.O. Graduates, June 1959 -- 850

(June, 1959 - Kellogg-Voorhis Campus)

	<u>Bachelor of Science</u>	
Animal Husbandry	17	
Agricultural Business Mgt.	11	
Crop Production	25	
Fruit Production	6	
Hort. Services & Inspection	10	
Landscape Architecture	6	
Ornamental Horticulture	4	
	<u>79</u>	
Total of K-V Graduates, June 1959 --		<u>79</u>
GRAND TOTAL --		<u>929</u>



# FACULTY

## Increase

The growth of Cal Poly's faculty, numerically, is shown in the following table:

<u>Year</u>	<u>San Luis Obispo</u>	<u>Kellogg-Voorhis</u>	<u>Total</u>	<u>Increase or Decrease Over Previous Year</u>
1950-51	176	25	201	-
1951-52	147	26	173	-28*
1952-53	159	29	188	+15
1953-54	167	37	204	+16
1954-55	194	36	230	+26
1955-56	208	38	246	+16
1956-57	254	40	294	+48
1957-58	270	69	339	+45
1958-59	292	101	393	+54
1959-60	292	124	416	+23

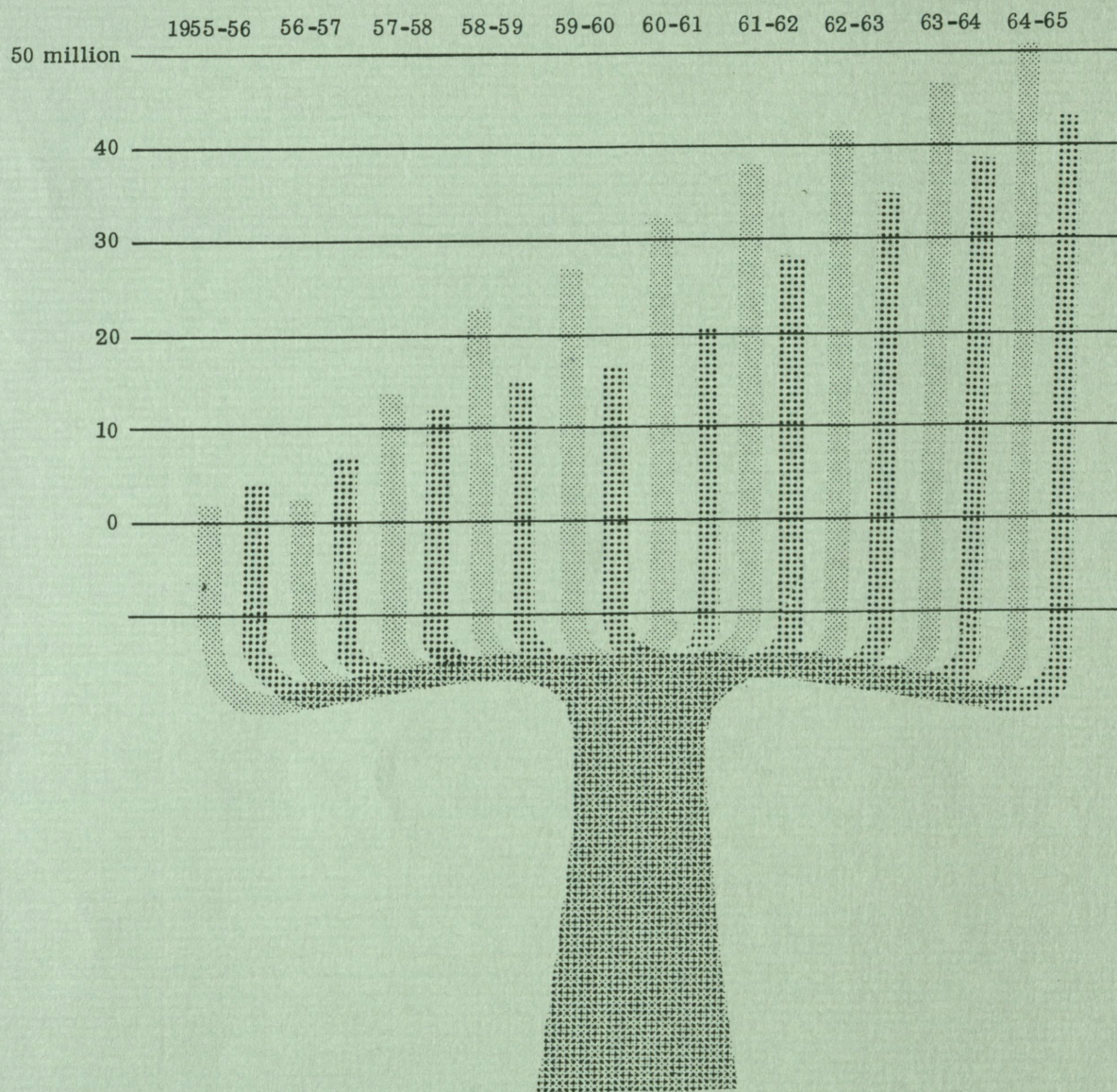
(\*Korean War Period)

## Educational Background

The following table indicates distribution of the Cal Poly teaching staff according to academic degrees as of Fall Quarter, 1959:

<u>Degrees</u>	<u>San Luis Obispo</u>	<u>Kellogg-Voorhis</u>	<u>Total</u>
Doctorates	67	27	94
Masters	118	45	163
Bachelors	94	49	143
None	<u>13</u>	<u>3</u>	<u>16</u>
Totals	292	124	416





GROWTH OF PHYSICAL PLANT

KELLOGG VOORHIS    Accumulative Funding  

 SAN LUIS OBISPO    Accumulative Funding

# CONSTRUCTION PROGRAM



## CAPITAL OUTLAY BUILDING PROGRAM

1955-60

San Luis Obispo Campus

In 1954, during the First Extraordinary Session of the California Senate, Senate Resolution Number 15 was passed, requiring the State Department of Finance to study all aspects of California's five-year construction needs, including the capital outlay construction requirements for the State colleges. The Department of Finance prepared and submitted to the Senate the "Report on State Building Construction Program" which listed in priority order the buildings then contemplated to be funded for the San Luis Obispo campus during the five-year period 1955-60. The following construction projects were included in that list:

1. Engineering East

This building was funded in the 1955-56 budget and was accepted by the State in July, 1957. It contains 5 lecture rooms, 17 laboratories, office space for 20 instructors plus numerous auxiliary rooms. It is of interest to note that although this building was completed only three years ago, it is now necessary for six of the drafting rooms to be converted to laboratories to house the expanding electrical and electronic engineering departments.

2. Men's Physical Education Facility

The 1957-58 budget provided the money for the main building, while the Outdoor P. E. Playfields were included in the 1958-59 budget. The building, containing a gymnasium with 4,000 spectator seats, a boxing room with two permanent boxing rings, a wrestling room sized to accommodate two full-size wrestling mats, two lecture rooms, office space for 19 instructors, and a shower and locker area accommodating 4,000 physical education students, was occupied in January, 1960. The outdoor facilities are now nearing completion and will be ready for use by September, 1960. Included in this portion of the project are six softball diamonds or three intramural size football fields on two turfied playfields; ten tennis courts; six four-wall handball courts, two of which are fully enclosed; and four multi-purpose courts.

3. Food Processing Building

This project was funded in the 1959-60 Governor's Budget and is currently being designed by the State Division of Architecture. It is now expected that the construction contracts will be awarded by October of 1960 with completion in March of 1962. This structure will contain laboratories for instruction in meat processing, canning and freezing of fruits and vegetables, processing of market milk and its by-products, a lecture room, a food processing laboratory, as well as staff offices and auxiliary rooms.

4. Corporation Yard

The construction of new maintenance department headquarters was necessary because the logical and economical expansion area for the library requires the relocation of the existing Corporation Yard. There is the added benefit of the replacement of some ancient structures now being used as well as providing the additional space for shops and storage required by the rapidly expanding college plant. This project was funded by the 1959-60 budget and is expected to start by June, 1960, with completion about one year later.

5. Student Health Service Building

Funded in the 1957-58 budget and occupied in October of 1959, this building includes six doctors offices, 12 treatment rooms, as well as the auxiliary clinic areas and also a 30-bed infirmary.



#### 6. Little Theater and Music Building

Although the "State Building Construction Program" listed this project as an "auditorium and music building" with an auditorium seating 1200 students, when the time came to prepare the preliminary plans, it was agreed that the college should have a little theater rather than an auditorium. The construction of an auditorium was deferred but the Little Theater and Music Building was "master planned" for the later addition of the auditorium.

The Little Theater and Music Building, containing a 500-seat Little Theater with full rigged stage and also facilities for the music department, is now under construction and is expected to be completed by September of 1961.

#### 7. Residence Halls

Although the State Building Construction Program only contemplated the construction of five 200-bed residence halls for the San Luis Obispo campus, and their funding over the four fiscal years 1956-59, the approval by California voters of a 200 million dollar bond issue coupled with the availability of a federal loan for residence hall construction made it possible to construct six residence halls capable of housing a total of 1200 students (including 400 women). The money was made available during the 1957-58 budget year. The residence halls have been completed and all are being equipped for occupancy in June of 1960.

The above seven projects are those which were contemplated by the five-year program for the San Luis Obispo campus and for which funds have actually been appropriated. The only items which have not yet been approved are (a) the Sheep and Swine Pavilion, which is again being requested for the 1961-62 budget; (b) the Crops Unit, which is included in the 1960-61 budget; (c) the Beef Breeding Unit for which we are asking funds in 1961-62; and (d) the Student Union, which is now being planned but which will have to be financed by some means other than a legislative appropriation.

Although the five-year construction program for all the State colleges suggested by the State Building Construction Program was expected to cost in excess of \$120,000,000, it is now seen that even this extensive program fell short of our needs. The following projects, which were actually funded during that same five-year period, were not included on the original list:

#### 1. Mathematics and Home Economics Building

This project, which was occupied in January, 1960, consists of a one-story wing for the Home Economics Department and a two-story wing for the Math department. It contains six home economics laboratories, fourteen lecture rooms, twenty-eight two-man offices, and a computing laboratory which will house the college's recently approved digital computer.

#### 2. Agriculture and Social Science Building

This building provides for offices and the space requirements for the lecture, laboratory, and activity functions of several departments of the Agricultural Division and also for the Social Sciences Department. It contains 10 labs, 15 lecture rooms, and 42 two-man offices. The building was occupied in September of 1959, having been funded in the 1957-58 budget.

#### 3. Cafeteria

Presently under construction and due for completion next December the new Cafeteria will be able to seat 1228 people simultaneously: two three-hundred seat resident student dining halls (which can be opened into one large banquet hall); a 400-seat snack bar which can be subdivided into three smaller dining rooms; and a 228-seat staff dining room which can also be divided into three smaller rooms.



4. Graphic Arts and Industrial Engineering Building

Construction for this project is scheduled to begin in May, 1960, with completion estimated for February, 1962. The building will house the Technical Journalism, Industrial Engineering, and Printing Departments. It will contain 8 printing labs, 3 industrial engineering labs, 3 journalism labs, 3 lecture rooms, and several storage, darkrooms, and other auxiliary rooms.

5. Whale Rock Dam

Another major project not thought of in 1954 is the Whale Rock Dam and Transmission Conduit. This project, whose cost is being shared jointly by the State and City of San Luis Obispo, will furnish the college with a guaranteed water supply for both domestic use and irrigation of the college farm.

6. Library Annex

This addition to the present library, which will extend east and north from the existing building, will increase the number of reader stations from its present 547 to 1650 -- the annex having about twice the capacity of the present building. Construction is expected to begin in June of 1961 with completion about December of 1962.

1960-65

The building program for the next five-year period is already well underway--at least on paper. Included in the approved State budget for the fiscal year 1960-61 are the following projects:

1. Engineering West

This very large complex of one, two, and three-story elements should be in the construction stage by November of 1960. Its site is the entire block east of the existing administration building now occupied by the metal "cubical units" and the temporary wood "classroom units." Upon completion it will house the entire Architectural Engineering and Technical Arts Departments as well as important labs for the Mechanical Engineering, Welding and Metallurgical Engineering, and Aeronautical Engineering Departments. Its tentative completion date is August, 1962.

2. Science Building Addition

This addition to the existing Science Building will add five physics labs for the Physical Science Department as well as 14 faculty offices. Three of the labs will be general physics labs, while an atomic and solid state lab and a nuclear physics lab will enable the college to offer valuable practical experiences in these increasingly vital fields. Completion is expected by September, 1962.

3. English and Speech Wing

A two-story addition to the eastern end of the existing Agriculture and Social Science Building, it will contain 11 lecture rooms and 17 faculty offices. Construction should begin in October of 1961.

4. Administration Building

The new Administration Building to house both the administrative offices for the San Luis Obispo campus as well as the college-wide administration will be a three-story structure located between the Science Building and the new residence halls. It will also have three lecture rooms and another room temporarily designated as a conference room, which are included in the building to serve the function of "expansion joints." This additional space will accommodate the administrative space needs for a campus of 10,000 students. Construction is scheduled to begin in March, 1962, and be completed in June, 1963.



### 5. Crops Unit

This much needed addition to the college farm will contain a vegetable handling room, a fruit handling room, a seed cleaning and treating room, a honey room, an equipment repair and storage area as well as dehydrator sulphur house, lath house and glasshouse.

The remainder of the college's 1960-65 building program has not yet been reviewed by the State control agencies and hence is not as definite in scope as the above projects. The following are listed by funding years, with project completion probable in from two to four years after funding, depending on the size of the project:

- 1961-62
  - a. Completion of Agriculture Units
  - b. Military Science and Additional Physical Education Projects
  - c. Auditorium
  - d. Remodel Existing Administration Building
  - e. Residence Hall (for 400 students)
- 1962-63
  - a. Business Administration Classroom Building
  - b. Engineering South
- 1963-64
  - a. Science Building Annex
  - b. Residence Hall (for 400 students)
  - c. Cafeteria
- 1964-65
  - a. Engineering Addition
  - b. Classroom Building
  - c. Addition to Health Center

The completion of the above projects will increase the San Luis Obispo campus capacity to the point where it will accommodate approximately 7,800 full-time students.

### Kellogg-Voorhis Campus

Pursuant to Senate Resolution #15 adopted March 31, 1954, which directed the Department of Finance to present a capital outlay program to meet the needs of the rapidly growing state agencies, the following list of buildings represents those which the Department of Finance felt were essential for California State Polytechnic College, Kellogg-Voorhis Campus:

#### Buildings Funded, Constructed, or Under Construction from 1955-60

Business Building. This building was funded in 1957 and was accepted by the state for use in January, 1959. Consisting of 7 lecture rooms and 7 laboratories, the Business Building provides the necessary facilities for majors in Accounting, Business Administration, and Marketing. This building, which houses 472 FTE, was constructed of reinforced concrete and face brick, is of modular design and typical of the attractive, yet functional, buildings being constructed on the Kellogg Campus.

Cafeteria. The original cafeteria for Kellogg Campus was designed with a seating capacity of 260 persons at any one time. The kitchen for this cafeteria was over-designed for the original seating capacity to provide an adequate kitchen for a future addition. This building was funded in 1955 and accepted by the state for occupancy and use in February, 1958.

Corporation Yard. The Corporation Yard, which is the heart of the maintenance and operational functions of the College, was funded in 1957 and occupied for the first time in 1959. This facility provides for the storage of trucks, buses, and automobiles which are used by the campus personnel in their instructional work. It also provides



a Maintenance and Operations Office, housing the chief of maintenance, superintendent of building trades and the Headquarters Office for the entire custodial staff of the College. Also enclosed in the Corporation Yard is the Security Officers Headquarters plus a fire station with suitable living quarters to house a 6-student stand-by Fire Department. The auto, paint, carpenter, electric, and plumbing shops, plus the Receiving Warehouse for the College, round out the balance of this facility.

Library. The Library was originally planned to accommodate a student body of 2400 students and to house 85,000 volumes; however, due to the rapid growth of this campus, the stack area was increased to hold 100,000 volumes. The Library, during the past year, has by necessity been used for instruction classes, doubled for a Book Store, and a student vending machine eating area. This building is a two-story construction with a total of 65,522 sq. ft. of floor space including various offices, storage rooms, hallways, and restroom facilities.

Agricultural Production Units. The Agricultural Production Units, funded in 1956 and accepted in 1958, were planned to provide the necessary field type laboratories and work in the processing and cold storage of fruit and crops, lathe houses and green houses for Ornamental Horticulture, Services and Inspection laboratories, beef production barn, beef feed lot, poultry production unit, including the incubation of eggs, layer and fryer cage houses, a poultry meat processing plant, and the sales room necessary to market the products of this unit, a complete swine production unit plus a sheep production unit and a wool laboratory. These units were designed and planned to take care of the ultimate needs of the Agriculture Division at K-V.

Gymnasium and Physical Education Facilities. The Physical Education Facility, including the gymnasium and its activity rooms plus the outdoor athletic area, was funded in 1955 and accepted by the state in April, 1958. Besides the gymnasium, which will attain its maximum use in the very near future, the outdoor facilities include 10 tennis courts, 6 multi-purpose courts, 6 handball courts, 5 shuffleboard courts, a baseball diamond, 5 softball fields, and a regulation track and football field complete with necessary lighting to accommodate night activities.

Residence Halls. The Kellogg Campus was originally planned to have residence halls to house 400 men and 200 women. Once again, however, the rapid growth pattern of this campus dictated an increase in the total number of spaces required. Consequently, there were four residence halls funded in 1957 to house 200 students each. Two of the halls were constructed for women and two for men. These buildings were finally accepted by the state in February, 1960, and will be occupied for the first time during the Fall Quarter of the 1960-61 academic year.

Agricultural Engineering Building. Funded in 1958 and projected to be completed in January, 1960, this building was delayed considerably by the steel strike which lasted approximately six months during the fall of 1959. Consequently, the occupying date became late June, 1960. This facility includes a lecture room and three laboratories for instruction in Ag Mechanics and Carpentry, Power and Machinery, and Electricity and Plumbing. Also included are the related faculty offices.

Health Center. Funded in 1958, this building will be occupied late in the month of May, 1960. It contains offices for five doctors, including a medical director, 10 treatment rooms, a business office to maintain the records of the various student patients plus x-ray and physiotherapy rooms as well as a small pharmacy for the dispensing of certain type prescriptions to the patients.

Agricultural Classroom Building. This building was planned for approximately 391 FTE and related faculty offices, which includes 5 lecture rooms and 11 laboratories, providing the necessary facilities for majors in Ag Business Management, Fruit, Crops, Ornamental Horticulture, Animal Husbandry, Services and Inspection, Landscape Architecture, and a related agriculture laboratory for general laboratory work in all seven



majors. Although this building was planned to have been funded in 1956, other buildings received higher priority according to their required use on the campus, and the Ag Classroom Building is being funded in the 1960-61 budget.

Administration Classroom Building. In the early planning stages of the State Building Construction Program by the Department of Finance early in 1954, California State Polytechnic College, Kellogg-Voorhis Campus, was scheduled to have a general classroom building and a separate Administration Building. However, the College felt that by deferring the request for the classroom facilities for one year, a much more functional unit could be achieved by a combination of these two separate buildings. Funded in the 1960-61 budget, the building will be ready for occupancy on or before September 1, 1961. The Business Management Department, Student Personnel Department, and all other administrative personnel will be housed in this facility plus classroom space to provide accommodations for 991 FTE. Included in the classroom area will be art, advertising, journalism, and photography laboratories as well as general lecture classroom facilities for math, English, and social sciences. The plan for this building provides for administrative space for a college of 12,000 or more students, but the excess space will be used for classroom purposes in the intervening years.

Student Activities Building. This facility has been requested but, as is true at all of the state college campuses, has not met with approval by the Department of Finance. The College feels that this building would provide much needed facilities for the student body which are a definite part of a well-rounded college education program.

Not included in this first 5-year list were certain buildings which, although not deemed necessary at that early date, were demanded by the rapid growth of the Kellogg Campus and subsequently were included in our building program. These include the following:

Engineering Center. With the approval of the engineering curriculum and the advent of four Engineering Majors (Aeronautical, Electronic, Industrial and Mechanical Engineering), it became necessary to provide facilities in which to teach these specialized courses. The Engineering Center was funded in 1956 and occupied by the College in the fall of 1958 and houses 6 lecture rooms and 24 laboratories including labs for sheet metal, welding, and machine shop operations. This facility also includes a sub-sonic wind tunnel for use in the demonstration of aerodynamics and airfoil stress and structure.

Cafeteria Addition. This addition which was funded in 1959 will be occupied in June, 1961, and will increase the present seating capacity from 260 to 885 total seats. In contrast to the existing serving line feeding operations in the present cafeteria, this addition will provide a scramble type serving facility to accommodate a larger group of students.

Meats Processing Building and Feed Mill. These two buildings will provide much needed additions to the agriculture program at the Kellogg Campus. The Feed Mill will make it possible to carry on studies in feed conversion by various breeds and types of animals. The Meats Processing Building will provide another means of obtaining the end results from these conversion studies. Animals in the study will be slaughtered and the meat completely processed in this facility. This will provide the students with the opportunity to study the effects of various type feeding operations on the meat produced.

Little Theater Music Building. This building will be funded in the 1960-61 budget and the earliest possible occupancy date would be the Fall Quarter of the 1962-63 academic year. This building will house two general music classrooms, two speech classrooms, the little theater and its related facilities plus the practice rooms (choral, vocal, instrumental, and band ensemble) and rehearsal rooms. These facilities will add to the students' education a feeling of appreciation for the fine arts and their practical application in everyday living.



Proposed Five-Year Capital Outlay Physical Facilities to Meet the Rapid Enrollment Growth Predicted During the Next Ten-Year Period.

The remainder of the College's 1960-65 building program has not yet been reviewed by the state control agencies and hence is not as definite in scope as the above projects. The following projects are listed by probable funding years:

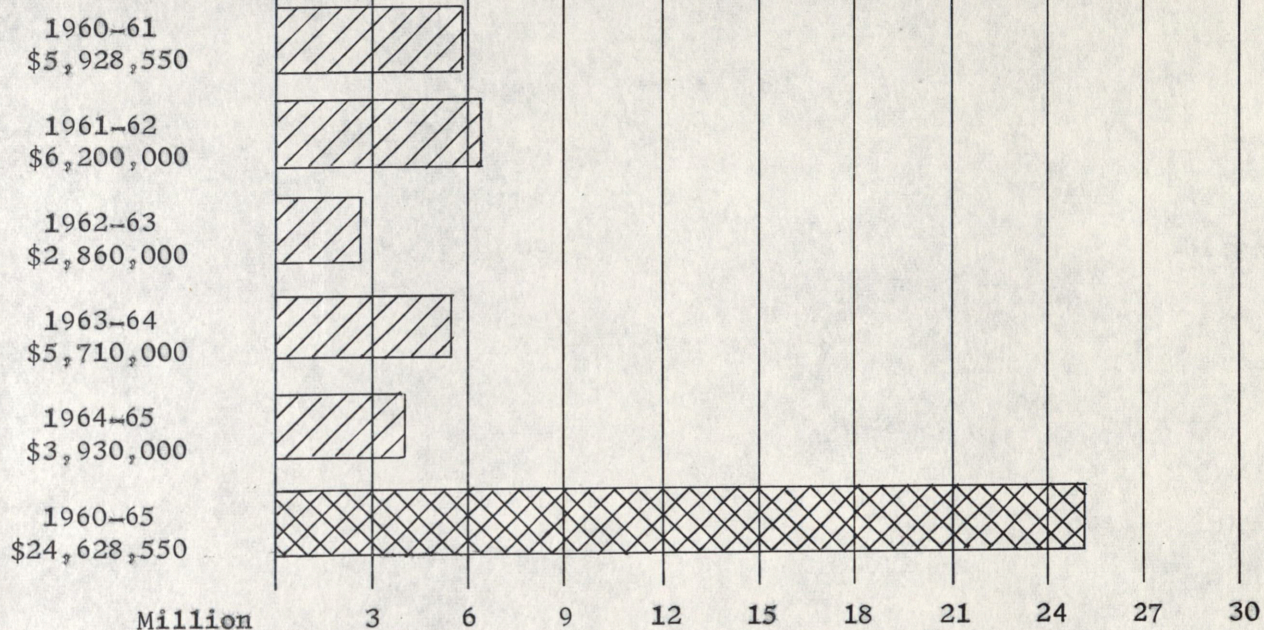
- 1961-62
  - a. Physics (remodel)
  - b. Cafeteria (Residence Hall)
  - c. Men's Gymnasium
  - d. Engineering Addition
- 1962-63
  - a. Home Economics
  - b. Library Addition
  - c. Cafeteria
  - d. Residence Hall
- 1963-64
  - a. Classroom Building #1
  - b. Complete P. E.
  - c. Health Center Addition
  - d. Industrial Arts
- 1964-65
  - a. Business Classroom Addition
  - b. Engineering Addition
  - c. Classroom Building #2

The completion of the above projects will increase the Kellogg-Voorhis Campus capacity to accommodate approximately 7,200 full-time students.

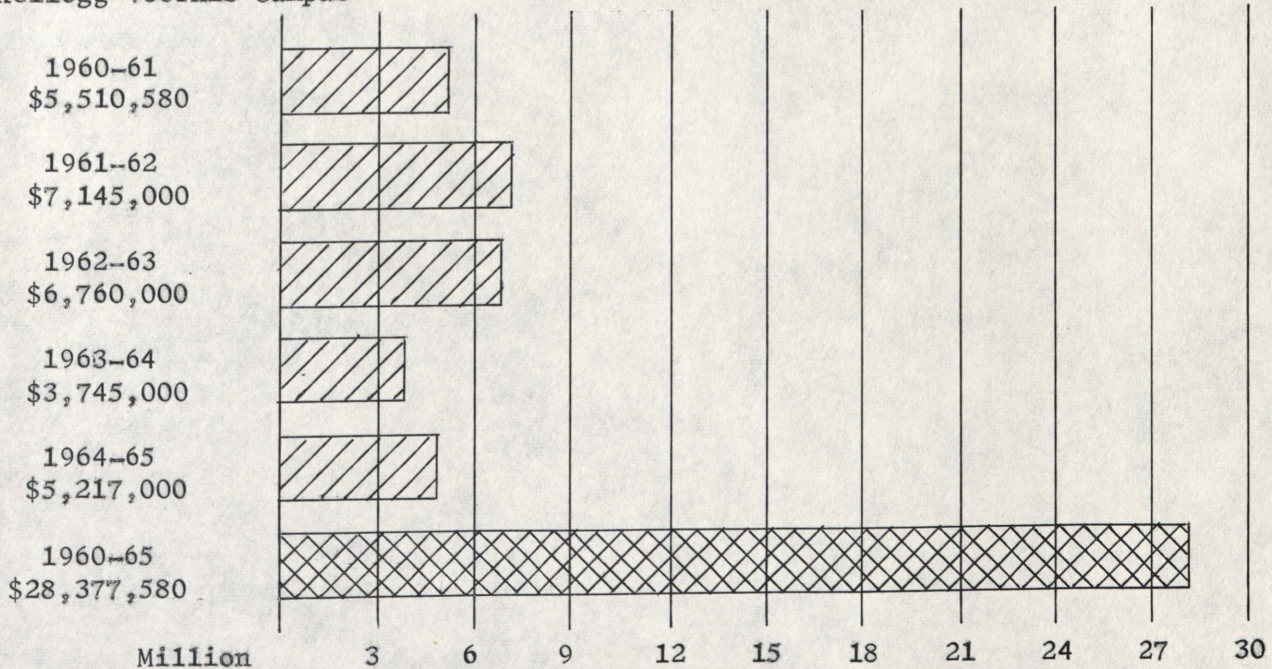


## CAPITAL OUTLAY PROGRAM FOR 1960-65

## San Luis Obispo Campus



## Kellogg-Voorhis Campus



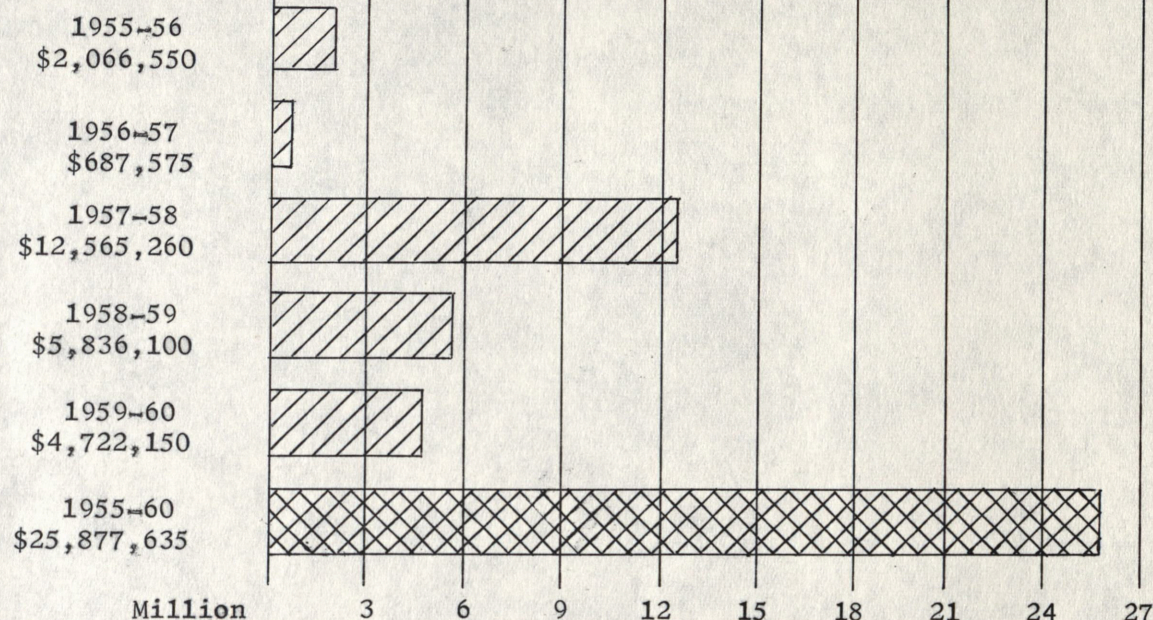
NOTES: (1) Estimate for 1960-61 based on Governor's budget.

(2) Estimates for 1961-62 through 1964-65 based on currently available information.

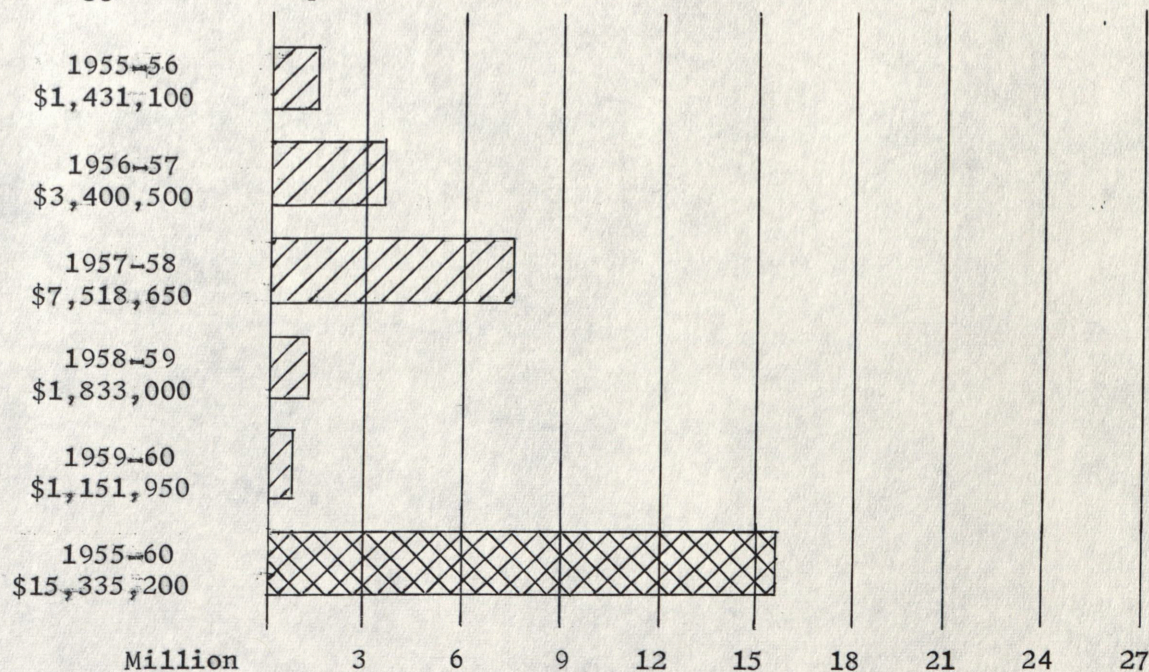


MAJOR CAPITAL OUTLAY APPROPRIATIONS  
For Budget Years 1955-1960

San Luis Obispo Campus



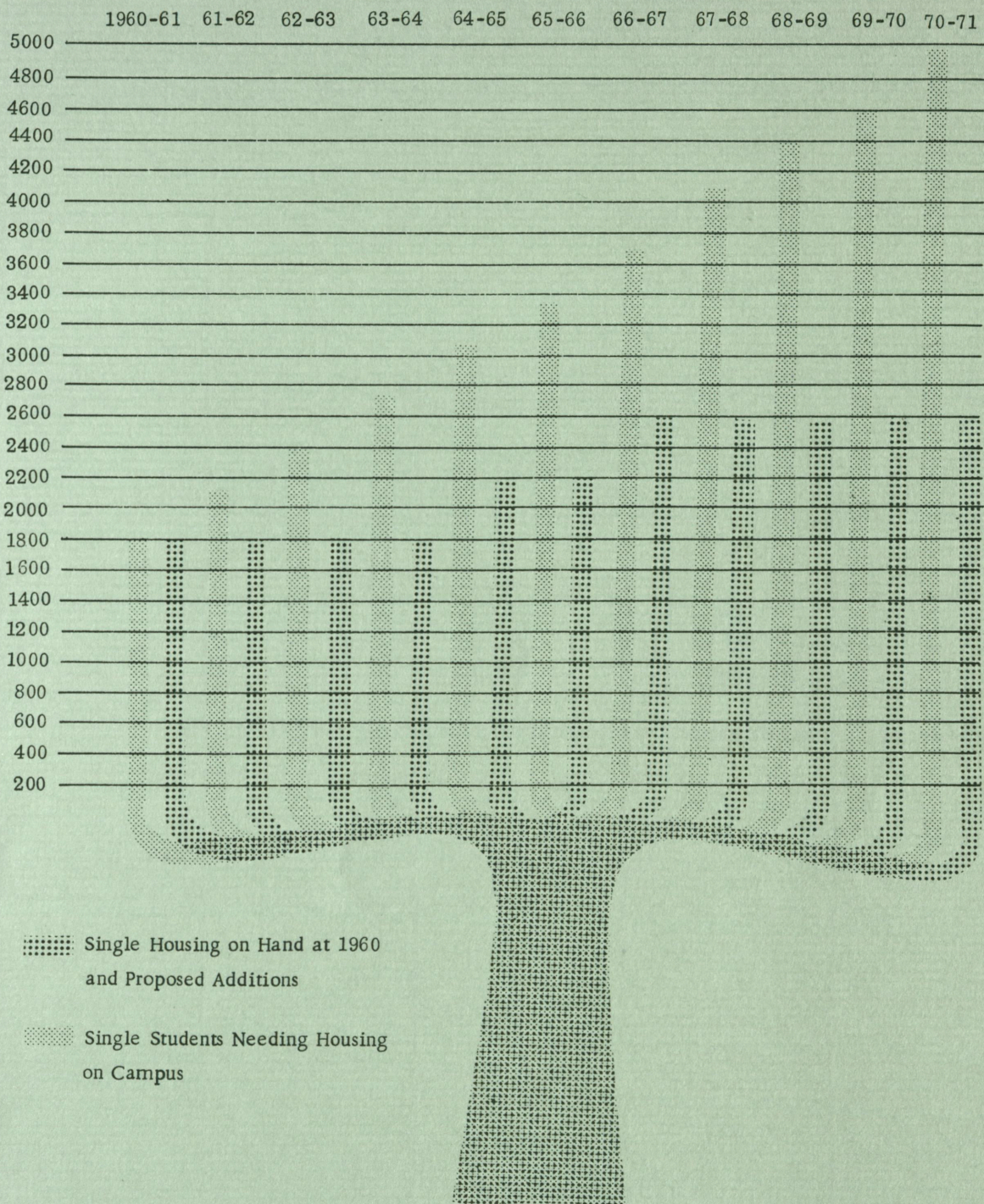
Kellogg-Voorhis Campus



NOTES: (1) Amounts shown are from approved budget bills for years 1955-56 through 1959-60.

(2) Cost includes total amounts appropriated by the Legislature for site development, construction and equipment.





# THE FOUNDATION HOUSING SPECIAL SERVICES



## COLLEGE FOUNDATION

Aid to the instructional and administrative program of the college was provided throughout the year by the California State Polytechnic College Foundation as has been the case since it was organized in 1942 to perform those functions. The aid to the instructional divisions is given through the student project program and the semi-commercial agriculture and engineering enterprises which provide the practical learn-by-doing program pioneered by Cal Poly. The Foundation's aid to the administrative program was in its management of the major functions of the housing and feeding of students.

### Aid to Instruction

At the San Luis Obispo campus 520 students had agricultural projects under Foundation sponsorship last year and earned \$29,599 with them. The number of students and their earnings from projects during the last five years are shown in the report of the Agricultural Division of the San Luis Obispo campus.

At the growing Kellogg-Voorhis campus there were 29 projects involving 101 students under Foundation sponsorship as of March 31. These were distributed as follows: beef 5, swine 7, sheep 6, poultry 4, crops 1, fruit 1, ornamental horticulture 5.

### Housing

#### San Luis Obispo Campus

The Foundation provided on-campus housing for 1197 students including 75 married students and their families during the 1959-60 college year.

The outlook for 1960-61 is that with the opening of six new modern residence halls, which will provide housing for 800 men students and 400 women students, it will be possible to relieve the crowded conditions which have existed in the older permanent halls during recent years. These older halls which have housed 737 students will have their occupancy reduced to house 534. The temporary wooden dormitories will be used only in the event that there are more than 1734 students who desire on-campus housing. Housing for married students, however, will be reduced from 75 units to 45 due to construction of new classroom buildings and roads which will require the destruction of a portion of the existing facilities.

#### Long-Range Housing Needs at San Luis Obispo

The graph which has been reproduced on the division page for this section of this report shows the number of single students estimated to need housing, and the housing that will be available to meet this need over the next decade. The number of single students who will need housing on campus in each year was determined by starting with the projected enrollment figure for that year and then subtracting from it the estimated number of married students and the estimated number of single students who would live off campus. The projected figure of the number of students in each year is that used by the College in its long-range planning and is based on the estimates of college age population in California prepared by experts in the State Department of Finance.



The housing available in each year includes the housing in existence in 1960 plus definitely proposed additional residence halls.

Comparison of the number of single students needing on-campus housing with the housing available, shows that a significant shortage, estimated at 600 spaces, will develop by the 1962-63 college year. The deficit of housing according to these estimates will reach as much as 2360 spaces in 1970 unless additional facilities are planned and constructed.

The following table presents the detailed supporting figures for this long-range on-campus housing study.

YEAR	FTE (Actual Regular)	No. of Married Students*	No. of Actual Single Students	Single Students Living Off-Campus	Single Students Needing On-Campus Housing	Campus Housing on Hand 1960 & Proposed Additions	No. of Spaces Deficient
1960-61	4763	953	3810	2000	1810	1800	10
1961-62	5260	1052	4208	2100	2108	1800	308
1962-63	5750	1150	4600	2200	2400	1800	600
1963-64	6270	1254	5016	2300	2716	1800	916
1964-65	6810	1362	5448	2400	3048	2200	848
1965-66	7300	1460	5840	2500	3340	2200	1140
1966-67	7890	1578	6312	2600	3712	2600	1112
1967-68	8540	1708	6832	2700	4132	2600	1532
1968-69	9000	1800	7200	2800	4400	2600	1800
1969-70	9470	1894	7576	2900	4676	2600	2076
1970-71	9950	1990	7960	3000	4960	2600	2360

\*20% of Actual Regular

#### Kellogg-Voorhis Campus

Housing facilities at the Voorhis campus served approximately 17.2 per cent of the enrollment (275 students) last year. Beginning with the college year 1960-61, the single student housing at the Voorhis campus will no longer be operated for student use. It will be replaced by the two new residence halls for men, with 200 student capacity each, which will be put into service at the Kellogg campus in the fall of 1960.

The new residence halls at both campuses are described in brochures to be found in the pocket inside the back cover of this report.



### Food Service

A major function of the Foundation is the feeding of students and staff. Construction was started this year on a new cafeteria building at San Luis Obispo. On the Kellogg-Voorhis campus cafeteria facilities completed in 1958 are being expanded to care for the ever-increasing enrollment. The feeding of resident students at San Luis Obispo and on the Voorhis campus was the major job of the food service people for the year. Students at San Luis Obispo contract for board for the quarter and are entitled to eighteen meals a week. The students at Voorhis contracted for the evening meal five days a week.

In addition to providing regular food service to Cal Poly students, the Foundation, through its San Luis Obispo cafeteria organization, has served during the 1959-60 college year banquets, barbecues, ranch breakfasts, coffee breaks, luncheons, etc., for 87 organizations engaged in college-sponsored programs on the campus. These occasions involved service to a total of 11,184 individuals.

### SPECIAL SERVICES

Under this heading are classified the programs and services, provided or contributed to by the College, for groups other than the regularly enrolled students at the College.

The College follows the state policy of limiting the use of its facilities by groups which are not a part of the College. However, college facilities are made available for programs consistent with objectives to which the College is dedicated for use by government agencies; non-profit, charitable, educational, or character-building organizations; and by groups or individuals for educational or non-commercial purposes. Any extra costs which are involved in such use of facilities by off-campus groups are borne by the user.

Many groups are making it a tradition to have their annual professional conferences, workshops and other types of in-service programs at one of the campuses of the College. The chart which follows attempts merely to give a sampling of these special services indicative of the scope and importance of this phase of the College's program.

Cal Poly looks upon its participation with such groups as a "two-way street" of service with both parties gaining. The outside groups have the use of facilities, the assistance of professional staff, and other services, while the staff and students of the College profit from the experiences and knowledge gained through association with the visitors.

A statewide cooperative program with the Bureau of Agricultural Education that has been in operation for several years should also be noted in this section. Its function, however, does not lend itself to inclusion on the chart. In answer to requests from agricultural departments of junior colleges and high schools throughout the state, faculty members of the College visit the departments to provide many and varied services of a consultation and demonstration nature. During the past school year, five faculty members of the Agriculture Division of the College made fifty-five different visits under this program.

From examination of the chart which follows, it is significant to note the large percentage of statewide meetings and conferences shown. Cal Poly is the state college with the statewide service area, and it is looking forward to continuing these services.



## SPECIAL SERVICES

Event	Date	Area Served	Approx. # of Participants
California Nurserymen's Refresher Course	June	Statewide	250
California Agriculture Teachers' In-Service Training	June	Statewide	90
Calif. Agriculture Teachers' Assoc. Annual Conference	June	Statewide	400
Soil Conservation Service Management Training Conference	June	Western U.S.	30
Sewage Treatment Plant Operators' Short Course	June	Central Coast	30
Calif. Pipe Trades Council State Apprenticeship Contest	June	Statewide	100
Association of Operating Millers	June	Statewide	250
National Science Foundation Summer Science Program for High School Students	June-July	Statewide	40
* Los Angeles County Farm Bureau Meeting	July	L.A. County and Mexican Guests	125
California Farm Bureau Board of Directors & Staff Institute	July	Statewide	120
Calif. School Lunch In-Service Training Program	July	Statewide	90
National Institute of Farm Brokers Education Conference	July	Statewide	80
Calif. Assoc. of Physical Education, Health, Recreation Workshop	Aug.	Statewide	250
National Leadership Development Conference in Trades & Industrial Education	Aug.	National	60
Science Workshop for San Luis Obispo County Schools	Aug.	Countywide	50
Pacific Coast Football Officials Association Clinic	Sept.	Statewide	50
Future Homemakers of America Regional Conference	Sept.	Central Coast	25
Legislative Committee on State Water Problems	Sept.	Central Coast	50
* Southern Calif. Agricultural Commissioners	Sept.	So. Calif.	12
Boy Scout Den Mothers Workshop	Oct.	Central Coast	100
Calif. Council of American Society of Tool Engineers Conference	Oct.	Statewide	70
American Childhood Education Conference	Oct.	Countywide	50
World Affairs Council Meeting	Oct.	Local	100
National Shade Tree Conference	Oct.	Western U.S.	40
* Southern Calif. Arabian Assoc. Junior Horse Show	Nov.	8 So. Counties	130
International Cooperative Association, Foreign Agriculture Service of U.S.D.A.	Nov.	International	50
American Society of Tool Engineers Conference	Nov.	Central Coast	100
* State Department of Education "Training for Trainers" Workshop	Nov.	Statewide	15
Bank of America Managers and Lending Officers Seminar	Nov.	Statewide	35
Society of Calif. Accountants Tax Conference	Nov.	Central Coast	25
* Sixth Annual Horticultural-Nursery Contest Day	Dec.	Megalopolitan Area	200
Calif. Council of Farm Co-ops and FFA Program	Dec.	Central Coast	30
* Calif. Cutting Horse Association	Dec.	So. Calif. and Arizona	90
* Pest Control Operators of California	Dec.	Statewide	300
Conf. of Calif. Assoc. of Refrigeration Service Engineers' Society	Jan.	Statewide	400
* Nurserymen's Association Meeting	Jan.	L.A. and the Inland Empire chapters	60
* California Agricultural Teachers Assoc. Meeting	Jan.	So. Calif.	100
Calif. Elementary School Administrators' Conference	Feb.	Central Coast	75

\* At Kellogg-Voorhis Campus



Event	Date	Area Served	Approx. # of Participants
* Citrus Practice Judging	Feb.	5 So. Counties	70
San Luis Obispo County Teachers' Education Conference	Mar.	Countywide	100
Industrial Arts & Mathematics Workshop	Mar.	Central Coast	15
* Future Farmer State Championship Citrus Judging Contest	Mar.	8 So. Counties	150
American Association of Physics Teachers	Mar.	Statewide	100
* High School Field Day	Mar.	8 So. Counties	900
* Azusa High School Teachers	Mar.	Azusa	35
California State Grange Youth Conference	Apr.	Statewide	110
* Career Conference Day	Apr.	Pomona Area	200
* Southern Calif. Arabian Assoc. Jr. Horse Show	Apr.	8 So. Counties	210
* Parents' Day	Apr.	Ventura South	300
* Southern Calif. Bank of America Agricultural Appraisers	Apr.	So. Calif.	30
Future Farmers of America (FFA) State Convention & Judging Contest	May	Statewide	1,000
* Landscape Contractors' Association Meeting	May	L.A., Orange & San Bernardino counties	60
Calif. Association of School Administrators	May	Central Coast	30
* Citrus Belt League Technical Workshop	May	L.A., Riverside & San Bernardino counties	300
Calif. Aberdeen Angus Breeders' Assoc. Conference	May	Statewide	400
* Light Horse Management Clinic - Weekly	May-June	So. Calif. & Arizona	350



### Kellogg-Voorhis Campus

The co-curricular activities program seeks to provide first-hand experience in student affairs for all students as a major contribution to their preparation for citizenship and community life.

A laboratory in group activities was offered in each quarter for club and student body officers stressing parliamentary procedure, the conduct of effective meetings, the techniques of leading group discussion and program planning. A leadership conference open to all students was held during the spring quarter at Big Bear Lake.

Highlights of the activity program this year were the following:

"Special Delivery", the associated students' entry in the annual Pasadena Tournament of Roses Parade won first prize in class 4, Educational Institutions, again gaining national publicity for Cal Poly students and the Ornamental Horticulture Department's floriculture program.

This year the Kellogg-Voorhis campus fielded teams in more inter-collegiate sports than ever before--football, basketball, baseball, track, cross country, tennis, golf, swimming and rodeo. In addition, a reorganized intramural program provided activity in touch-football, softball, basketball, volley-ball, shuffleboard, horse-shoes, bowling, miniature golf, tennis, table tennis, and track and field. A scratch and handicap bowling team were entered and competed quite successfully in the newly organized intercollegiate bowling league.

The annual music tour between the winter and spring quarters featured the college glee club and dance band in a variety show performed for the entertainment of eleven high school student bodies in San Bernardino, Los Angeles and Riverside counties.

The Tenth Annual Agricultural Education Field Day held in the winter quarter attracted in excess of 1,000 high school and junior college students to the campus to compete in the agricultural judging and skills week.

The Eighteenth Annual Poly Vue, open house, attracted an estimated 5,000 people to tour the educational displays and visit the campus.

### Counseling Center

#### San Luis Obispo Campus

In keeping with the philosophy of the College, which is primarily of an occupational orientation, the Counseling Center gives first emphasis to the student. Because of the "upside-down" nature of the curricula, the student is required to make decisions concerning his major area of concentration during his freshman year. It thus becomes important to see that his vocational objectives are in harmony with his attitudes and aptitudes at a much earlier time than on other campuses. It is toward this end that the Center strives, attempting to aid the student in arriving at a better understanding of himself so that he may be more adequately prepared to make decisions concerning his future goals. As one major means of facilitating this objective, a close liaison is maintained between the student and the faculty and administration.

The services of the Counseling Center are varied in nature but may be considered to be localized in three general areas: services to the students; to the instructional staff; and to the administration.



### To the Student

The Center is generally concerned with three areas of counseling: vocational, educational, and personal. It is rarely found that a student presents a problem that can be classified under but one of these headings. All areas are usually involved in varying degrees. The average time for counseling clients is 2 hours, with continuing clients, faculty referrals and medical referrals averaging 4 to 5 hours. Students who are withdrawing, changing majors, or are prospective students average about 1 hour. A few isolated cases have continued over a period of months, involving more than 10 hours of the counselor's time. Table I indicates the Center's services to the students during the past year.

Tables II, III, and IV indicate the number of students tested during the past year, as well as the types and numbers of the various tests administered.

### To the Instructional Staff

Services to the faculty include the preparation of individual student folders at the beginning of each academic quarter, as well as test scoring, item analyses and the administration of standardized tests throughout the academic year. By special request, members of the Counseling staff also participate in various workshops, orientations and lecture series. They are also represented in staff consultations regarding curriculum planning.

### To the Administration

As a means of maintaining and furthering the professional attitudes of the Counseling Center staff and other personnel, a series of in-service training programs is carried on during the academic year. Assistance on special projects, e.g., aiding in the selection of residence hall managers, is also available. When requested, staff members are also available for consultation with divisional representatives.

A close functional relationship is maintained at all times with the College Health Center. Bi-monthly luncheon meetings afford the opportunity for an exchange of data and notes of progress in each area.

### Other Services

The IBM scoring machine in the Counseling Center is also made available to the various junior and senior high schools in the area. By request, testing for various industrial firms is also carried out. Tables II, III, and IV reflect this information, as well as the testing carried out as a means of assisting the prospective college student.



Following is a tabular representation of the various services performed by the Counseling Center for the fiscal year 1959-60:

TABLE I COUNSELING SERVICES TO STUDENTS

MONTH	SELF REFERRAL NEW	SELF REFERRAL CONT.	FACULTY REFRAL.	MEDICAL REFRAL.	WITH- DRWL	CHG. MAJ.	PROSPC- TIVE	TOTAL
July <sup>1</sup>	-	-	-	-	-	-	-	-
Aug.	3	-	3	-	-	-	-	6
Sept.	24	3	5	0	6	3	1	42
Oct.	167	0	0	0	37	-	0	204
Nov.	245	0	6	1	25	-	0	277
Dec.	137	0	14	1	82	-	0	234
Jan.	124	20	20	0	66	-	0	230
Feb.	70	64	16	0	41	-	0	191
Mar.	36	46	9	1	105	19	8	224
Apr.	100*	30*	30*	0	30*	15*	5*	210*
May	150*	50*	20*	0	40*	25*	5*	290*
June	20*	0	0	0	10*	0	2*	32*
TOTAL	1076	213	123	3	442	62	21	1940

<sup>1</sup> Data incomplete indicated by "-"

\* Data for April, May and June are projected figures

TABLE II NUMBER OF STUDENTS TESTED PER MONTH<sup>1</sup>

MONTH	COUNSEL- ING RFRL.	INSTRCTRL RFRL.	PROSPCTV STUDENTS	INDUST. RFRL.	ENTRANCE TESTING	SPECIAL TESTING	TOTAL
July <sup>1</sup>	-	1	-	-	-	-	-
Aug.	-	-	-	-	-	-	-
Sept.	-	-	1	-	1472	100	1573
Oct.	62	16	5	0	0	17	100
Nov.	38	1	1	1	1	18	60
Dec.	47	1	1	0	0	29	78
Jan.	12	5	8	5	127	30	187
Feb.	40	7	16	4	3	5	75
Mar.	37	15	3	10	167	20	252
Apr.*	30	15	5	5	5	10	70
May*	40	15	5	5	5	10	80
June*	20	5	10	5	250	30	320
TOTAL	326	80	55	35	2030	269	2795

<sup>1</sup> Data incomplete indicated by "-"

\* Data for April, May and June are projected figures



Following is a tabular representation of the various services performed by the Counseling Center for the fiscal year 1959-60:

TABLE I COUNSELING SERVICES TO STUDENTS

MONTH	SELF REFERRAL		FACULTY REFRAL.	MEDICAL REFRAL.	WITH- DRWL	CHG. MAJ.	PROSPC- TIVE	TOTAL
	NEW	CONT.						
July <sup>1</sup>	-	-	-	-	-	-	-	-
Aug.	3	-	3	-	-	-	-	6
Sept.	24	3	5	0	6	3	1	42
Oct.	167	0	0	0	37	-	0	204
Nov.	245	0	6	1	25	-	0	277
Dec.	137	0	14	1	82	-	0	234
Jan.	124	20	20	0	66	-	0	230
Feb.	70	64	16	0	41	-	0	191
Mar.	36	46	9	1	105	19	8	224
Apr.	100*	30*	30*	0	30*	15*	5*	210*
May	150*	50*	20*	0	40*	25*	5*	290*
June	20*	0	0	0	10*	0	2*	32*
TOTAL	1076	213	123	3	442	62	21	1940

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July <sup>1</sup>	-	1	-	-	-	-	-
Aug.	-	-	-	-	-	-	-
Sept.	-	-	1	-	1472	100	1573
Oct.	62	16	5	0	0	17	100
Nov.	38	1	1	1	1	18	60
Dec.	47	1	1	0	0	29	78
Jan.	12	5	8	5	127	30	187
Feb.	40	7	16	4	3	5	75
Mar.	37	15	3	10	167	20	252
Apr.*	30	15	5	5	5	10	70
May*	40	15	5	5	5	10	80
June*	20	5	10	5	250	30	320
TOTAL	326	80	55	35	2030	269	2795

<sup>1</sup> Data incomplete indicated by "-"

\* Data for April, May and June are projected figures



TABLE III NUMBER AND TYPES OF TESTS GIVEN - EXCLUDING  
ENTRANCE TESTING

MONTH	APTITUDE	ACHIEVE- MENT	VOCA- TIONAL	PERSON- ALITY	SPECIAL APTITUDE	INDIVIDUAL TESTS	TOTAL
July <sup>1</sup>	-	-	-	-	-	-	-
Aug.	-	-	-	-	-	-	-
Sept.	-	-	-	-	-	-	-
Oct.	29	62	47	3	13	3	157
Nov.	26	23	60	9	0	4	122
Dec.	34	26	39	2	1	2	104
Jan.	17	12	24	5	0	0	58
Feb.	35	14	46	15	1	2	113
Mar.	22	52	35	15	0	1	125
Apr.*	25	80	20	10	5	5	145
May*	35	50	30	10	2	2	129
June*	<u>25</u>	<u>15</u>	<u>15</u>	<u>5</u>	<u>2</u>	<u>2</u>	<u>64</u>
TOTAL	248	334	316	74	24	21	1017

<sup>1</sup> Data incomplete indicated by "-"

\* Data for April, May and June are projected figures

TABLE IV NUMBER AND TYPES OF TESTS GIVEN - INCLUDING ENTRANCE TESTS

MONTH	APTITUDE	ACHIEVE- MENT	VOCA- TIONAL	PERSON- ALITY	SPECIAL APTITUDE	INDIVIDUAL TESTS	TOTAL
July <sup>1</sup>	-	-	-	-	-	-	-
Aug.	-	-	-	-	-	-	-
Sept.	1472	2944	1472	-	-	-	5888
Oct.	29	62	47	3	12	3	157
Nov.	27	25	61	9	0	4	126
Dec.	34	26	39	2	1	2	104
Jan.	144	266	151	5	0	0	566
Feb.	38	20	49	15	1	2	125
Mar.	189	306	202	15	0	1	713
Apr.*	30	90	25	10	5	5	165
May*	35	60	35	10	2	2	144
June*	<u>275</u>	<u>515</u>	<u>265</u>	<u>5</u>	<u>2</u>	<u>2</u>	<u>1064</u>
TOTAL	2273	4314	2346	74	25	19	9052

<sup>1</sup> Data incomplete indicated by "-"

\* Data for April, May and June are projected figures



## Guidance Center

### Kellogg-Voorhis Campus

The Guidance Center supplies counseling, testing and vocational information. In counseling, questions dealing with serious personal problems usually are referred to appropriate agencies on or off campus. The central focus of the counseling service is on the academic advisory system with which it works closely. Counseling seeks to help students to work out problems through a program of coordinating all aspects of the student's campus life with his academic-vocational workload. The Guidance Center serves as the coordinating agency and provides the technical services of selecting appropriate test portfolios for counselees, gathering the necessary test data, and interpreting these data to department advisers and/or students.

Some 3,000 tests have been administered by the Guidance Center during the year, including academic aptitude and subject matter placement tests given to all entering students in addition to the individual interest inventories, personality tests and vocational guidance surveys administered to students who sought assistance from the Center. Services to instructional departments have been developed into such areas as reading speed and comprehension testing in the English composition classes. Similar services have been provided for accounting and landscape architecture. The results have been a more realistic appraisal of the problem of teaching communications skills. Not to be overlooked, however, is the increase in traffic in the counseling offices regarding change of major, personal problems, vocational choices and the like.

A long-needed occupational library has been established as part of the Guidance Center influence in Student Personnel. This aspect of the service is related to the placement service so that students going into the labor market, as well as those adjusting their occupational choices, will have the advantage of the available literature.

### Student Health Service

#### San Luis Obispo

The purpose of the Student Health Service is to protect and maintain the health of the student during his stay at this college with the same understanding and interest and scope of care provided by the student's family physician at home. On admission to the college, the student is given a complete health examination including laboratory tests, X-ray of the chest, evaluation of his hearing acuity by audiogram, looking for unusual findings which may influence the student's welfare, either while he is a student or in later life. All students routinely receive influenza and tetanus toxoid vaccinations.

In October, 1959, the Health Service moved into a new building housing clinic facilities for six full-time physicians and an infirmary of twenty-four regular and six isolation beds. There has been no great change in the scope of service since moving into the new building, but the service in several areas has been improved. The health center now has a licensed pharmacy under the direction of a registered pharmacist; the physical therapy department is staffed with a half-time registered physical therapist; as a result, the efficiency in this area of our service has shown remarkable improvement.

When the college is regularly in session, a registered nurse is on duty 24 hours a day and a physician is on call at all times. With more adequate facilities, our workloads in both the clinic and infirmary have increased. A diet table has been established for those students requiring a special diet and we currently have 14 out-patient students eating medically prescribed special diets in the health center dining room. The environmental sanitation and safety program on the campus is constantly being altered and adjusted to meet the needs of our rapidly expanding campus. Some 200 students are hospitalized in the infirmary for an average stay of  $3\frac{1}{2}$  days. Some 30,000 visits are made to the clinic each year.



### Kellogg-Voorhis Campus

The purpose of the Student Health Service is to build up and maintain the health of the student during his stay at the college, so that he may receive the most benefit possible from his educational program.

On admission, the student is given a general health examination. Any findings which may influence the student's welfare, either while here at college or in later life, are carefully investigated and steps are taken to help such problems. A fair percentage of students here have or develop problems needing further investigation and care, such as visual difficulties or hearing problems.

More than 5,000 student visits were made to the clinic last year. Services given included referral to family physicians, plus diagnostic services, clinical laboratory services, physiotherapy, and counseling. All students are advised of the benefits of continuing the routine immunization programs (tetanus, smallpox, polio, etc.) and are offered these services.

The student is encouraged to seek care as soon as he becomes ill or injured. The Health Service places emphasis on prevention of illness and accidents. The Student Health Service has the same understanding and interest as would the student's family physician.

Student Health Service is responsible for environmental sanitation on the campus. Sanitary inspections are made of food preparation and eating areas. Inspection of dormitories is made with the idea in mind of prevention of accidents and illnesses.

Students are encouraged to carry health and accident insurance, either on their own or through the student group insurance program offered at the college.

It is the desire of the Student Health Service to avoid loss of school time, prevent injury and illness, and to work with the student's family physician.

### Placement Office

#### San Luis Obispo Campus

#### Employment Interviews on Campus

A summary of interviewing activities of employing organizations visiting the Cal Poly campus during the regular recruiting period follows:

	<u>Actual</u> <u>1955-56</u>	<u>Actual</u> <u>1956-57</u>	<u>Actual</u> <u>1957-58</u>	<u>Actual</u> <u>1958-59</u>	<u>Estimate</u> <u>1959-60</u>
No. of students contacted through regular interview schedules	1913	3526	4513	4694	4218
No. of campus recruitment visits by employing organizations	211	243	213	278	316
No. of employing organizations for whom interview schedules were made	108	170	147	181	165
No. of employers organizations' representatives who conducted interviews	215	413	309	417	479



This year during the height of the recruiting season the number of students contacted on campus by prospective employers again was higher than in previous years:

	<u>Monthly Average, October-March</u>		
	<u>1957-58</u>	<u>1958-59</u>	<u>1959-60</u>
Number of students contacted	533	706	755
Campus recruitment visits by employers	24	38	57
Number of employers for whom interviews were arranged	21	24	30

#### Part-Time Employment

Between September 1, 1959 and March 22, 1960, 574 part-time job listings were filled; 15,011 students visited the Placement Office; and 314 interview room days were scheduled.

#### Teacher Placement

The Placement Office compiles and maintains a placement folder for each student completing the Teacher-Training program. A summary of teacher placement activity follows:

	<u>Actual</u> <u>*1956-57</u>	<u>Actual</u> <u>*1957-58</u>	<u>Actual</u> <u>1958-59</u>	<u>Estimate</u> <u>1959-60</u>
Teachers and teacher candidates using services of the Placement Office	91	112	160	195
Number of confidential folders mailed to school officials	168	278	394	430

\* Until 1958-59, Vocational Agriculture teacher placement was handled 100 per cent by the Bureau.

#### Student-Alumni Placement

##### Kellogg-Voorhis Campus

The Student-Alumni Placement Center which operated previously with only part-time staff began operations in September of 1959 with a full-time Placement Supervisor and a .5 time Placement Officer. With the first class of engineers in disciplines of electronics, mechanical and industrial planned for June, 1960, coupled with initial graduates in the areas of business and accounting, emphasis has been maintained on the function of recruiting and arranging individual interviews for these graduates. In many cases interviews were arranged for students in agricultural majors in the same manner as for the engineers and business graduates.

Along with the recruiting activities, the staff developed commercial literature displays, cooperating with the Counseling Department; set up an on-campus survey of employment; instituted Supervisor reports for eventual inclusion in career placement records; actively participated in the meetings of professional associations involved with personnel and placement activities in Southern California; placed students in both on-campus and off-campus part-time jobs; lectured in senior seminar groups on placement activities, preparing letters of introduction and data sheets; and maintained a regular visitation and personal calls upon businessmen in the Los Angeles area who are interested in employing Cal Poly graduates.

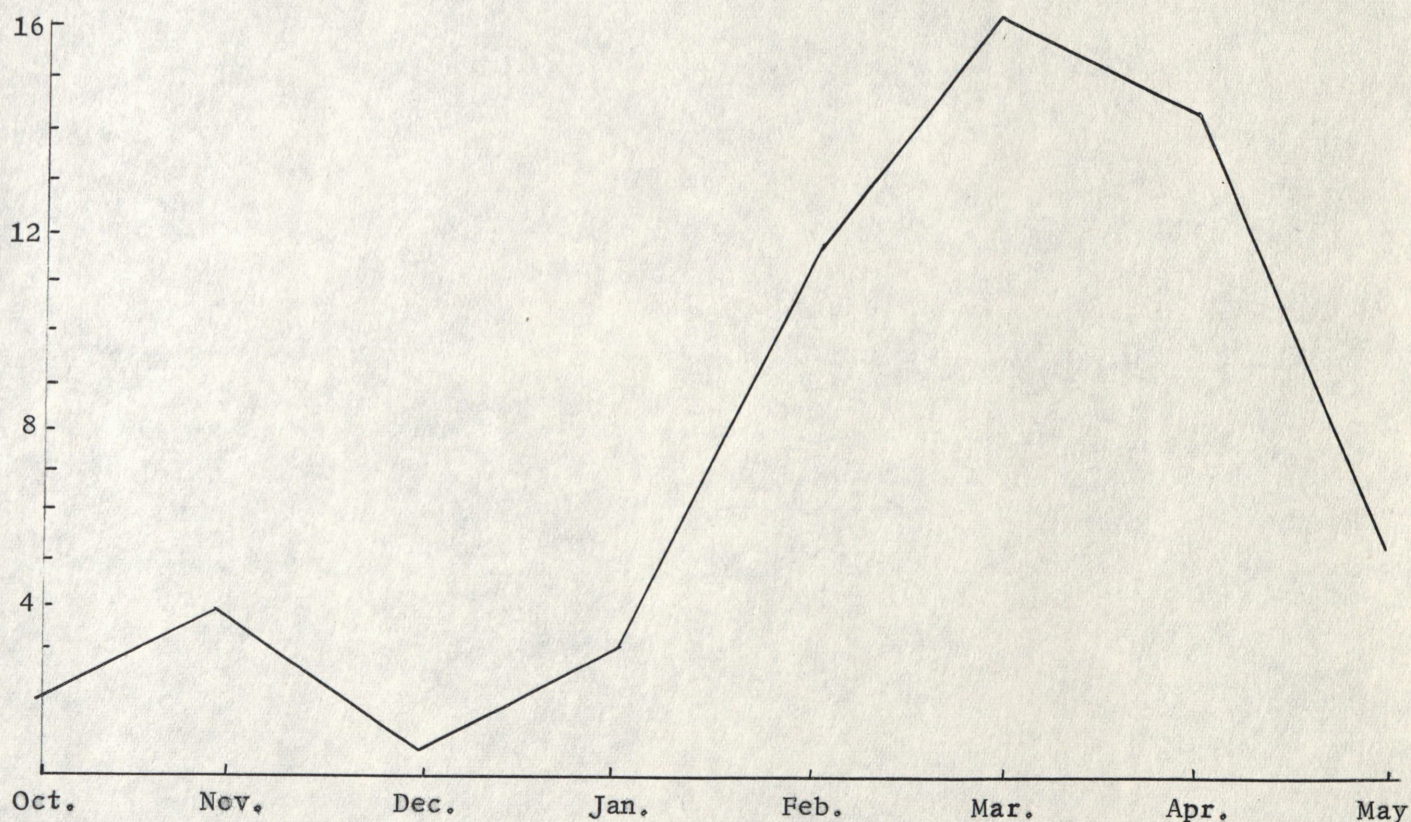


### Placement Interviewing

Forty-nine individual firms scheduled interview dates on the Kellogg campus for initial screening of graduating seniors during the school year 1959-60. Four hundred and seventy individual interviews were conducted by firms in Engineering, Business and Agriculture for an average of nearly eighty interviews per month during the period October through April, excluding Christmas vacation. Comparison of this figure against the graduating number of approximately 135 seniors would indicate interviews at the rate of 3.45 per graduating student held on campus.

Due to the full-time operation of the Placement Office beginning in September of 1959, invitations to firms for scheduled visits were late, since the majority of firms receive invitations from colleges in late Spring for the following year which would account for the light acceptance for the Fall quarter wherein only seven firms were on campus.

The following chart indicates the frequencies of on-campus visits by months:



### Starting Salary Survey - Kellogg Campus

#### Degree

#### National Average Estimates\*

Electronics	\$515 - 550	\$515
Mechanical	500 - 525	515
Industrial	485 - 525	515
Agriculture	400 - 450	-
Business	400 - 450	424
Accounting	425 - 485	450
Physics - Math	525 - 575	515

\* Northwestern University survey



### Part-Time Work

During the Fall quarter some 275 students were interviewed and registered through the Placement Office for part-time employment. Of these it is estimated that 30 per cent received direct assistance from the office in finding suitable employment. During the Winter quarter 145 students applied for work, and in the Spring 93 registered for assistance. In each case the student was interviewed with regard to his interest in either on-campus or off-campus work.

On-Campus: A system of coordination of hiring for on-campus jobs was instituted for the first time this year and meetings were held with supervisors for a better understanding of wage rates, use of student assistants, and hiring policies. Nearly 200 on-campus jobs were registered with the Placement Office excluding student readers and department assistants. Basic to the on-campus employment was the filing of cards on individual jobs by the various supervisors, who then looked to the Placement Office when making changes in personnel. Through this means a central clearing house for all students seeking campus employment was developed.

Integration of the supervisor reports on a monthly basis regarding the students employees' performance has been started this year and it is hoped that this will provide excellent work history references for men who work largely on campus during their school years. Employers constantly indicate their interest in men who have had actual working experience and who have developed good work habits. Through this system it is expected the Placement Office can assist students in developing solid employment records for use upon graduation.

Off-Campus: To develop greater numbers of jobs for Cal Poly students off campus in an area populated with seven colleges nearby, the Placement staff sent out letters and handy reference telephone cards to all previous employers of Cal Poly students along with a selected list of 60 additional firms. A response to this mail campaign of nearly 10 per cent indicated the value of the effort.

In conjunction with the mail campaign, personal visits were made by the Placement Supervisor and the Placement Officer to firms in the nearby area. In addition advertisements were placed in local papers indicating the techniques, skills and availability of technically trained undergraduate students at Cal Poly.

### Women Students

Of the total number of students registered for the Fall quarter, 1959, at the San Luis Obispo campus, 569 were women. They constituted more than 13 per cent of the student body and were enrolled in all divisions of the College, the heaviest concentration being in Arts and Sciences.

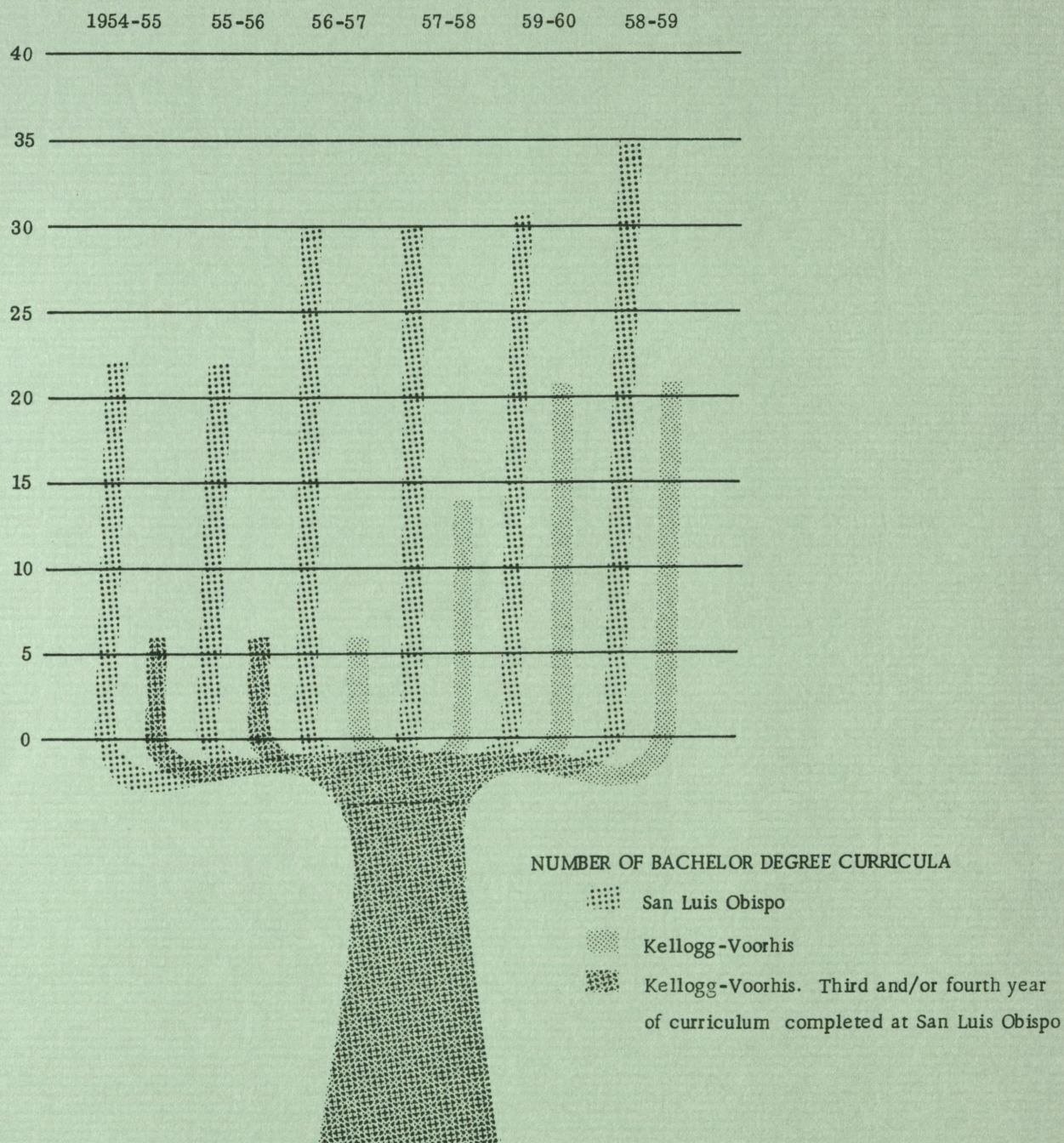
Approximately one half of the coeds lived in campus or "approved" off-campus residences. The latter consisted of homes in the community which were supervised by adults, and in which college social regulations were enforced.

The Home Economics Club supported its annual Big and Little Sister program, and the Women's Residence Association expanded its activities to include a tea for new women in September and a tea for senior women in May.

The year 1959-60 saw a new women's honorary service fraternity obtain its charter. Cardinal Key, sister organization to Blue Key, was installed with 25 charter members.

Academically, women again competed favorably with men students. The three women's residence halls remained in their former position of being among the top halls on the campus in reference to overall grade point average.





# INSTRUCTION

OBJECTIVES & PHILOSOPHY

NEW CURRICULA LIBRARY

THE DIVISIONS: AGRICULTURE

ENGINEERING

ARTS & SCIENCES



## OBJECTIVES AND PHILOSOPHY

The distinctive function and philosophy of California State Polytechnic College and the manner in which these are reflected in curricular patterns, selection of staff, co-curricular program and other campus activities have been concentrated in the "Cal Poly Profile" developed during this past year. The "Profile" is reproduced on the following page.



# CAL POLY PROFILE

**C**ALIFORNIA STATE POLYTECHNIC COLLEGE, part of the State's public system of higher education, is an accredited degree-granting, tax-supported institution with its own statutory identity.

When the Legislature established Cal Poly in 1901, it recognized the permanent need for diversified educational opportunities and a differentiation of functions between institutions. It described Cal Poly's specialized function in Education Code Section 24751. The essence of this specialized function is:

To provide to young men and women occupationally-centered educational opportunities in agriculture, mechanics, engineering, business, home economics and in other branches of the practical arts and applied sciences. The Act provides that it be "liberally construed" to the end that Cal Poly may at all times contribute to the industrial and agricultural welfare of the State.

This direction given by the Legislature guides Cal Poly in developing and maintaining educational programs which prepare students to meet both present and future requirements of specific occupations in production, supervision, management, product design and development, sales, services, teaching and similar areas. Decisions affecting curricula, facilities, methods, teachers and students are based generally on continuing close contact with both small- and large-scale agriculture, business and industry throughout the state.

*In implementing this direction:*

- Cal Poly's curricular pattern requires a student to select his major occupational field as a freshman. Basic job-getting technical and exploratory courses are stressed during his first two years. Increasing proportions of general education and supporting courses are required in the last two years. (This curriculum pattern has come to be known as Cal Poly's "upside-down" plan.)
- Cal Poly's instructional philosophy emphasizes laboratory and field work with constant interplay between general principles and practical applications. (This emphasis is often termed Cal

Poly's "learn-by-doing" philosophy.) Whenever possible, a project system is utilized to give actual managerial experience on a semi-commercial basis for individual students or groups of students with financing available through a non-profit Foundation corporation. (This is often termed Cal Poly's "earn-while-learning" program.)

- Cal Poly conducts studies and investigations which apply and expand the results of pure or fundamental research developed by the University and kindred institutions insofar as such projects are at the level of and are of special application or benefit to the College's instructional program.
- Cal Poly's faculty members are expected to be academically competent, pedagogically able, occupationally oriented, and successfully experienced in a practicing field directly related to their teaching assignment.
- Cal Poly's specialized facilities and staff are utilized in such extension and continuing education programs as will best serve specifically identified adult needs within the functional framework of the College's philosophies and methods. On-campus programs that do not interfere with the College's regular instructional program receive greatest emphasis.
- Cal Poly's co-curricular resident-campus program is purposefully and closely interwoven with the instructional areas to supply supplementary training and experience in leadership and constructive community living.

The whole of Cal Poly's instructional plan adds "know-how" to "know-why." It encourages close student-teacher relationships during and after college. It promotes respect for both planning and labor and provides effective campus-to-job transitions. Whereas some colleges gain repute through joint and individual research efforts of their faculty members, Cal Poly gains its reputation from the success of its graduates weighed in terms of the total contribution made by these occupationally-trained men and women to the welfare of the State and Nation.



## INSTRUCTIONAL DEVELOPMENTS

New CurriculaSan Luis Obispo

In addition to the major programs in Food Processing and Metallurgical Engineering which were introduced in the Fall Quarter, 1959-60, and described in the 1958-59 Annual Report of the California State Polytechnic College, new programs in Agricultural Business Management and in Business also were introduced.

Agricultural Business Management. This curriculum is designed to prepare students for employment in agricultural businesses and government agencies serving the farmer.

In contrast to the self-sufficient farm owner of 100 years ago, the modern farmer is primarily a specialist who confines his operations largely to producing crops and livestock. He depends upon farm related businesses for fertilizer, insecticides, machinery and equipment, commercial feeds, capital and other production supplies. At the same time, he relies heavily on off-farm businesses for processing and merchandising his products. He uses more commercial and public agency advisory and informational services.

As a result of such trends, excellent career opportunities are available for those who are trained in the business principles and procedures necessary for organizing, managing and representing the expanding farm related businesses and industries.

While the Agricultural Business Management curriculum is based upon a firm foundation in production agriculture, the program brings together both the agricultural and business training required for success in farm related business careers.

Students majoring in Agricultural Business Management have the opportunity of selecting electives to obtain a broad background in agriculture or technical skills in specialized agricultural fields according to their interests and needs.

The curriculum emphasizes the "learn by doing" method pioneered at the college level by Cal Poly with students taking part in many learning activities involved in the production, processing and merchandising of crops and livestock from Cal Poly's 3,000 acre ranch campus. The program is described in greater detail in a brochure which will be found in the pocket inside the back cover of this report.

Business. The Business program prepares students for employment in the administrative and technical functions of both small and large business. The training, first of all, provides an opportunity for employment in the business community. Specialized course work is designed to shorten the essential period of apprenticeship all executives must serve. Correlated theory and practice are provided early in the program so that the student will know the why and how of business operation.

The program provides courses in general education together with a core of basic business courses upon which to build a specialized field of business. These specializations, which are worked out in conjunction with the adviser, are in the following fields: Accounting, General Business, Sales and Sales Management, and Labor and Management Relations.

The opportunity afforded the student in the Business program is unique in that the offerings of the Agricultural and Engineering Divisions are available to the student. This course work, together with the foundations in business, will provide a background of training which will permit the student to go into the field of his choice. The new major in business is described more completely in the brochure which will be found in the pocket inside the back cover of this report.



### Kellogg-Voorhis

The fourth year of a number of major curricula were introduced in the Fall Quarter, 1959-60. Each of these showed enrollment increases as given in the following table:

	<u>Enrollment</u>		<u>% Increase</u>
	1958-59	1959-60	
Aeronautical Engineering	42	84	100
Electronic Engineering	233	384	65
Industrial Engineering	41	64	56
Mechanical Engineering	116	164	41
Accounting	12	32	167
Business Administration	66	125	90
Marketing and Sales	4	19	375
Mathematics	19	51	168
Physical Education	57	81	42
Physical Sciences	14	32	129
Social Sciences	21	37	76

### Accreditation

The effectiveness of the College program was re-affirmed when it was granted re-accreditation by the Western College Association and the State Board of Education. Accreditation teams representing both of these organizations visited the College in January, 1960. Included in the approved credential programs was the new "Special Secondary Credential in Homemaking Education."

### General Education Study

A college-wide study of the general education requirements in the Cal Poly curricula is currently in progress. This is being undertaken in view of the number of curricula and courses which have been added since the last similar study.

Five subject-matter committees on each campus will report to their respective campus-wide committee recommendations on purposes and objectives of general education at Cal Poly together with lists of approved courses which can be used to satisfy the general education requirements as set forth in the Administrative Code, Title 5.

The campus-wide committees will make their recommendations to a college-wide committee which is expected to complete final action by February 1, 1961.



## L I B R A R Y

### San Luis Obispo Campus

The College Library has continued its steady growth. The addition in the past year of almost 10,000 items has brought the library's reference collections to slightly over 81,000, of which 60,000 are included in its main catalogued book collection, with the remainder consisting of curriculum library materials separately catalogued and indexed, bound periodicals and documents, and other uncatalogued materials. Annual periodical subscriptions totalled 793, an increase of 34 as compared with the preceding year.

The curriculum library includes 5,855 items, of which 1,463 are in the field of children's literature, 2,795 are textbooks and the remainder are courses of study and teaching aids. There was an increase of almost 2,400 items in the curriculum library during the year.

As in the preceding year, circulation showed an increase which amounted in this instance to over 19 per cent. The total circulation was 123,612.

The library use has increased markedly during the past two years as is indicated in the five-year study of library use which follows:

#### Library Use Statistics

CIRCULATION:	Faculty	Students	Reserve	Total
1954-55	6,979	22,761	42,352	72,092
1955-56	7,043	27,591	44,266	78,900
1956-57	6,735	32,952	43,691	83,378
1957-58	7,618	40,273	51,803	99,694
1958-59	8,973	45,363	69,276	123,612

As in the past nine years, the program of formal instruction in use of the library has been determined by the requests of faculty members for the library staff to present classes in library methods. During the past year such library instruction material was presented to 40 classes with a total of 879 students. Of these 40 classes, 26 were in the English Department and the instruction was followed in regular course work by assigned problems in the use of the library as a reference source. Five of the classes were for graduates and senior project groups.

### Kellogg-Voorhis Campus

Library services were moved into the new building in July, 1959. Students and staff members registered a favorable reaction toward the building's new and pleasant surroundings.

The process of reclassifying the catalogued library collections from the Dewey Decimal Classification to the Library of Congress Classification, begun in 1958, was completed. The expected advantages of the change, easier use of the book collection by students and easier processing by the library staff, were realized.

During the year 4,493 books, 701 bound periodical volumes, 54 microfilm reels, and 83 phonograph records were added. Thus, the major collections included 19,694 bound volumes, 659 microfilm reels, and 233 phonograph records. Periodical subscriptions received totalled 544.

New services offered by the library during the year included a browsing section, the provision of coin typewriters, and the addition of a phonograph record collection with players.



## AGRICULTURE DIVISION

### San Luis Obispo Campus

Enrollment in the Agriculture Division for the year 1959-60 shows an increase of  $12\frac{1}{2}$  per cent over that of 1958-59. Most of the increase was in the Animal Husbandry, Agricultural Business Management and Farm Management departments. The growth of demands for agricultural trained graduates in related business fields has greatly stimulated student interest. These related positions can be found not only in processing, sales and servicing of agricultural products, but also in management, banking, agricultural engineering, soils and fertilizers and food distribution.

The Agricultural Division continues to develop the basic educational philosophy which stresses production techniques, management skills and related agricultural business enterprises; it also requires a basic core of related sciences, production courses of the major curriculum, and a substantial block of general education subjects necessary to prepare students to take their rightful place in a democratic society.

### Agriculture Building

The Agriculture Building was occupied in September after a considerable rush to secure equipment by the date classes started. The faculty and students are particularly proud of the building and the outstanding equipment that has been provided by the State of California for their respective instructional programs. It has allowed many of the instructors to revise their courses to include recent changes in industry. New equipment has brought them up to date in their course offerings. Ten laboratories are used by the Animal Husbandry, Dairy Husbandry, Ornamental Horticulture, Crops, and Farm Management departments. Agricultural Business Management, Animal Husbandry, Dairy Husbandry, Dairy Manufacturing, Field, Truck, and Fruit Crops, Farm Management, Poultry, and Ornamental Horticulture departments have offices in the Agriculture Building.

### Foreign Student Program

The Agriculture Division is continuing its contract with the International Cooperation Administration whereby the State is reimbursed for training activities involving 121 students from 25 countries in many phases involving technical agriculture training at the college. These students range from single students pursuing four-year training to groups of fifteen students requiring a few days specific training. Cal Poly is the only non-Land Grant college participating in this training and Dean Vard Shepard has coordinated this activity as official contact officer for the ICA program.

In addition, three special communications courses are offered, each of one week duration during the early part of the summer. Cal Poly started this program two years ago as a pilot study and is now continuing on a regular basis.

### Project Operations

Cal Poly's different philosophy of education is generally identified by the project program opportunities available to students whereby they have the opportunity of carrying on productive projects as a supplement to their regular curricular program. It should be emphasized that the conduct of such projects not only offers "learn by doing" experience to the students engaged in the project but also provides instructional material for other courses. Project animals are used for many events including the State Finals FFA Judging Contest.



In the past year 520 students received project experience, receiving \$29,599 as their share of the project operations. During the past ten years, students have earned over \$225,000 in their project program. A breakdown by department is as follows:

DEPARTMENT	1958-59 NO. OF STUDENTS	TOTAL 5 YRS. 1954-59	1958-59 MONEY	TOTAL 5 YRS. 1954-59
Dairy	34	194	\$13,730	\$ 35,509
Beef	142	841	6,508	29,686
Swine	78	476	1,295	7,440
Sheep	64	361	1,251	5,198
Poultry	43	241	3,509	21,616
Ornamental Horticulture	25	160	1,291	6,519
Crops	64	293	2,015	9,001
Horses	70			

During the past year students in the Animal Husbandry Department have won many championships with their project livestock: grand champion pen of fat lambs at the State Fair, Sacramento; open division champion steer and reserve grand champion steer at Pomona; also grand champion fat lamb and reserve grand champion fat hog. Reserve champion Angus steer and champion pen of three steers and reserve grand champion carload of steers at Cow Palace in San Francisco; grand champion steer and grand champion carload of steers at Great Western in Los Angeles. All three breed champions in the Great Western open division were shown by Cal Poly students.

The Animal Husbandry Livestock Judging teams won the collegiate judging contests at Pacific International, Portland, Oregon, and at the Cow Palace in San Francisco.

The Dairy Department continued to improve the classification records and herd tests. The official Holstein classification of 84.1 for the herd, ranks the Cal Poly herd very high in Western U. S. One Holstein two-year-old heifer completed a year test with 878 pounds of fat, second high for two time milked in the U. S. The official Holstein H.I.R. test record on the herd set a new high of an average of 17,050 pounds of milk and 664 pounds of butter fat per cow on two time milking.

The Ornamental Horticulture Department has continued to develop work in floriculture. Student interest has increased enrollment in this area.

The Soils Department is working with range fertilization field trials to develop methods and rate of application of fertilizer to improve native forage. Over 200 students have carried out soils tests and fertilizer trials with soil samples from their home ranches.

The Farm Management Department has made enterprise cost studies on the dairy herd, poultry operation, sheep department, and beef herd and swine operations at Cal Poly.

The Agricultural Division will extend its field operations next year with the addition of 300 leased acres of irrigable crop land and 500 leased acres of range land at Camp San Luis Obispo. This is in addition to 500 acres of range land at the Camp, now leased by the college. This will bring the total acreage of land operated by the college at the San Luis Obispo campus to over 4,100 acres. This addition will greatly assist the crops project instruction program and the range management program of the Soils and Animal Husbandry departments.



### Kellogg-Voorhis Campus

Enrollment in agriculture has continued its gradual increase and prospects are that the division will continue to strengthen in all departments. Applications for the 1960-61 year already show prospects of increase in several areas. One of the most significant improvements in the agricultural picture in 1959-60 has been the development of the College Placement Office and the resultant organized industry contacts and placement activity. This office has been particularly helpful in locating both part-time and permanent jobs for students in the Agricultural Division. As in recent years, career opportunities appear to be greatest in the related service areas.

Planning is near completion for an Agricultural Classroom Building which will provide offices, laboratories and classrooms for all but the Agricultural Engineering and Soil Science departments which will remain in their present locations.

One of the important additions has been the new Agricultural Engineering Building with shops to serve the entire division. Heretofore this department has used temporary structures for its instructional program. It is contemplated that early summer will see the final completion of this building, and that it will be available for first classes beginning with the Fall Quarter, 1960.

During the year, many vocational agriculture classes and groups from high schools in the area came to the campus for special study and observation with various college agriculture departments. Of greatest significance was the Agricultural Education Field Day conducted on March 5 for approximately 1,000 agricultural students from the secondary schools in Southern California. In addition, the division sponsored a special program for teachers of vocational agriculture on January 30.

This was the first year that an accurate appraisal could be made of the Agricultural Business Management curriculum in terms of the relative success of its graduates. Employers of those students who graduated in 1959 are already returning for 1960 graduates. For the second year, in-school students were employed as trainee dealer-servicemen by the Pacific Coast Canned Pear Service. This project has proved most successful as an adjunct to the instruction program and has resulted in several full-time job opportunities. The Campus Produce Store was initiated this year by the staff and students of the Agricultural Business Management Department and has been successful in merchandising student project produce to the staff and students of the college. During the year, many industry representatives have been invited as guest speakers for classes and have served in an important way to tie the instruction program more closely to industry's needs.

The small poultry program serves as an important part of the agricultural instruction, and facilities during the year have been filled to capacity with poultry for both egg production and meat production, all in student projects. The poultry processing plant has been completed and processed its first fryers in the Spring Quarter.

Planning has almost been completed for a new feed mill and a Meats Processing Building which will be added to the facilities of the Animal Husbandry Department. Numbers of students in animal husbandry projects have almost doubled during the year providing valuable skills and experiences. Through the Placement Office part-time summer positions are being found for interested students in cattle operations over the state.



Student participation in General Crops departmental activities reached a new high with very successful extra-curricular programs and increased interest in the farm production program. The newly developed plant varietal and demonstration plot area proved to be a real instructional asset. A new propagation house was constructed entirely with student help. The Foundation-leased farming property of the Pacific State Hospital played an important role in providing students with production and managerial experiences. Job opportunities have been plentiful and graduates have had excellent selection for permanent placement.

With the completion of new glasshouses and head house, Ornamental Horticulture activities in general have reached a new peak. Student projects in the Foundation program have been accented during the year, and there has been increased student interest and activity in the growing of plants for sale. An attractive patio project was designed and completely installed by students in Landscape Construction classes. As in past years, an excellent crop of chrysanthemums was produced by students in the department for the Rose Parade float.

Landscape Contractors and Nurserymen met on the campus for two meetings providing an opportunity for students to meet and talk with outstanding industry representatives.

## ARTS AND SCIENCES DIVISION

### San Luis Obispo Campus

The Arts and Sciences Division has primarily a service function. Each of its thirteen major instructional departments recognizes this important aspect of its operation. Eleven of these departments provide a major curriculum for preparation of the graduate with a Bachelor of Science degree. Two departments, Music and Military Science and Tactics, provide only service courses. Through the cooperation of all departments of the college, enrollment in the basic military science and tactics courses has exceeded the minimum quota. The Library and Audio-Visual, both services and production, are administered by the Arts and Sciences Division.

The departmental organization of the Division was changed to reflect the addition of the Business Department. No department head has been selected as yet, therefore the administrative operations of the department are conducted by the Social Sciences Department. Agricultural Journalism will take on a new format and title. It will be known as the Technical Journalism Department and the curriculum will permit a student to specialize in four distinct areas of Journalism: Agricultural, Business and Industrial, Community, and Home Economics. The broadening of the scope of the department will provide additional employment opportunities for its graduates. Future planning for the English Department will emphasize its major function of seeking to develop a higher level of proficiency in oral and written communication for students of all divisions of the college.

The Arts and Sciences Division continues its upward climb in enrollment of major students (for enrollment by majors, see page 2 of this report).

The physical facilities of the Division have been improved by the completion of four new buildings. The new buildings which are used primarily by the Arts and Sciences Division are: Mathematics and Home Economics, Men's Gymnasium, and the Home Management Facility. The Social Sciences, Technical Arts and Business departments are housed in the newly completed Agriculture and Social Sciences Building. The outdoor physical education facilities, which consist of playing fields for various activities, tennis courts and handball courts, provide additional space for the physical education program.



A building currently under construction, which is to be used for instruction and student activities under supervision of Arts and Sciences Division faculty members, is the Music and Little Theater Building. Additional facilities will be available later in the Graphic Arts Building, Engineering West, Physical Sciences Addition, English Wing and the Library.

The Instructional Materials produced by the Audio-Visual Department in conjunction with major departments on campus continue to provide important and current materials to the college instructional departments as well as high schools throughout the state. The latter purchase these materials through the College Book Store. In addition to the Instructional Materials program, the Audio-Visual Department provides both production and service for all the instructional departments of the college. The use of visual aids has increased tremendously during the past year.

The instructional staff of the Division has increased during the 1959-60 academic year. The new instructors were selected because of their professional and/or technical background. Every effort is made to inculcate in the new, as well as present staff, the philosophy of the college and how this philosophy relates to the objectives to be pursued in training the college student.

#### Kellogg-Voorhis Campus

The Arts and Sciences Division at the Kellogg-Voorhis Campus continued an orderly growth pattern of major enrollment and service instruction. In 1958-59, the three business departments, Accounting, Business Administration, and Marketing, had a total enrollment of 86 majors, increasing to 198 in 1959-60. Majors in the other divisional curricula, Biological Sciences, English, Mathematics, Physical Education, Physical Sciences, and Social Sciences, increased from 163 in 1958-59 to 295 in 1959-60. In 1958-59 the Division's total teaching load was 760 FTE students, while in 1959-60 the load increased to a little more than 1,000 FTE students.

In the Biological Sciences Department, construction was begun on two zoology physiology laboratories in space previously occupied by the Library. This is part of the facility development program in which spaces are modified to meet increasing needs in the sciences by moving departments temporarily housed in the Science Building to their own specialized facilities. In the Physical Sciences area, planning was completed for the development of two additional physics laboratories in space originally planned for them but presently utilized for other purposes.

The three business departments are housed in the Business Building and this year had use of new classrooms and laboratories. Since the building receives heavy use from many departments of the college, the specialized business classrooms are meeting the needs of these departments and their growing enrollment of major students.

During this academic year, the college became a member of the Western Data Processing Center. Availability of this facility has been of great value to instruction in mathematics, business, and the sciences, particularly. Students in the Mathematics Department who are studying data processing and computer logic are now able to make use of this facility to develop skill and understanding of complex processes and operations. The business departments and classes in economics have been able to make extensive use of the Center's services, particularly in study of management decision making.

The Audio-Visual Department, a service department in the Arts and Sciences Division, has been able to offer excellent service to the entire campus now that its new facility has gone through the initial phase of development. All instructional departments have participated in the services offered by this facility. In addition, the audio-visual program has been so developed that student participation is at a maximum. Nearly all production and development is done by students, primarily those enrolled in the departments using the devices and materials being developed. In addition, the communications facilities are operated primarily by students enrolled in engineering and science curricula to give them practical experience with an operating communications system.



## ENGINEERING DIVISION

San Luis Obispo Campus

The year 1959-60 saw continued progress in the Engineering Division. The slight drop in enrollment, consistent with the national trend, gave the division a chance to "catch its breath," to appraise current progress and to plan for the years ahead. In an educational institution, success is a journey, not a destination. In the Engineering Division, the journey thus far has been a fruitful one, but equally fruitful challenges lie ahead.

The recent report of the Accreditation Committee of the Western College Association states in part: "In the fields of Engineering and Agriculture the College has developed excellent programs which are accomplishing admirably what they set out to accomplish.....In the field of Engineering the instances of excellence in accomplishment of objectives are too numerous to list in detail in this report. A typical example is the imagination and creativity of faculty and students in the Department of Architectural Engineering, although it may not be singled out above all others. A careful study of the Agricultural, Electronic, Electrical, Mechanical, and Aeronautical Engineering programs and facilities was made. The Committee is impressed by the equipment and facilities available, by the spirit and enthusiasm of the faculty, and by the interest and accomplishment of the students."

The Engineering Division is very pleased to receive such an excellent Western College Association critique, and pledges itself to continue to merit the compliments.

Looking Ahead

The underlying philosophy of the Engineering Division is to keep pace with the ever-changing technology of our times. Graduates are expected to be able to cope professionally with current engineering problems and to be prepared to learn to cope with the problems of the future. This philosophy necessitates constant contact with all segments of industry from the standpoint of present operations and future plans.

Typical examples of alertness to the future needs of engineers are the leaves of absences taken and planned by staff members during the past year.

Mechanical Engineering. A staff member spent six months assisting in the reactor operations of the U. S. Naval Reactor Test Station and was assigned to the Argonne National Laboratory operated under contract to the Atomic Energy Commission. When nuclear technology assumes a more significant role in Mechanical Engineering, Cal Poly will be ready.

Industrial Engineering. A staff member is currently completing requirements for a PhD at Stanford University, looking ahead to the stepped-up use of statistics and computers in management control.

Electronic Engineering. A staff member is working at the Naval Ordnance Laboratory in Corona and taking additional graduate work. Major emphasis is on equipment reliability, a major factor in missile design. Another staff member will attend Montana State College for additional graduate work in electronics. A third staff member will be working for his doctorate at the University of California, Berkeley. He will also be close to the research picture to help the college predict what lies ahead.

Architectural Engineering. A staff member will work and study in the world's foremost structural laboratory (located in Spain). He will emphasize new concepts in creative structural design.



Aeronautical Engineering. A staff member will work and study at the Naval Ordnance facility in China Lake, emphasizing new developments in missile structural design.

All Departments. Many staff members will continue their individual programs of professional development in graduate school and industry during the summer.

Administration. The Acting Dean of Engineering will spend two weeks of intensified seminar work as a guest of the General Motors Corporation in Detroit. Emphasis will be on long-range developments in the automotive industry.

### Looking Back

An extensive survey, completed in 1959, of all engineering graduates through the class of 1958 has provided an appraisal of past efforts and a basis for future planning. A few significant statistics are as follows:

Of the respondents (approximately 50 per cent response)

1. 93.4 per cent stated that the Cal Poly training has been indispensable or highly important in the furthering of their professional careers.
2. 38.8 per cent have taken additional graduate work since graduating from Cal Poly.
3. 89.9 per cent indicated that their present jobs are directly related or closely related to their majors at Cal Poly.
4. 47.6 per cent held leadership positions in co-curricular activities at Cal Poly. (30 per cent indicated that this experience was helpful in obtaining the first job--35 per cent indicated that it is helpful in the present job.)
5. 78.4 per cent have good or excellent opportunities for advancement; 14.5 per cent see fair opportunity.

As a cross-check on graduate responses, employers were also contacted. The responses of employers were consistent with graduates' responses; they reflected excellent confidence in Cal Poly graduates, and were highly optimistic in predicting continued success for the graduates. Responses were 90 per cent favorable in reply to questions concerning the technical ability, leadership, attitudes, enthusiasm, and dependability of Cal Poly graduates.

### The Class of 1960

Approximately 400 engineering students will receive their Bachelor of Science degrees in June. Their next step will be the transition to the world of industry and professional engineering. As preparation for this step, they will have completed a rigorous, modern curriculum. The climax to their formal studies is the senior project in which they undertake individual projects in the manner of the project engineer in industry. The senior project is a unifying experience in which the various disciplines mastered during the four-year curriculum are brought to bear on a challenging problem. The following selected topics in themselves tell the quality and level of the work undertaken:

The Construction and Operational Procedures of "The Lino-Film" System  
Cooling of an Air Cooled Engine Utilizing Exhaust Ejection  
Data Processing for Inventory Control in Intermittent Manufacturing  
Design and Testing of a Plasma Jet Engine



Design and Construction of a Decoding Matrix to Translate Binary Coded Signal into a Discrete One Wire Out of Sixteen to be Used in a Digital Computer  
 Design and Construction of a Psycho-Galvanic Skin Response Audiometer  
 Development of an Experimental Program for the Comparison of Cutting Tools  
 Development of Laboratory Techniques for Vacuum Metallizing  
 Experimental and Theoretical Investigation of Piezomagnetism of Ferrites at Frequencies Up to One Kilocycle  
 Regenerator for a Solar Mars Gas Turbine  
 Tryptometer for Strength of Materials Laboratory  
 Thermoelectric Cooling as Applied to Microscopy  
 Folded Plate Concrete Structures.

As additional preparation for the transition to industry and professional engineering, students participate in student chapters of professional engineering societies. Represented in this manner on campus are:

American Institute of Architects  
 American Institute of Electrical Engineers  
 American Rocket Society  
 American Society of Tool and Manufacturing Engineers  
 American Welding Society  
 Institute of Radio Engineers  
 Institute of Aeronautical Sciences  
 Society of Automotive Engineers  
 American Society of Heating, Refrigerating, and Air Conditioning Engineers

The Engineering Division is grateful for the splendid assistance given to the college by the parent societies and for the grants of scholarships and equipment which continue to flow steadily from industry to the college.

#### Kellogg-Voorhis Campus

The aims and strengths of the Kellogg-Voorhis engineering program are parallel to those of the home campus at San Luis Obispo. The division is proud of the high caliber of its students and its faculty, and the dedication of staff and students toward the development of competent engineering graduates.

#### Staffing

The engineering faculty is unusually well balanced with both depth and breadth of experience. The education and experience of the members cover all levels of engineering. This is evidenced by the fact that the group as a whole represent the educational product of 38 colleges and universities. Members of the group also have had teaching experience at 16 colleges and universities and have an average of 11 years of industrial experience.

#### Enrollment Growth

The Engineering Division enrollment jumped from 435 in 1958-59 to 695 in the fall of 1959. The first senior classes in Mechanical Engineering, Electronics, and Industrial Engineering were offered this year, and the first graduates from each department will participate in commencement in June, 1960. The recruiting season was marked by 'more recruiters than seniors.' Perhaps a unique feature on this campus will be that essentially every graduate will have some industrial experience prior to graduation. In the summer of 1959, for example, there were 26 of our people (students and faculty) at Aerojet, 31 at Convair. Many part-time faculty members and some full-time faculty who work for industry only in the summer are employed in these and many other Southern California industries where they keep up on the latest practices and obtain splendid examples for their teaching.



There was evidence of increasing interest in our program by other engineering schools, giving further proof of the soundness of the College's approach to instruction.

Much expanded were participation in professional society meetings, conferences, and visitations to technical and industrial exhibits of national scope. Field trips to industry and visits to the campus by industrial and engineering leaders increased considerably.

### Gifts

Gifts of equipment and supplies were received from Hughes, Douglass, Wetmore Tool and Engineering, M. C. Crawford Company, U. S. Industrial Tools Company, Mojave Granite Company, Del Mar Engineering Laboratories, Roger Coulombe, Oldsmobile Division of General Motors, and West Coast Plastics Distributors, Inc.

### Instructional Developments

Aeronautical Engineering. Two interesting student projects were a "Reynolds Number Demonstrator," and an operating mock-up for experimental study of the Convair 880 Jet Pod installation. An auxiliary power supply gas-driven turbine and generator from the Atlas Missile has been obtained. It will be modified for analytical study by the senior lab groups next year. The aircraft construction shop in the freshman laboratory was put into full operation. Much equipment was built by students and faculty for the laboratories. Plans are being made to include more courses suitable for the Space Age beginning with elective courses in missiles and rockets in 1960-61.

Electronics Engineering. The department is serving 372 majors in a full four-year curriculum after only one year of operation in the Science Building, and now the second year in the new Engineering Center. The seven seniors were all employed in industry in summer work last year. They have all been offered an opportunity to return to their respective employers as graduates.

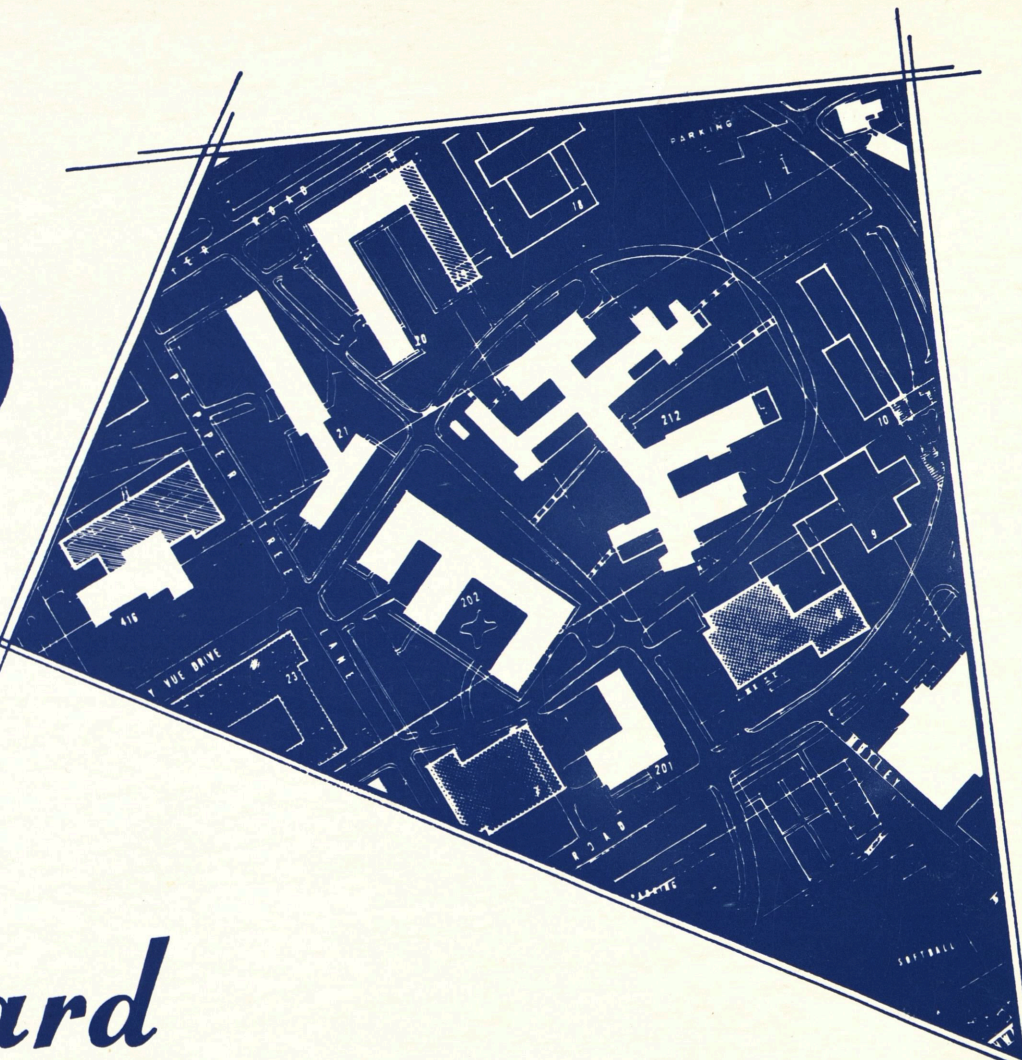
The Electronics Department initiated a work-study program with Convair's Pomona Division. It provided work experience, special educational activities, and at the same time forced the student to apply acquired theory to the engineering tasks.

Industrial Engineering. Another application of Cal Poly's philosophy resulted in accomplishment of many department and individual projects in which senior students served as project coordinators, planned their assigned programs, interviewed and selected freshman assistants, and actually supervised the freshmen to accomplish the planned results. Students studied local industry by making "process-capability" studies of products manufactured locally, time and motion studies of the operations of nearby companies, and a survey of the industrial engineering function in 50 local companies. The Industrial Engineering project room and the Industrial Engineering laboratory were equipped.









# *Toward Tomorrow...*

CALIFORNIA STATE POLYTECHNIC COLLEGE • SAN LUIS OBISPO, POMONA, SAN DIMAS



# Toward Tomorrow...

JULIAN A. MCPHEE, PRESIDENT  
CALIFORNIA STATE POLYTECHNIC COLLEGE

*A SPECIAL REPORT presented to the Trustees of the California State College System, meeting at the Kellogg-Voorhis Campus of the California State Polytechnic College, Pomona, California, October 13, 1960.*

## Challenge of the 1960's

The decade which lies ahead holds unprecedented challenges for man in every sphere of his activity. If the predictions of expert forecasters prove true, those who live during the next ten years will see changes so dramatic as to be almost unbelievable when measured against man's accomplishments in the past 6000 years. The fabulous future is a topic of interest and concern to every thoughtful man and woman.

Certainly the Trustees of the State College System, the Regents of the University of California, the State Board of Education, members of the Coordinating Council, members of the California Legislature, and other officials of state government are well aware of the

many challenges which face public higher education in California. The Master Plan Survey provided data on the problems to be faced, greatest of which is the burgeoning population. An ever-expanding technology, an ever-contracting world, a stepped-up pace of modern living, and many types of economic pressure are among the other problems which have their implications for the educational system.

For those responsible for guiding public higher education, I can offer no panaceas. They have a great task before them. I feel compelled, however, on the basis of 28 years experience as a college president and 14 years as a teacher and administrator in public secondary education, to speak for deliberate diversification within the system of public higher education.

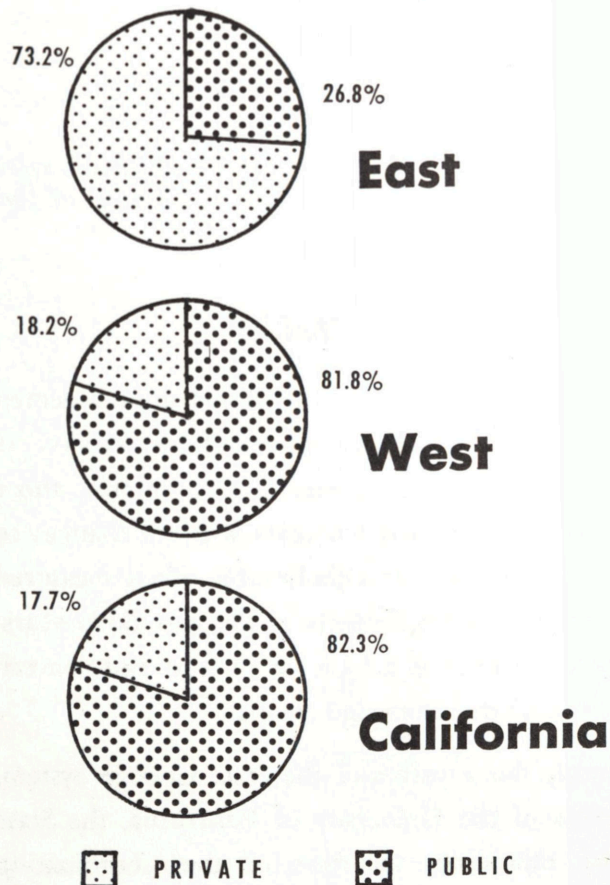


## Diversity vs. Uniformity

The total challenge of the next ten years is so big that no single college can cope with it in its entirety. Nor can the problem be solved by a formula that demands uniformity, standardization, and conformity of all units within the system. While fiscal and management difficulties may be eased by a formula approach, the problem of providing higher educational opportunities for all levels of excellence requires diversity rather than uniformity.

The problem of diversity of opportunity is an especially important one for the California State Colleges. If higher education in this state is to be sufficiently diversified to meet the challenges of the future, this must be achieved largely through public institutions. Unlike the East where 73.2 per cent of higher education enrollments are in private institutions, California has 82.3 per cent of its enrollments in public colleges and universities. The 17.7 per cent of the state's higher education which represents privately supported institutions is not a sufficiently large proportion of the whole to achieve the needed diversification.

### HIGHER EDUCATION ENROLLMENTS IN PUBLIC AND PRIVATE INSTITUTIONS FALL 1958 \*



\* Circular No. 545, U. S. Office of Education



## Cal Poly's Role

California State Polytechnic College, with a history of nearly 60 years of accomplishment in the applied sciences and practical arts, is prepared to undertake its share of the challenges of the future. A brief statement descriptive of the College's history and present status was developed in 1959 by the faculty and administration. The statement, entitled "Cal Poly Profile," is as follows:

"California State Polytechnic College, part of the State's public system of higher education, is an accredited degree-granting, tax-supported institution with its own statutory identity.

"When the Legislature established Cal Poly in 1901, it recognized the permanent need for diversified educational opportunities and a differentiation of functions between institutions. It described Cal Poly's specialized function in Education Code Section 24751. The essence of this specialized function is:

"To provide to young men and women occupationally-centered educational opportunities in agriculture, mechanics, engineering, business, home economics and in other branches of the practical arts and applied sciences. The Act provides that it be 'liberally construed' to the end that Cal Poly may at all times contribute to the industrial and agricultural welfare of the State.

"This direction given by the Legislature guides Cal Poly in developing and maintaining educational pro-

grams which prepare students to meet both present and future requirements of specific occupations in production, supervision, management, product design and development, sales, services, teaching and similar areas. Decisions affecting curricula, facilities, methods, teachers and students are based generally on continuing close contact with both small- and large-scale agriculture, business and industry throughout the state.

"In implementing this direction:

"Cal Poly's curricular pattern requires a student to select his major occupational field as a freshman. Basic job-getting technical and exploratory courses are stressed during his first two years. Increasing proportions of general education and supporting courses are required in the last two years. (This curriculum pattern has come to be known as Cal Poly's 'upside-down' plan.)

"Cal Poly's instructional philosophy emphasizes laboratory and field work with constant interplay between general principles and practical applications. (This emphasis is often termed Cal Poly's 'learn-by-doing' philosophy.) Whenever possible, a project system is utilized to give actual managerial experience on a semi-commercial basis for individual students or groups of students with financing available through a non-profit Foundation corporation. (This is often termed Cal Poly's 'earn-while-learning' program.)

"Cal Poly conducts studies and investigations which



apply and expand the results of pure or fundamental research developed by the University and kindred institutions insofar as such projects are at the level of and are of special application or benefit to the College's instructional program.

"Cal Poly's faculty members are expected to be academically competent, pedagogically able, occupationally oriented, and successfully experienced in a practicing field directly related to their teaching assignment.

"Cal Poly's specialized facilities and staff are utilized in such extension and continuing education programs as will best serve specifically identified adult needs within the functional framework of the College's philosophies and methods. On-campus programs that do not interfere with the College's regular instructional program receive greatest emphasis.

"Cal Poly's co-curricular resident-campus program is purposefully and closely interwoven with the instructional areas to supply supplementary training and experience in leadership and constructive community living.

"The whole of Cal Poly's instructional plan adds 'know-how' to 'know-why.' It encourages close student-teacher relationships during and after college. It promotes respect for both planning and labor and provides effective campus-to-job transitions. Whereas some colleges gain repute through joint and individual research efforts of their faculty members, Cal Poly gains its

reputation from the success of its graduates weighed in terms of the total contribution made by these occupationally-trained men and women to the welfare of the State and Nation."

So much for the College's description of itself. Next the evidence contained in reports on the institution by accreditation committees:

### **The Northwest Association of Secondary and Higher Schools, 1958**

"The Northwest Association holds as a basic premise of institutional evaluation that each institution is to be evaluated with respect to its own objectives. It therefore becomes crucial at the outset to determine whether institutional objectives are stated and whether these objectives, in fact, operate to give direction to the programs of the institution. Both the materials of the self-evaluation report and an examination of the programs in operation gave ample evidence to support an unqualified affirmative answer to the question of objectives at California State Polytechnic College.

"The conclusion is inescapable that here is an institution with a sense of direction based upon an awareness and pride in its history, an effective staffing for determining the salient facts with respect to its present status, and sound planning together with high morale for projection into the future."



# LEADING AGRICULTURAL COLLEGES WITH RESPECT TO UNDERGRADUATE ENROLLMENT — FALL 1957\*

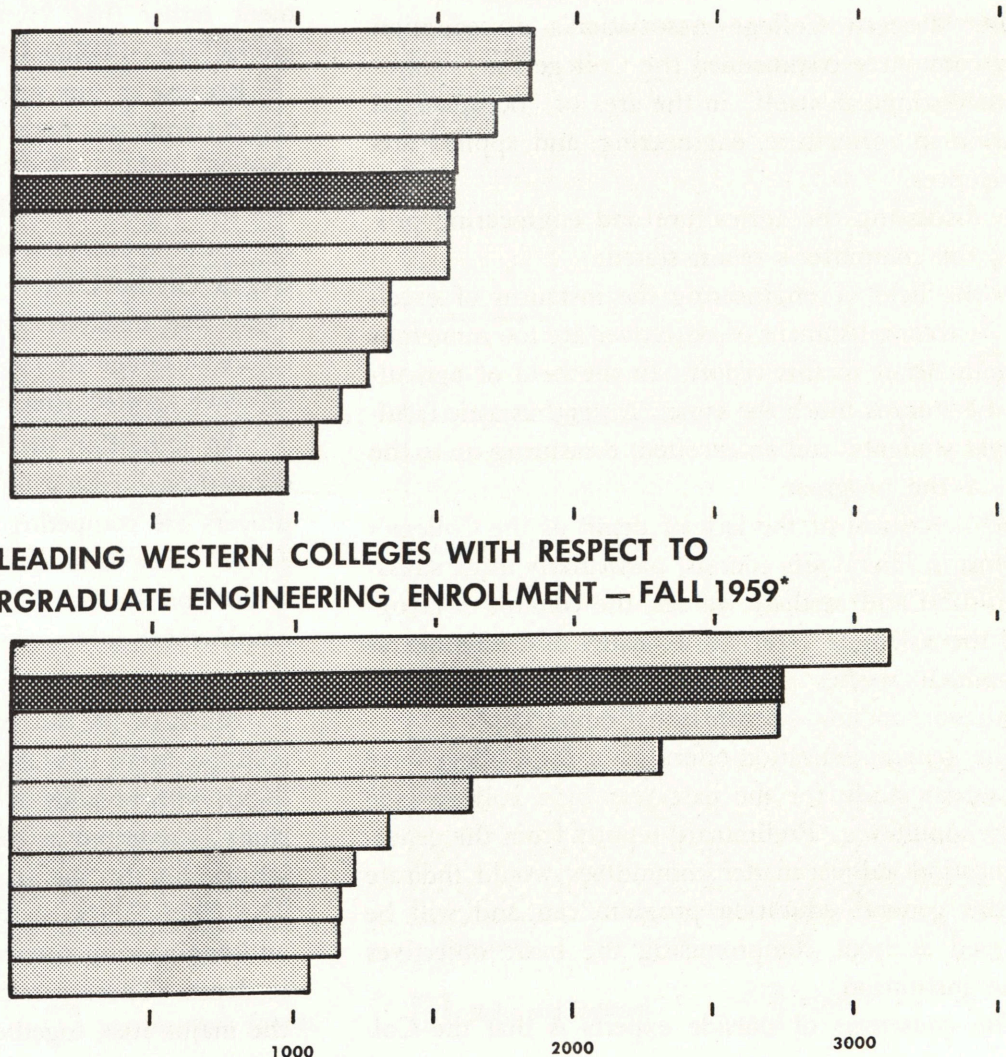
Iowa State College	1874
Michigan State University	1825
University of Minnesota	1718
Cornell University	1583
California State Polytechnic	1535
Ohio State University	1530
Pennsylvania State University	1528
University of Illinois	1325
University of Missouri	1318
Purdue University	1254
Texas A & M College	1165
Oklahoma State University	1083
University of California [Davis]	969

\*BRIGHAM YOUNG UNIVERSITY

# LEADING WESTERN COLLEGES WITH RESPECT TO UNDERGRADUATE ENGINEERING ENROLLMENT — FALL 1959\*

University of Colorado	3111
California State Polytechnic	2735
University of California	2724
University of Washington	2313
University of Arizona	1606
Oregon State	1424
University of Utah	1235
San Jose State	1178
University of So. California	1170
Stanford University	1051

\*OFFICE OF EDUCATION U.S. DEPT.  
OF HEALTH, EDUCATION, AND WELFARE





## The Western College Association, 1960

The Western College Association's accreditation survey committee commended the College for "continuing to distinguish itself" in the area of "occupational education in agriculture, engineering, and applied arts and sciences."

In discussing the agriculture and engineering programs, the committee's report stated:

"In the field of engineering the instances of excellence in accomplishment of objectives are too numerous to list in detail in this report. In the field of agriculture, the story is much the same. An enthusiastic faculty, eager students, and an excellent measuring up to the goals of the program."

While critical of the lack of depth of the College's offerings in liberal arts courses, particularly those stressing cultural and aesthetic values, the committee recognized the dilemma faced by a faculty and administration which wishes to remain true to its original, specialized function—occupational education.

The general education offerings of the College have been under study for the past year by a college-wide faculty committee. Preliminary reports from the general education subject-matter committees would indicate that the general education program can and will be improved without compromising the basic objectives of the institution.

The consensus of outside experts is that the Col-

lege's occupationally-oriented programs, which complement rather than compete with theory-oriented programs, are enjoying outstanding success.

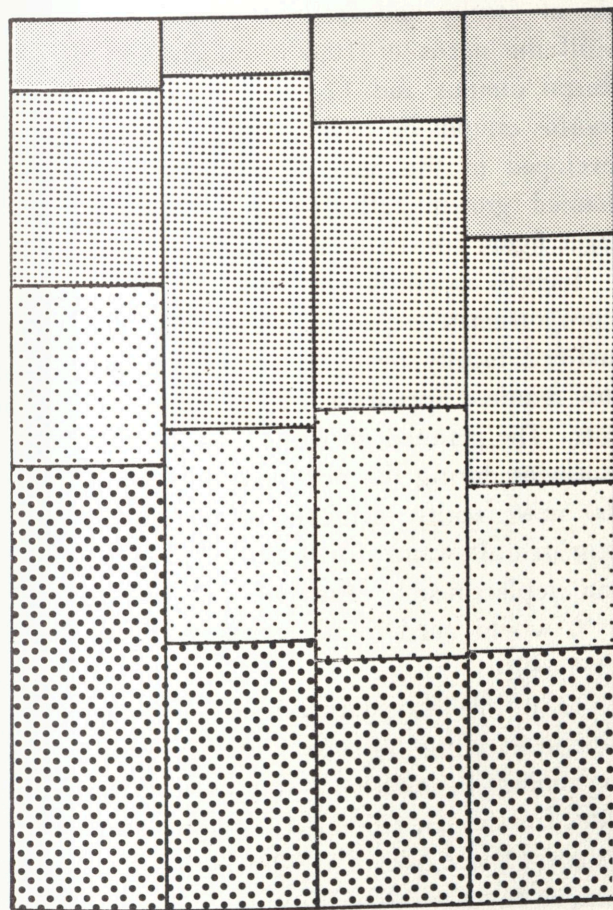
Because of this success, the enrollment in Engineering curricula has become the second largest in the west (second only to that at the University of Colorado) and the largest on the Pacific Coast. The enrollment in Agricultural curricula is the largest in the west and fifth largest in the United States. Approximately four of every five students enrolled at California State Polytechnic College in 1959-60 were studying engineering or other applied sciences.

An indication of the effectiveness of the College's occupational education programs is the fact that employers are competing for the graduates of these programs. Last year the Placement Office arranged for seniors on the San Luis Obispo campus 4,316 personal employment interviews with 523 employer-representatives.

Much of the success of Cal Poly graduates may be credited to an educational experience which combined depth with breadth in a selected curriculum. Depth of study is required as essential to specialization and true scholarship in the student's selected area of interest. The charts showing subject matter in the agriculture and engineering curricula are indicative of this academic depth. These curricula have a solid core of work in the major area, together with the necessary background



## SUBJECT MATTER IN AGRICULTURE CURRICULUM

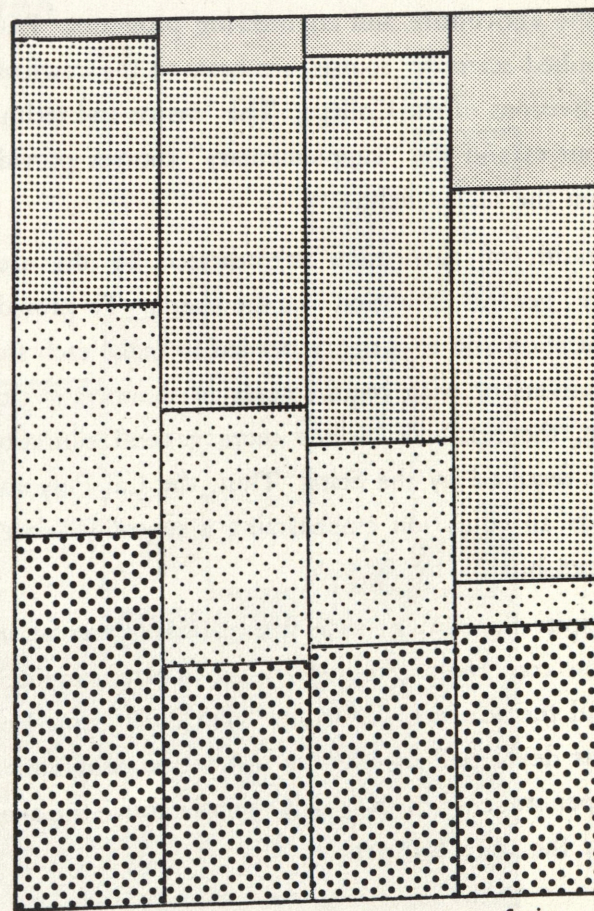


General Education



Supplementary Courses

## SUBJECT MATTER IN ENGINEERING CURRICULUM



Major and Technical



Elective



courses in the arts and sciences. The major curricula of the Arts and Sciences follow the same general pattern as do the agriculture and engineering programs. Pure and applied scientific courses are basic to the curricula in all divisions of the College. The "major and technical" courses and the "supplementary" courses provide focus on the major field.

Breadth of curriculum is indicated by the area marked "general education" in the charts. To provide the education and experience needed to make each student conversant with requirements of democratic citizenship, the curricula include more general education than is required by the State. Thus, the Cal Poly student has an education emphasizing a specialty as well as citizenship.

Despite the widely recognized greater costs of instruction commonly required in agriculture, engineering, and the sciences, California State Polytechnic College has developed its effective instruction programs at a cost per student which is only slightly above the average for the state colleges.

## Cal Poly Looks Ahead

The College is making a carefully planned expansion of faculty and facilities which will enable it to fulfill the needs of 10,000 students at the San Luis Obispo campus and 12,000 students at the Kellogg-Voorhis campus by 1970. Based on population figures developed in the State Department of Finance, the planned growth calls for annual increases until the target figure for 1970 is reached.

Increase in enrollment will bring with it, of course, a proportionate expansion of faculty. Recruitment of qualified faculty members in the numbers and at the time required appears as one of the most serious problems. The planned growth of the College calls for recruitment during the next five years of approximately 660 new faculty members, which figure includes an estimated allowance for leave, retirement, and resignation replacements. Another total of approximately 1030 would need to be recruited during the period, 1965-1970.

California State Polytechnic College plans to do its part in meeting the needs of the coming decade by continuing its traditional role as a college which provides for specialized education within the State College system. The College will be honored to continue its unique function in California higher education.

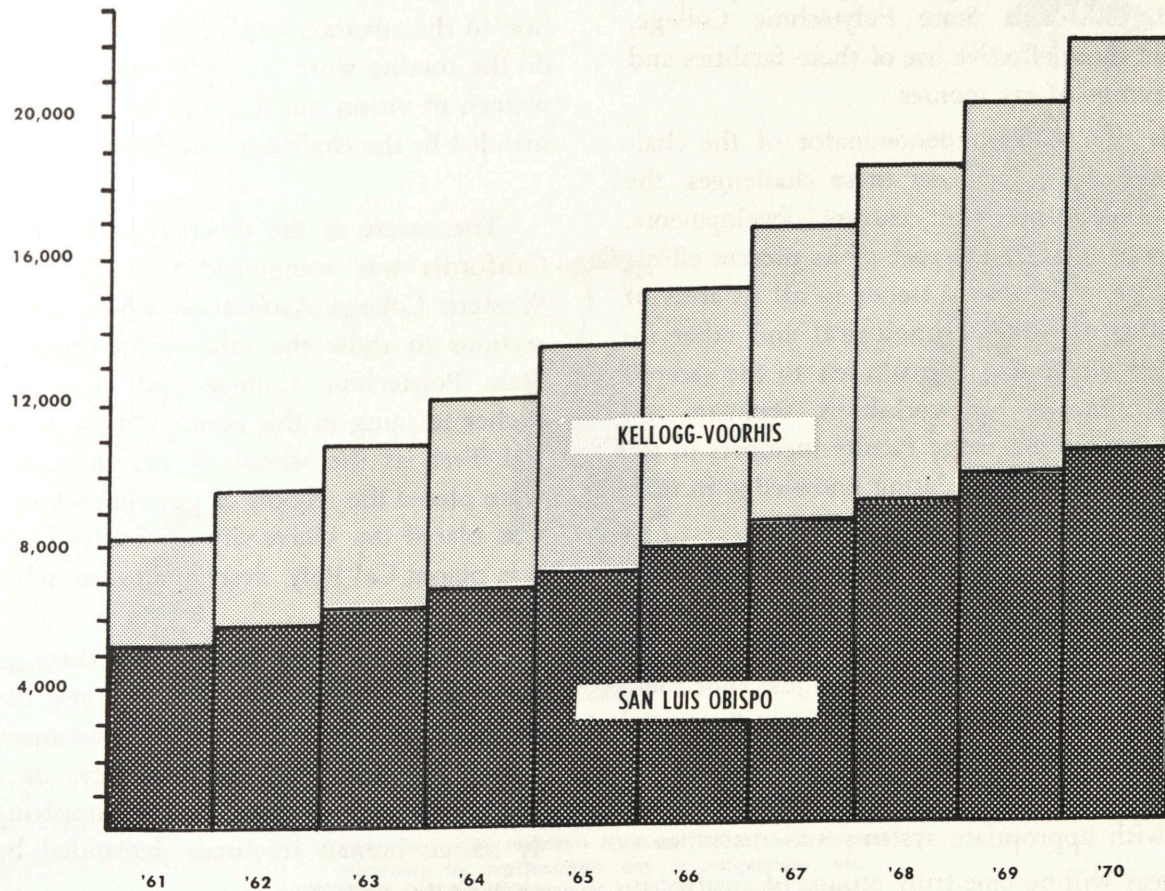
One result of further planned specialization of function within the system of public higher education



# CAL POLY ENROLLMENTS

1961-1970

STUDENTS





can be the elimination of unnecessary duplication of high cost instructional programs. Avoiding duplication of specialized instructional programs requiring expensive investments in facilities and equipment in such fields as agriculture and engineering, already highly developed at California State Polytechnic College, would result in more effective use of these facilities and consequent savings of tax monies.

Change is the common denominator of the challenges of the Sixties. To meet these challenges, the College must keep abreast of current developments. The College will increase the pace of its present efforts to keep in touch with current trends in all its areas of instruction. It will bring technological and other industrial groups (including agriculture) to the campus in increasing numbers for workshops, seminars and conferences. It will encourage faculty members to use every possible means for up-dating knowledge in their fields of specialization.

It will bring to education problem-solving techniques employed by business and industry. Operations research which has seen such rapid development in business and industry during the decade just ended will be applied to educational decision making. Just as industry has replaced individual tools with machines and systems, so will the College replace "hand-laboring" committees with appropriate systems and machines.

Committees will become truly groups of creative in-

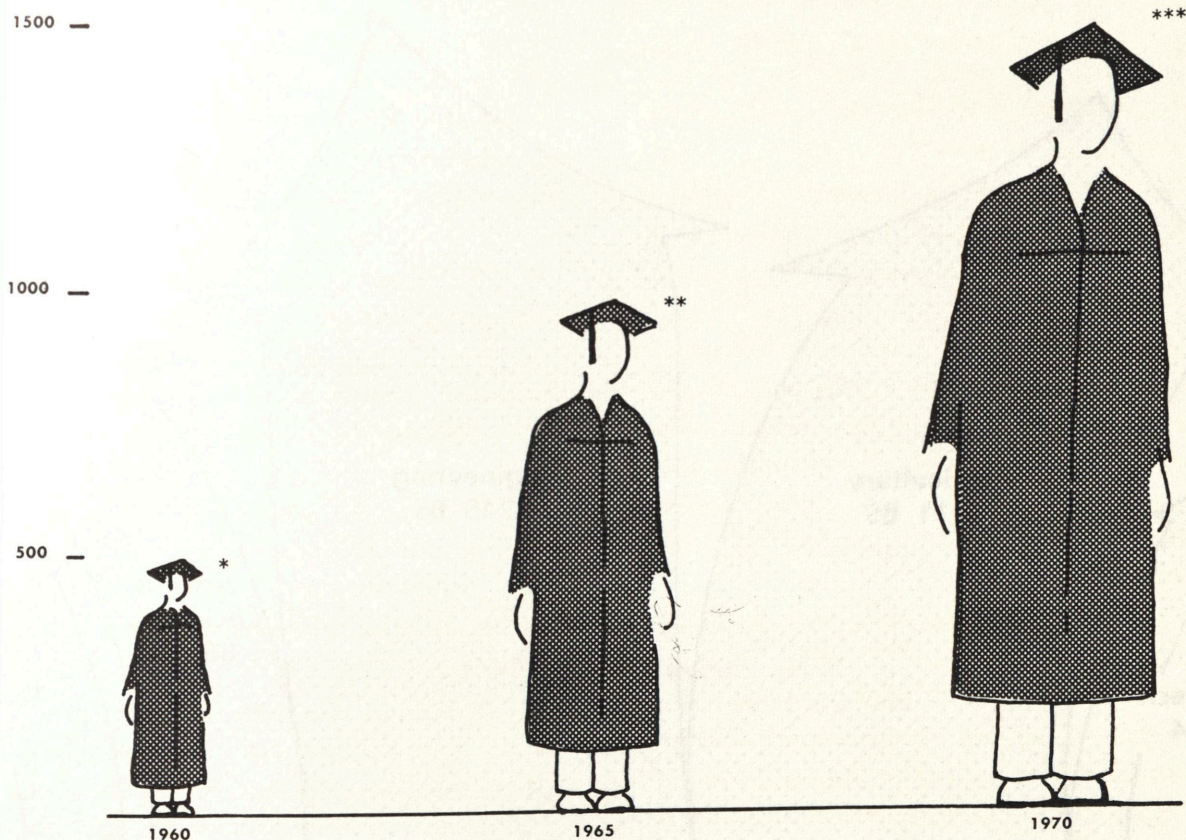
dividuals coming to grips with significant problems, not merely devices by which laborious data-gathering assignments are handed to the faculty. In short, California State Polytechnic College will give every staff member an opportunity to make his creative contribution to the advancement of the College. Machines can do the routine work but only highly qualified men and women of vision can think to the degree and scope demanded by the challenges we face.

The nature of the diversity of higher education in California was recognized in a 1951 report of the Western College Association which used compass directions to show the relationship between California State Polytechnic College and other institutions of higher learning in this State. On the north was placed Cal Tech as the school of pure science; on the east were placed the schools of pure liberal arts; on the west was placed the University of California; on the south was placed Cal Poly, described as the school of applied science.

By helping educational leaders throughout the State keep their compass directions straight, the Trustees of the State College System can be instrumental in encouraging and enhancing individuality, in nurturing all kinds and levels of talent, and in supplying the infinitely varied human resources demanded by a complex, democratic society.



# CAL POLY FACULTY GROWTH AND DEMAND 1960-1970



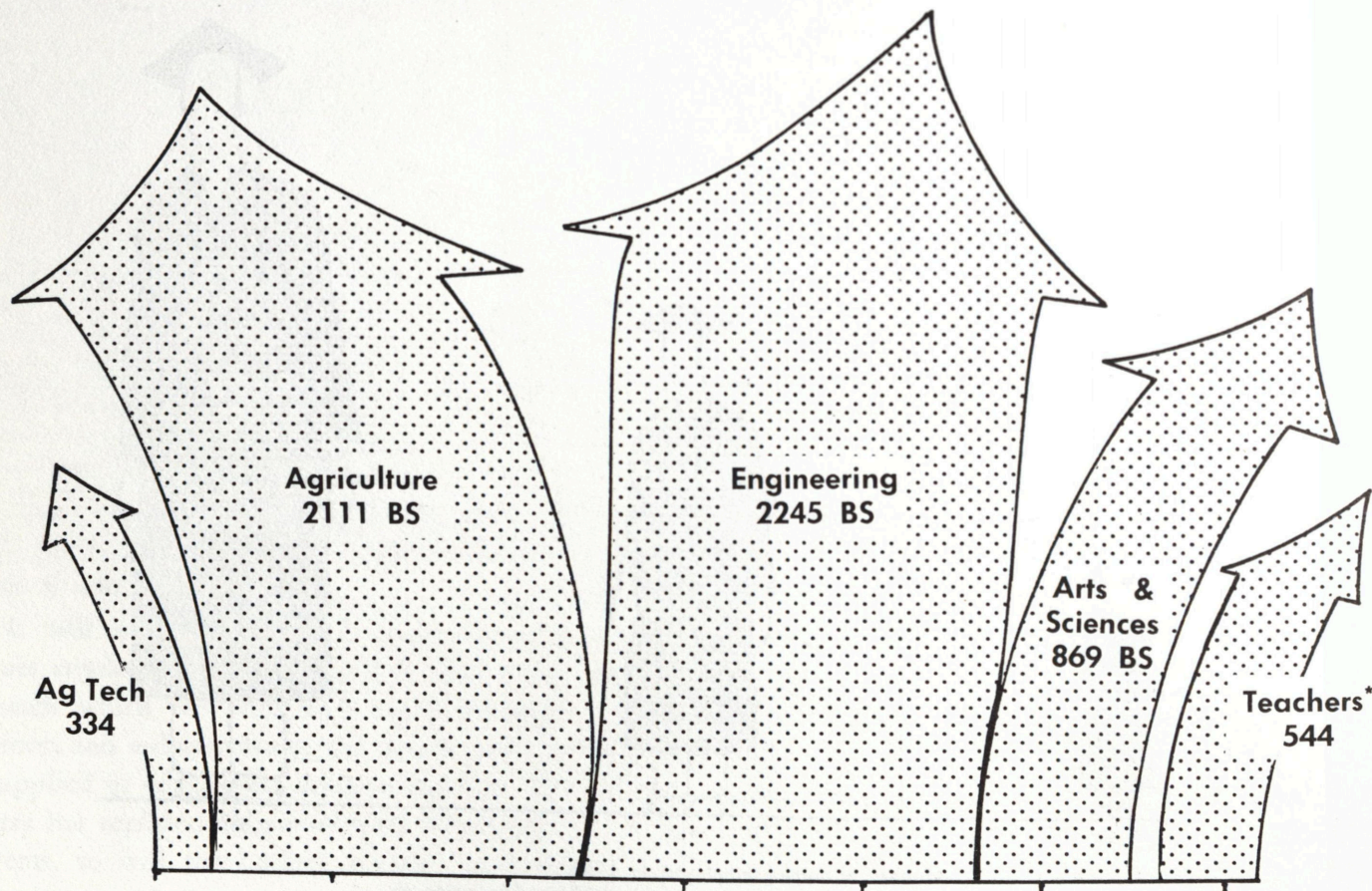
\* Number of faculty employed in 1960

\*\* 664 new faculty members required 1960-65 including an allowance for replacements due to resignations, etc.

\*\*\* 1038 new faculty members required 1965-70 including allowance for replacements due to resignations, etc.



# CAL POLY GRADUATES 1951-1960



\*Teachers included in previous divisional totals.





**THERE'S ROOM FOR YOU . . .**





Situated on a hillside, Cal Poly's new residence halls offer panoramic views of the central campus, San Luis Obispo, and environs.

## **AT CALIFORNIA STATE POLYTECHNIC COLLEGE**

Building of six new residence halls with a total capacity of 1,200 students has put an end to the housing shortage that has limited enrollment at California State Polytechnic College at San Luis Obispo in recent years. The College now has 15 residence halls. Two of the new fire-proof, air-conditioned halls will be reserved for 400 women students. All qualified students who wish to attend Cal Poly will now be able to do so.

Each of the six new halls will be directed by a full-time head resident assisted by upperclass or graduate students. The other nine halls will be managed by upperclass or graduate students under immediate direction of the Residence Hall Counselor. Head residents serve as advisers to the hall's student government organization and assist students in carrying out a varied social and recreational program.

The College always has maintained campus residences for students. As a result of more than half a century of experience it is convinced of the importance of a well organized residence hall program to the total educational process. Among the many advantages are opportunities to make friends more readily, to experience a fuller college life, and to adjust to life situations.

Space in residence halls is rented on a room and board basis only. Three meals daily are served Monday through Friday as well as lunch and dinner Saturday and dinner Sunday noon. Dietetically correct, Cal Poly meals are planned for appeal to youth. A new cafeteria which will seat 1,100 students at one time is now under construction to replace present dining facilities.

The room and board rate is \$230 a quarter payable in advance, but installment payments may be arranged for an added service charge of \$4. Students interested in reserving space in a residence hall may use the application blank attached to the Application for Admission form, or secure an Application for Residence form from the College Housing Office. A \$20 security deposit which does not apply on board and room is required with each application.





Outdoor study room — Library patio.

California State Polytechnic College, with campuses at Pomona, San Dimas and San Luis Obispo, is administered as one of California's state colleges. The college specializes in occupational education in the fields of agriculture, arts and sciences, business, and engineering. It grants the Bachelor of Science

degree, and at San Luis Obispo, also the Bachelor of Education and the Master of Arts in Education degrees.

Cal Poly's education program is marked by: (1) Occupational emphasis at the entry level of those occupations which require college degrees, (2) Citizenship emphasis stressing such qualities as honesty, good work habits, leadership, wholesome social adjustment, etc., (3) Sound preparation for further learning.

### Occupational majors available at San Luis Obispo are . . .

**AGRICULTURE** — Agricultural Business Management, Agricultural Engineering, Animal Husbandry, Crops Production, Dairy Husbandry, Dairy Manufacturing, Farm Management, Food Processing, Fruit Production, Mechanized Agriculture, Ornamental Horticulture, Poultry Husbandry, Soil Science, Truck Crops.

**ARTS AND SCIENCES** — Agricultural Chemistry, Biological Sciences, Business, Elementary Education, English and Speech, Home Economics, Mathematics, Physical Education, Physical Sciences, Social Sciences, Technical Arts, Technical Journalism.

**ENGINEERING**—Aeronautical, Architectural, Air Conditioning and Refrigeration, Electrical, Electronic, Industrial, Mechanical, Metallurgical, Printing.



# COMPARISON OF FOUR METHODS OF DOING BUSINESS UNDER PRIVATE ENTERPRISE

FEATURES COMPARED	INDIVIDUAL	PARTNERSHIP	NON-COOPERATIVE CORPORATION	OWNER COOPERATIVE (USUALLY) CORPORATION
1. WHO USES THE SERVICES?	NON-OWNER CUSTOMERS	GENERALLY NON-OWNER CUSTOMERS	GENERALLY NON-OWNER CUSTOMERS	CHIEFLY THE OWNER-PATRONS
	INDIVIDUAL	THE PARTNERS	THE STOCKHOLDERS	THE MEMBER-PATRONS
	NECESSARY	THE PARTNERS	COMMON STOCKHOLDERS	* THE MEMBER-PATRONS
	NECESSARY USUALLY BY PARTNERS' SHARE IN CAPITAL		BY SHARES OF COMMON STOCK	USUALLY ONE MEMBER ONE VOTE
	INDIVIDUAL	THE PARTNERS	COMMON STOCKHOLDERS AND DIRECTORS	THE MEMBER-PATRONS AND DIRECTORS
	INDIVIDUAL	THE PARTNERS	THE STOCKHOLDERS AS INVESTORS	MOSTLY THE MEMBER-PATRONS
	NO	NO	NO	*YES USUALLY \$1 OR LESS (SOMETIMES INTEREST MORE THAN DIVIDENDS)
	THE INDIVIDUAL	THE PARTNERS IN PROPORTION TO INTEREST IN BUSINESS	THE STOCKHOLDERS IN PROPORTION TO STOCK HELD	THE PATRONS ON A PATRONAGE BASIS

## CAREERS IN AGRICULTURAL BUSINESS MANAGEMENT

CALIFORNIA STATE  
POLYTECHNIC COLLEGE

SAN LUIS OBISPO



## Opportunities

In contrast to the self-sufficient farm owner of 100 years ago, the modern farmer is primarily a specialist who confines his operations largely to growing crops and livestock.

He depends upon farm related businesses for increasing amounts of fertilizer, insecticides, machinery, equipment, feeds, capital and other production supplies. He uses more and more commercial and public agency advisory and informational services. At the same time, he relies more heavily on off-farm business for processing and merchandizing his products.

As a result of such trends, farm related business functions involving agricultural products provide excellent career opportunities for those who are trained in business principles and procedures. This includes preparation for organizing, managing and representing agricultural business and public agencies engaged in providing products, supplies, credit and machinery as well as advisory and informational services to farmers. Activities in connection with farm products include their buying, transporting, processing, standardizing, financing, advertising and selling.



Student Selling for Packing Company

Farm related agricultural employment opportunities include such positions as:

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Manager, Livestock and Poultry Feed Company  
Agricultural Representative, Chain Store  
Marketing Specialist  
Manager, Agricultural Cooperative  
Sales Manager, Fertilizer and Insecticide Company  
Farm Real Estate Salesman  
Agricultural Claims Adjuster  
Farm Loan Officer  
Manager, Rural Bank  
Agricultural Appraiser  
Manager, Food Processing Company—Meat, Cereals, Fruit, Vegetables, etc.  
Farm Group and Commodity Officer  
Owner, Farm Related Business  
Sales Manager or Salesman, Agricultural Equipment  
High School Teacher, Vocational Agriculture  
Information Specialist, Public Agricultural Agency

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## Who Should Enter the Field?

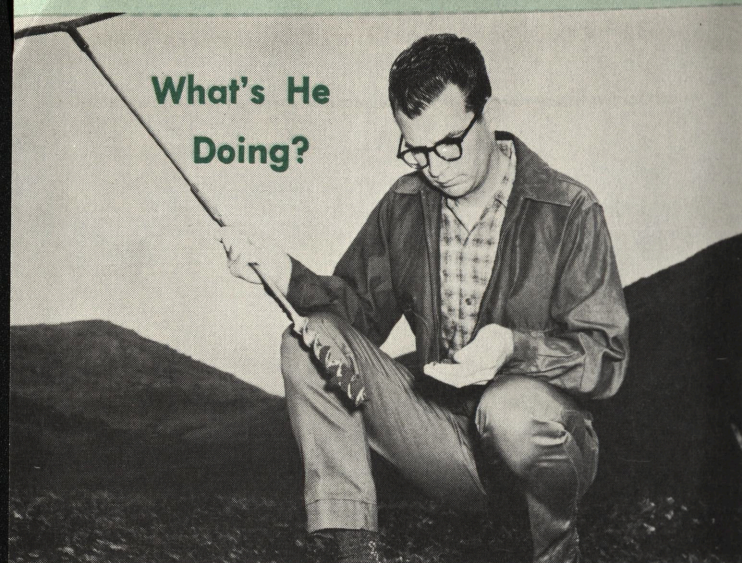
Opportunity is available not only for the student with agricultural knowledge acquired on his home farm and in vocational agriculture courses, but also for the above-average non-farm student with a desire for a career in agriculture. At Cal Poly the non-farm student can get the farm production training at the same time that he is getting his preparation in agricultural business management.

## For Women, Too

Increasingly, farm related businesses are employing women in credit departments, real estate, title insurance, food processing, accounting, personnel, banking and other similar fields. Government agencies, too, seek women for these and other occupational areas including marketing, business forecasting, information and public relations. Women who have agricultural business training are in demand for a wide variety of positions which include managerial and supervisory duties in clean and pleasant surroundings.



## What's He Doing?



This student is getting a soil sample for his study of soil science, part of the background education required in an agricultural business management major.

## How Can You Prepare at Cal Poly?

If you are interested in a business career, you will find opportunity in the program of the Agricultural Business Management Department at Cal Poly. As a part of your education you will assist in sales promotion programs, marketing studies, property investment and management programs, wholesale and retail business management and other similar learn-by-doing activities.

Since occupational success in farm related business will depend to a large extent upon an understanding of farming, farm people and farm products, the agricultural business management curriculum is based upon a firm foundation in production agriculture. While completing a major in agricultural business management, you may, through electives which provide great flexibility and a wide range of choice, learn one of several agricultural production specialties offered in the West's largest agricultural school. The well established agricultural course offerings from which you may select electives include:

Agricultural Engineering	Animal Husbandry
Dairy Husbandry	Dairy Manufacturing
Farm Management	Field Crops Production
Food Processing	Fruit Production
Mechanized Agriculture	Ornamental Horticulture
Poultry Husbandry	Soil Science
Truck Crops Production	

Realtor Discusses Opportunities in His Business with Students

You begin work in your chosen major at the first of your freshman year, rather than waiting until you are an upperclassman—that's the "upside-down" curriculum approach as made famous at Cal Poly. Also, through the learn-by-doing method pioneered at the college level by Cal Poly you take part in many learning activities involved in the production, processing and merchandizing of crops and livestock from Cal Poly's 3000-acre ranch campus.

While about two dozen agricultural business management courses are available at Cal Poly, the following are required of students who major in the program:

- Introduction to Agricultural Business Management
- Agricultural Marketing Programs in California
- Agricultural Business Organization
- Agricultural Business Sales and Service
- Agricultural Business Credit and Finance
- Agricultural Property Management and Sales
- Agricultural Business Sales Management
- Agricultural Cooperative Management
- Advanced Agricultural Business Management
- Ag. Labor Relations and Personnel Management
- Ag. Business Management and Government Policies
- Agricultural Business Communication
- Field Studies in Ag. Business Management
- Undergraduate Seminar.

The curriculum and specific courses of the Agricultural Business Management Department are based upon the job requirements and characteristics of the increasingly complex and expanding agricultural businesses and service agencies. The vocationally centered curriculum brings together in clear perspective the changes occurring in agriculture and relates such changes to business principles and procedures in organizing, managing and working in the growing agricultural businesses and industries.



## Cal Poly—General Information

CALIFORNIA STATE POLYTECHNIC COLLEGE with campuses at San Luis Obispo, Pomona and San Dimas is administered as one of California's state colleges. It grants the Bachelor of Science degree in all three of its divisions—agriculture, engineering and arts and sciences. The degrees of Bachelor of Education and Master of Arts in Education also are granted.

**ADMISSION STANDARDS.** Prospective students in making application for admission should write to the admissions office for information requesting a copy of the college catalog and an application form.

Applicants must as a minimum meet one of the following requirements: 1. Have completed the equivalent of 70 semester periods of course work, in subjects other than physical education and military science, with grades of A or B during the last three years in high school. 2. Have completed the equivalent of 50 semester periods of course work, in subjects other than physical education and military science, with grades of A or B during the last three years in high school and attained the twentieth percentile of the national norm of a standard college aptitude test.

Students may transfer to Cal Poly from a degree granting college or junior college if they have maintained a grade average of C. However, junior college students who were ineligible for admission to a state college on the basis of their high school records must have completed 36 or more quarter units of college work with a grade average of C or better in the total program. (Beginning in the fall of 1961 the requirement will be 24 units of B average or better or 60 units of C average or better.)

**ACCREDITATION.** The college is fully approved as a four-year degree granting institution by the Northwest Association of Secondary and Higher Schools, the Western College Association and the California State Department of Education.

**COSTS.** Required fees for California residents for one college year amount to \$91.50. Non-residents are charged tuition of \$86.25 per quarter. Books cost from \$20 to \$50 a quarter, depending upon major. Tools and supplies for engineering students cost between \$25 and \$50. Room and board on campus are \$230 per quarter for three meals a day Monday through Friday, lunch and dinner on Saturday and dinner Sunday noon. College approved housing off the campus also is available.

**SERVICE TO STUDENTS.** A college Placement Service aids students in obtaining part-time employment and in placement at graduation. Students are assigned faculty advisors and counseling and health services are provided.

➡ For further information address the Associate Dean (Admissions), California State Polytechnic College, San Luis Obispo.

At right: Getting Practical Farm Machinery Know-How



Title Company Official Explains Use of Lot Book



Student Agricultural Production Project





# **Careers In Agricultural Business Management**

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This brochure published through the  
cooperation of Evans Brokerage Company,  
specializing in ranch properties, San Luis Obispo, California





## **OCCUPATIONAL EDUCATION ON A RESIDENT CAMPUS**

Students who desire the enriched college experience afforded by living on a campus may now have that opportunity at the beautiful Kellogg Campus of California State Polytechnic College. Four new residence halls, one of which is pictured here, become available in the fall of 1960.



# CALIFORNIA STATE POLYTECHNIC COLLEGE, KELLOGG-VOORHIS CAMPUS

The Kellogg-Voorhis Campus of California State Polytechnic College just outside Pomona offers 22 occupational majors in the areas of agriculture, arts and sciences, business and engineering. Characteristics of its educational program are (1) Occupational emphasis at the entry level of those occupations which require college degrees, (2) Citizenship emphasis stressing such qualities as honesty, good work habits, leadership, wholesome social adjustment, etc., (3) Sound preparation for further learning.

In its occupationally centered education, Cal Poly uses three unusual methods in which it has pioneered. First, work in the major field begins in the freshman year. Second, students learn by doing, applying techniques under on-the-job conditions. Third, the college uses the project system in which the student

may increase his knowledge and earn part of his expenses by conducting a commercial project in his major field.

Training for citizenship at Cal Poly draws heavily upon campus life and its activities. It is here that living on campus can contribute so much to effective education. In the campus community the student "learns by doing" to live with others and to carry his fair share as a citizen.

As a resident on campus the student has an opportunity for enriching his college life. Students tend to become more a part of the total program when their interests and activities are not divided daily between home and school.

To aid the student in getting the most from campus living, Cal Poly maintains a constructive, well organized residence hall program. Each of the halls is directed by a full-time head resi-

*Residence halls, shown here in foreground, are in easy walking distance of the center of the campus.*

dent assisted by upperclass students. Head residents serve as advisors to the hall's student government organization and assist students in carrying out a varied social and recreational program. The student is helped to make new friends and to find a place in groups of congenial interests.

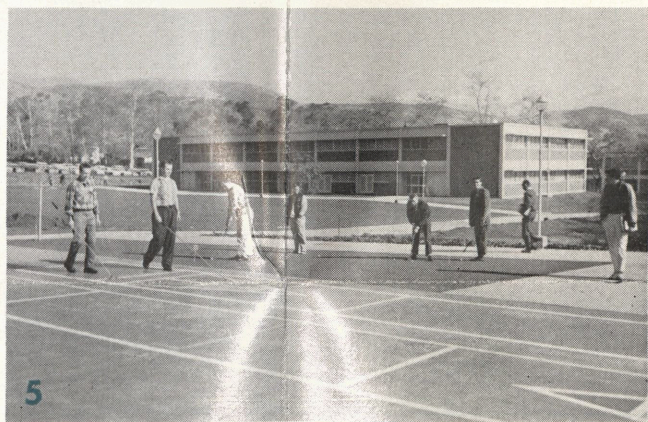
The new fire-proof, air-conditioned residence halls which meet the best modern standards contribute to a full campus life. They house students two to a room in well furnished quarters of generous size, each of the four halls having a capacity of 200 students. Special study rooms are available on every floor. The first floor of each residence has a lobby, lounge and recreation room in which students may enjoy informal social contacts day by day. These public rooms may be thrown together to provide spacious facilities for dances and other special events.







(Top) Student room in Kellogg residence hall.  
Medical service in a modern Health Center is part of the campus living plan.



- (1) Students and faculty maintain informal, friendly relationships.
- (2) El Patio lounge is a good place to loaf.
- (3) The recreation room in each residence hall offers a variety of relaxation.
- (4) Intramural sports play a part in the campus living plan.
- (5) Shuffleboard and putting enthusiasts display their skill during lunch hour. Business classroom building is in background.
- (6) Well planned meals geared to young men's appetites are served in the cafeteria.

Space in residence halls is rented on a board and room basis only. Meals are served seven days a week in the college dining hall. A minimum number of meals must be purchased on the board and room plan. Students may purchase additional meals on an a la carte basis.

The minimum room and board rate is approximately \$210 a quarter payable in advance, but installment payments may be arranged at an added cost of \$4. Students interested in reserving space in a residence hall may use the application blank attached to the Application for Admission form, or obtain an Application for Residence form from the College Housing Office. A \$20 security deposit which does not apply on board and room is required with each application.

The site of the Kellogg Campus is the former Kellogg Horse Ranch internationally known through most of this century for the quality stable of Arabian horses that is still maintained there. Since early decades of the Nineteen Hundreds when the W. K. Kellogg family established its home at the ranch, it has enjoyed a tradition of gracious living.

For further information write to:

THE ADMISSIONS OFFICE  
CALIFORNIA STATE POLYTECHNIC COLLEGE  
POMONA, CALIFORNIA



## **MAJORS OFFERED**

California State Polytechnic College with campuses at Pomona, San Dimas and San Luis Obispo is administered as one of California's state colleges. It grants the Bachelor of Science degree and, at San Luis Obispo, the Bachelor of Education and Master of Arts in Education degrees. The College is accredited by the Northwest Association of Secondary and Higher Schools, the Western College Association and the California State Department of Education.

*Occupational majors offered at the Kellogg-Voorhis Campus are:*

### **AGRICULTURAL DIVISION**

Agricultural Business Management, Animal Husbandry, Fruit Production, General Crops, Horticultural Services and Inspection, Ornamental Horticulture, Landscape Architecture, Soil Science.

### **ENGINEERING DIVISION**

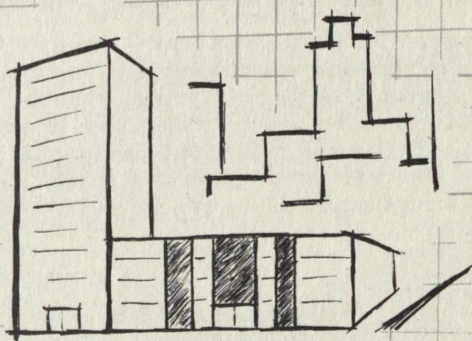
Aeronautical Engineering, Electronic Engineering, Industrial Engineering, Mechanical Engineering.

### **ARTS AND SCIENCES DIVISION**

Accounting, Biological Sciences, Business Administration, English and Speech, Marketing and Sales, Mathematics, Office Management, Physical Education, Physical Sciences, Social Sciences.



# CAREERS IN BUSINESS



CALIFORNIA STATE POLYTECHNIC COLLEGE  
San Luis Obispo



# There's a future for you in **BUSINESS**

and the future starts  
with *today's* preparation

Business is the big occupational field in America today. The four and a half million businesses in the United States are the nation's largest source of employment. They offer opportunity for all well prepared young men and women who are interested in buying, selling, accounting, financing, transporting, communicating, servicing and administering.

Business has been continuing to hire more college graduates and at better salaries. The starting salary in accounting for inexperienced college graduates is estimated at from \$421 to \$464 a month. For sales work the starting range is \$414 to \$460. The starting salary for general business trainees ranges from \$400 to \$443.\*

The more responsible and desirable of positions, however, demand a college education increasingly as the tempo of business picks up, government regulation increases and business itself becomes more complex. To supply that demand is the function of the Business Department at California State Polytechnic College which offers a four-year course leading to the Bachelor of Science degree in business.

To prepare for a business career the student at Cal Poly follows a required curriculum designed to give him a broad general knowledge in the field. Along with the required pattern of courses he uses his wide choice of electives to concentrate in accounting, labor and management relations, sales and sales management, or general business. He takes 41 units in his specialty chosen with the advice of his faculty adviser.

## REQUIRED COURSES

The required program of courses which all students take regardless of their specialization is the following:

### FIRST YEAR

ENGLISH COMMUNICATION  
PHYSICAL EDUCATION  
HEALTH EDUCATION  
MATHEMATICS FOR BUSINESS  
ACCOUNTING PRINCIPLES  
BUSINESS MACHINES  
TYPEWRITING

OFFICE ORGANIZATION  
AND OPERATION  
LABOR MOVEMENT IN  
CALIFORNIA AND U.S.  
INSURANCE PRINCIPLES  
APPLIED BIOLOGY

### SECOND YEAR

SPORTS EDUCATION  
PRINCIPLES OF ECONOMICS  
LITERATURE  
PUBLIC SPEAKING  
ADVANCED PUBLIC  
SPEAKING

GENERAL PSYCHOLOGY  
PSYCHOLOGY FOR BUSINESS  
AND INDUSTRY  
COLLEGE PHYSICS  
DESCRIPTIVE STATISTICS

### THIRD YEAR

INTRODUCTION TO  
PHILOSOPHY  
LOGIC  
STATISTICAL METHOD  
REPORT WRITING

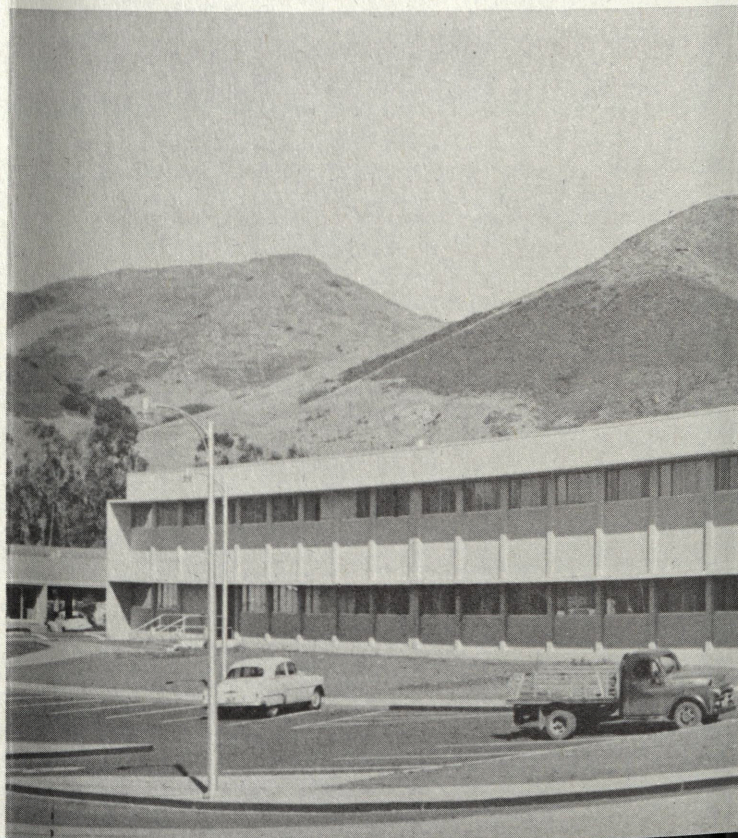
BUSINESS FLUCTUATIONS  
AND FORECASTING  
BUSINESS LAW  
AMERICAN GOVERNMENT  
FAMILY RELATIONS

### FOURTH YEAR

GOVERNMENT AND  
BUSINESS  
GROWTH OF AMERICAN  
DEMOCRACY  
U.S. IN WORLD AFFAIRS

SENIOR PROJECT  
UNDERGRADUATE SEMINAR  
POLITICAL AND ECONOMIC  
GEOGRAPHY

The business program at Cal Poly is designed to prepare graduates for middle-management positions in accounting, labor and management relations, sales and sales management, or general business.



\* Endicott Report, Journal of College Placement, Feb., 1960.



## ACCOUNTING

Accounting is the second largest field of professional employment for men. It is growing because of increased use of accounting information for management guidance, the complex tax systems, the growth of publicly held business corporations accountable to stockholders for their operations, and the greater use of accounting services by small business organizations.\*

The 1960 "College Placement Annual" lists 507 firms that are actively recruiting inexperienced college graduates for accounting employment.

Cal Poly's curriculum prepares graduates to enter public accountancy, private accounting or governmental accounting. Preparation is in sufficient depth to enable graduates to take the Certified Public Accountancy examinations administered by the state.

## LABOR AND MANAGEMENT RELATIONS

The concentration in labor and management relations is designed to give a firm understanding of the part labor organizations play in our economy. Detailed studies of both agricultural and industrial unions are made.

The graduate who has concentrated in this field is prepared to enter into the administrative functions of both labor unions and management. Labor and management organiza-

tions provide many positions in the field of industrial and personnel management for those versed in this concentration.

## SALES AND SALES MANAGEMENT

The 8,000,000 Americans who sell include more persons earning more than \$5,000 than do those engaged in any other occupation, according to the most recent census of the Department of Commerce.

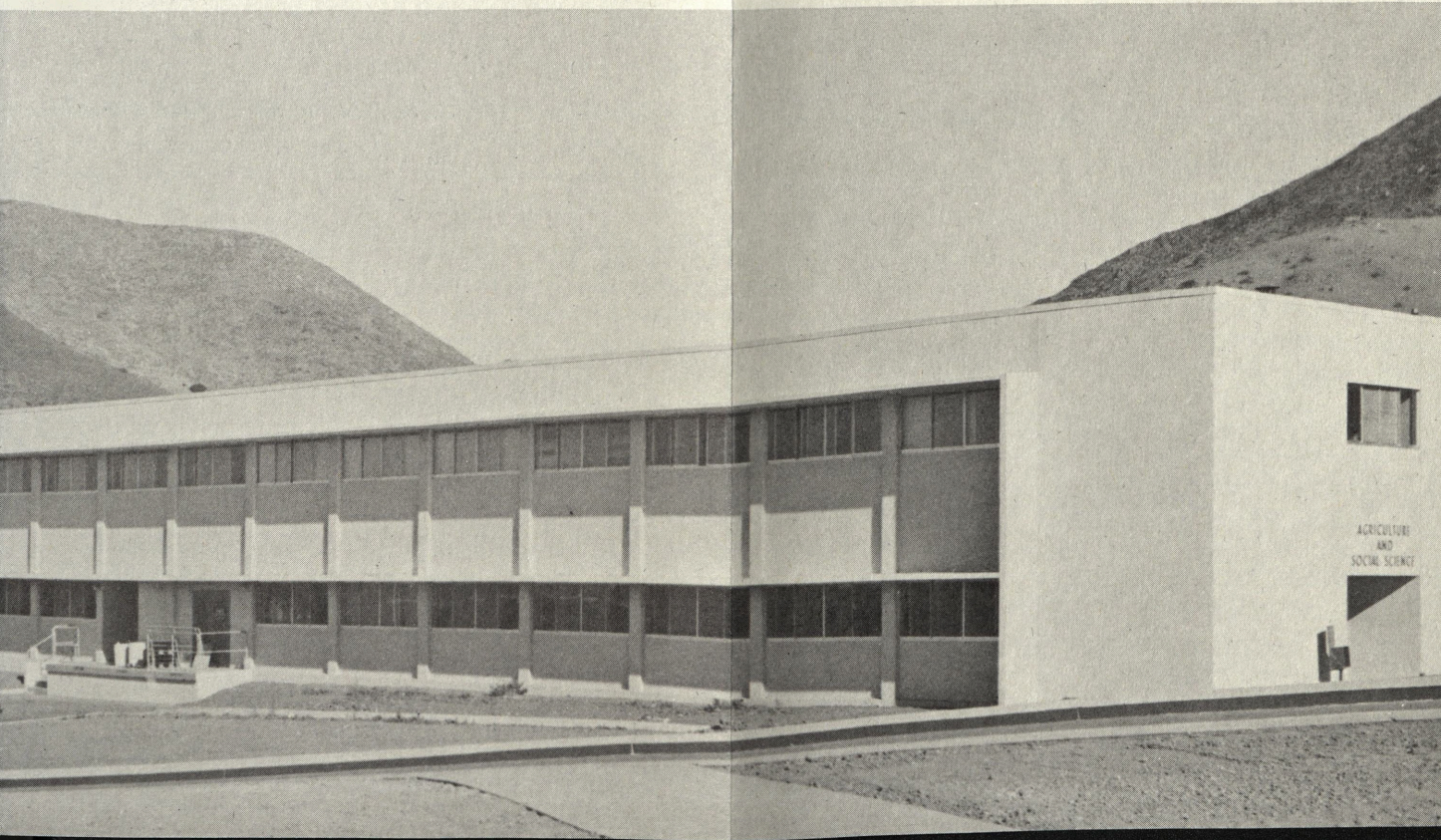
The concentration at Cal Poly in sales and sales management prepares graduates to engage actively in the fields of sales, sales promotion and sales management. The concentration provides a background in the techniques of selling which includes not only the general fields of business, but also those of agriculture and industry. Courses in the college's large and well established divisions of Agriculture and Engineering are available to students who wish to broaden further content coverage.

## GENERAL BUSINESS

The concentration in general business is concerned with what is frequently called business administration. It emphasizes administration, finance and office management. The student is given a broad background in the operations of business from primary production to ultimate sale. The preparation leads to a wide variety of employment in business including, in many cases, initial employment in the training programs of large corporations.

*Home of Cal Poly's Business Department*

\* Occupational Outlook Handbook, Bureau of Labor Statistics, U.S. Department of Labor.





# Typical Business Occupations

Typical positions in the world of business for which Cal Poly prepares students are:

## ACCOUNTING

- AUDITING (financial auditor, general auditor)
- COST ACCOUNTING (company cost accountant, cost clerk, general cost accountant)
- PUBLIC ACCOUNTING (accounting systems expert, certified public accountant, company accountant, general accountant)
- PUBLIC FINANCE (federal, state, municipal)
- TAX PRACTICE (government service, tax accountant, tax consultant)

## LABOR AND MANAGEMENT RELATIONS

- PERSONNEL ADMINISTRATION (consultant in labor relations, employment manager, personnel director, business manager)
- NEGOTIATION (contract negotiator, wage and hour specialist, labor research)

## SALES AND SALES MANAGEMENT

- FOREIGN TRADE (branch manager, export salesman, trade counselor)
- MARKETING (director of marketing, market forecaster, sales manager, sales-promotion manager)
- RETAILING (merchandise manager, sales-promotion manager)
- PURCHASING (chief clerk, industrial buyer, purchasing agent, purchase analyst)
- STOREKEEPING (chief clerk, material control clerk, perpetual inventory clerk, storekeeper)

## GENERAL BUSINESS

- FINANCIAL CONTROL (assistant treasurer, cashier, financial adviser, treasurer)
- MANAGEMENT CONTROL (business manager, executive assistant, manager, staff executive)
- RECORD CONTROL (budget director, comptroller, executive assistant, internal statistician)
- OFFICE MANAGEMENT (chief clerk, consultant, department head, office manager, systems expert)

## CAL POLY—GENERAL INFORMATION

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SERVICE TO STUDENTS. A college Placement Service aids students in obtaining part-time employment and in placement at graduation. Students are assigned faculty advisors and counseling and health services are provided.

For further information address the  
ASSOCIATE DEAN (Admissions)  
California State Polytechnic College  
San Luis Obispo.



# CAREERS IN BUSINESS

CALIFORNIA STATE POLYTECHNIC COLLEGE

San Luis Obispo

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*This brochure published through the cooperation of  
The Exchange Club of San Luis Obispo, California*

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