HISTORY OF

CALIFORNIA STATE POLYTECHNIC

THE FIRST FIFTY YEARS
1901-1951

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CHAPTER I

FOUNDING THE CALIFORNIA POLYTECHNIC SCHOOL

California was the scene of considerable change during the last two decades of the nineteenth century. The key factors of rapid population increase and land settlement[1] were abetted by railroad company activities. During the eighties steel rail mileage within the state was doubled, reaching a figure of 4350 miles.[2] Lured by frenzied advertising, thousands of settlers moved to the West, their journeys facilitated by cutthroat rate wars between the Southern Pacific and Santa Fe companies. By 1900 the population of California was 1,485,053 persons, a twenty-year increase of about 70 per cent, as compared to the national increment of approximately 50 per cent during the same period.[3]

Agriculture was expanding. Although wheat and barley output continued to be of greatest importance, the trend from 1880 to 1900 was toward diversified and intensive farming[4] made possible by irrigation projects which brought thousands of additional acres under

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[1]Robert G. Cleland, From Wilderness to Empire; A History of California, 1542-1900 (New York, 1944), 365.

[2]Southern Pacific Company, "Historical Outline" (San Francisco, 1933), 43.

[3]Twelfth Census, 1900, I, Statistics of Population, xxii.

[4]Cleland, From Wilderness to Empire, 358

cultivation. Failure of attempts to institute sericulture and cotton cropping was more than offset by the successful introduction and rapid propagation of the Washington navel orange.[5] With dairy, grape, and prune production especially successful, California agriculture flourished during this period.

Industry had moved forward. The five manufacturing classifications most important in 1880 - flour, lumber, foundry products, meat packing, and the refining of sugar and molasses[6] - had more than doubled in value twenty years later.[7] Meanwhile, rapid progress had been made in the canning and preservation of fruits and vegetables, and the petroleum industry was gaining a solid foothold. Although a serious depression hampered economic development between 1892 and 1895, for the most part hard times were forgotten by 1900.[8] It was during the prosperous days of the early twentieth century that the California Polytechnic School, precursor of California State Polytechnic College, was born.

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[5]John W. Caughey, California (New York, 1940), 463-64; 491.

[6]Compendium of the Tenth Census, 1880, Part II, Manufacturing, 948-49.

[7]Twelfth Census, 1900 VII, Statistics of Manufactures, 35.

[8]Cleland, From Wilderness to Empire, 370-72.

Myron Angel was most responsible for the founding of the Polytechnic.[9] Envisioning in 1893 a state supported educational institution in San Luis Obispo,[10] Angel for eight years campaigned for his ideal by writing numerous articles, heading citizens' committees, and corresponding with legislators. He was the key figure in the fight for the school[11] and deserves recognition as "father of California State Polytechnic College."[12]

Angel was born December 1, 1827, in Oneonta, New York, where he spent his boyhood.[13] The most important event of his youth was an appointment in 1846 to West Point; however, after several years' study he resigned from the military academy,[14] setting out with his brother Eugene to search for gold in California. After months of travel the Angels reached San Diego barefooted and ragged having walked the last several hundred miles carrying their possessions on their backs. They spent their remaining funds for passage on a small brig which brought

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[9]Leroy Anderson, "California Polytechnic School Pioneers" (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 1.

[10]Myron Angel, History of the California Polytechnic School at San Luis Obispo, California (San Luis Obispo, 1908), 10.

[11]San Luis Obispo Morning Tribune, January 10, 1897, p. 3; January 13, 1897, p. 2; December 7, 1898, p. 1., March 9, 1902, p. 4.

[12]San Luis Obispo Daily Telegram, June 28, 1911, p. 1.

[13]San Luis Obispo Morning Tribune, June 28, 1911, p.1.

[14]Anna P. Hannum (ed.), A Quaker Forty-Niner; The Adventures of Charles Edward Pancoast on the American Frontier (Philadelphia, 1930), 177.

them into San Francisco on December 8, 1849.[15] Lacking money for lodgings, they passed their first night ashore walking the streets. In the morning Myron was offered a job shingling a roof. Although desperately in need of cash, he was forced to reject this opportunity because, as he explained, "I never drove a nail in my life."[16] This experience impressed on Angel's mind the value of practical, vocational training.

After several years of indifferent success in mining gold, the Angels for almost a decade operated a ranch near Colusa, California.[17]

During the 1860's Myron Angel turned to a journalistic career. Successively he was editor of newspapers in Placerville, Sacramento, and Oakland; meanwhile he published histories of several California counties and one of the state of Nevada.[18] When in 1883 he arrived in the city of San Luis Obispo with the purpose of writing an account of San Luis Obispo County, the natural beauty and delightful climate proved so attractive that he decided to settle permanently in the city where he was to make his home until his death in 1911.[19]

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[15] Ibid., 232.

[16] Angel, History of the Polytechnic, 23.

[17] Hannum (ed.), Quaker Forty-Niner, 334-56.

[18] San Luis Obispo Morning Tribune, June 28, 1911, p. 1.

[19] Angel, History of the Polytechnic, 15.

In 1893 while visiting his native village of Oneonta after an absence of several decades, Angel was greatly impressed with its progress in culture, refinement, and enlightenment. These beneficial gains he believed to have resulted from the influence of a local normal school.[20] He resolved thereupon to do all in his power to have established a similar institution in San Luis Obispo, which he considered "one of the most neglected places in California."[21] Such an establishment, he reasoned, would bring the city both cultural and economic advantages.[22]

The following year on his return to California, Angel commenced a campaign for a local teacher training institution.[23] At this time San Luis Obispo had a population of 3200;[24] its numerous fraternal orders and civic organizations were active, and there was much general interest in political and social affairs. However, the prospects were dim in the mid-1890's for the founding of a state school in the city. San Luis Obispo was not easily accessible to outsiders. The dirt and gravel roads fanning out to the north, east, and south were virtually

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[20] Ibid., 11.

[21] Margaret Chase, "History of Cal Poly" (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 2.

[22] Anderson, "California Polytechnic School Pioneers," 1.

[23] Angel, History of the Polytechnic School, 11.

[24] Twelfth Census, 1900, I, Population, 78.

impassable during the wet winter months. By 1894 the Southern Pacific Railroad Company had pushed its lines southward to join San Luis Obispo with San Francisco, but it was not until 1901 that through passage to Los Angeles was to be provided.[25] One could travel to coastal points south or north on ships of the Pacific Coast Steamship Line,[26] which put in at Port Harford,[27] located about eleven miles to the southwest and connected to San Luis Obispo by a narrow gauge railway line.[28] The comparative isolation of the city was a distinct handicap.

Proponents of a local school faced the additional problem of existing normal institutions in Chico, San Jose, and Los Angeles, appropriations for which in 1893 had exceeded $175,000.[29] Moreover, economic conditions were declining throughout the state as three years of drought following the panic of the early nineties, had accentuated California's difficulties.[30] Notwithstanding these adverse conditions Myron Angel proceeded with his attempts to procure a state supported educational institution for San Luis Obispo.

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[25] Southern Pacific Company, "Historical Outline," 43.

[26] San Luis Obispo Weekly Tribune, February 22, 1895, p. 4; San Luis Obispo Morning Tribune, July 19, 1895, p. 4.

[27] Now known as Avila Beach.

[28] Chris N. Jesperson, History of San Luis Obispo County (n.p., 1939), 117-119.

[29] Statutes of California, 1893, p. 530.

[30] Cleland, From Wilderness to Empire, 371-72.

While Angel promoted the school idea locally, the politician most actively behind such an institution was Sylvester C. Smith of Bakersfield, representing San Luis Obispo and Kern Counties in the California Senate from 1894 to 1902.[31] Senator Smith's interest was first aroused in 1895 when he received from Angel a letter advocating the founding of a state normal institute in San Luis Obispo.[32] Highly interested, Smith drew up a school bill, but it was too late in the session for it to receive serious consideration.[33]

During the ensuing two years the school issue received only minor attention. Benjamin Brooks, an influential civic leader and long-time editor of the Tribune, did comment favorably in an editorial,[34] but Angel was on an extended trip to the East, and little was accomplished.[35]

Late in 1896 Angel commenced efforts to secure passage of a normal school bill by the legislature scheduled to convene the following month. One of his most effective articles, appearing in the Christmas Day edition of the Breeze, called upon the local citizens

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[31] Biographical Directory of the American Congress, 1774-1949, p. 1834.

[32] San Luis Obispo Breeze, March 11, 1902, p. 8.

[33] Angel, History of the Polytechnic School, 12.

[34] San Luis Obispo Weekly Tribune, February 22, 1895, p. 4.

[35] San Luis Obispo Morning Tribune, January 13, 1896, p. 4.

to band together for united action in support of a teacher training institute. Angel pointed out the overcrowded conditions in the existing normal schools and the favorable geographic location of San Luis Obispo, midway between Los Angeles and San Jose.[36] This writing brought results. A public meeting at the City Hall attracted twenty prominent local businessmen. Angel was appointed head of a committee charged with drawing up a petition for a school,[37] and a few days later at another gathering, Angel's document, which included comments on the salubrious climate and beautiful scenery of San Luis Obispo, was read and approved. Copies were immediately dispatched to Senator Smith and to Assemblyman J. K. Burnett, representing San Luis Obispo in the lower house of the state legislature.[38]

On January 15, 1897, Senator Smith submitted Angel's bill to the Senate, although a few days earlier legislation providing for a normal school at San Diego had been introduced.[39] Then quite suddenly came a significant change regarding the proposed San Luis Obispo school. In a speech made five years later, Senator Smith explained

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[36] San Luis Obispo Breeze, December 25, 1896, p. 1.

[37] San Luis Obispo Morning Tribune, January 10, 1897, p. 3.

[38] Ibid., January 13, 1897, p. 2.

[39] Ibid., January 15, 1897, p. 3.

how he had "suggested to Mr. Angel that the plan be changed to that for a polytechnic school."[40] With three normal schools in operation and with San Diego now bidding for a fourth, the chances seemed slim indeed that a teacher training institution would be founded at San Luis Obispo. Interested in technical and vocational training, and mindful of his San Luis Obispo constituents' desire for a school, Senator Smith, on February 8, 1897, prepared a bill to found a polytechnic institute at San Luis Obispo and shortly introduced it into the Senate.[41]

Meantime the petitions of San Diego and San Luis Obispo for state schools resulted in the appointment of a legislative committee to examine the possibilities of each city. After visiting San Diego the legislators arrived in San Luis Obispo on February 20, 1897.[42] Eager to convince the visitors that San Luis Obispo should be the site of a state school, the City Council had appropriated one hundred dollars for a reception and banquet at the famous Ramona Hotel.[43] This function was attended by the most influential citizens of the area. By this time

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[40] San Luis Obispo Breeze, March 11, 1902, p. 2.

[41] San Luis Obispo Morning Tribune, February 9, 1897, p. 2.

[42] San Luis Obispo Weekly Tribune, February 26, 1897, p. 3.

[43] Ibid.

Angel had concluded that he should change his tactics by backing the founding of a polytechnic institute rather than a normal school for San Luis Obispo.[44] When called upon for a speech at the conclusion of the banquet, he spoke out emphatically for an institution which would "teach the hand as well as the head so that no young man or woman will be set off in the world to earn their living as poorly equipped as was I when I landed in San Francisco in 1849."[45] The gist of his peroration - the urgent state-wide need for technical training - was enthusiastically indorsed by visiting legislators and townsfolk alike, who jointly approved the establishment of a polytechnic school in San Luis Obispo.[46] The plans for a local normal institution were shelved.

Within a month the Polytechnic School Bill passed both houses of the legislature with few dissenting votes. However, Governor James H. Budd in April, 1897, interposed a veto on the grounds that such an institution was not necessary and would increase taxation.[47]

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[44]Chase, "History of Cal Poly," 2.

[45]Angel, History of the Polytechnic School, 24.

[46]San Luis Obispo Weekly Tribune, February 26, 1897, p. 3.

[47]Ibid., April 9, 1897, p. 7.

In December, 1898, those interested in the founding of a polytechnic institute in San Luis Obispo took renewed action. A public meeting called by Mayor William Shipsey was attended by an enthusiastic group of residents; site and subscription committees were appointed and soon set to work.[48] In newspaper articles Angel exhorted San Luis Obispans to support all attempts to procure a local state supported institution.[49]

Results in Sacramento were disappointing for although the Polytechnic School Bill passed the Senate by a vote of twenty-nine to one, it failed in the lower house by thirty to twenty-three votes.[50] Defeat in the Assembly was not based on general disapproval of the institute, but came about because of the unpopularity of Assemblyman Burnett,[51] who had antagonized many of his colleagues by supporting a measure discontinuing the popular coyote scalp bounties.[52] Thus was the school bill lost in 1899.

The November, 1900, election of young, ambitious, and personable Warren M. John of San Luis Obispo to the Assembly strengthened the

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[48]San Luis Obispo Morning Tribune, December 4, 1898, p. 1.

[49]Ibid., December 7, 1898, p. 1; San Luis Obispo Breeze, December 16, 1898, p. 3.

[50]San Luis Obispo Morning Tribune, February 23, 1899, p. 1; March 9, 1899, p. 1.

[51]Chase, "History of Cal Poly," 2.

[52]San Luis Obispo Morning Tribune, March 10, 1899, p. 1.

cause of the Polytechnic School Bill.[53] Its passage was Assemblyman John's primary ambition during his initial term of office in 1901.[54] To forestall a possible veto on grounds of economy, Senator Smith and Assemblyman John included in the proposed act a clause providing that funds for the institute would not be available until after January 1, 1902.[55]

Interest in the Polytechnic had spread beyond the city boundaries. In letters to the editor of the Tribune persons in Paso Robles, Pozo, and Morro Bay urged county-wide support for the school.[56] Public donation of funds for lobbying purposes was suggested. In a letter to Benjamin Brooks, President David Starr Jordan of Stanford University recommended that a trade school be established in San Luis Obispo.[57]

In February, 1901, the bill passed the Senate by a vote of thirty-three to three and the Assembly by fifty-one votes to one.[58] As its fate now hinged upon the action of Governor Henry T. Gage, various

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[53]San Luis Obispo Weekly Tribune, November 9, 1900, p. 4.

[54]Ibid., January 13, 1901, p. 4.

[55]Ibid., January 11, 1901, p. 1.

[56]Ibid., January 4, 1901, p. 3; December 28, 1900, p. 2; December 30, 1900, p. 2.

[57]Ibid., January 23, 1900, p. 1.

[58]Ibid., February 6, 1901, p. 1; February 22, 1901, p. 1.

means were used to sway him to a favorable decision. Senator Smith had earlier urged San Luis Obispans to request their friends throughout the state to write letters favoring the school.[59] A petition bearing the signatures of 967 persons in Santa Margarita, Paso Robles, Templeton, and San Miguel was submitted by John.[60] A statement indorsing the Polytechnic School, signed by some fifty prominent San Francisco merchants, was forwarded to Sacramento.[61]

On March 8, 1901, Governor Gage signed into law the California Polytechnic School bill.[62] There is some evidence that this action was strongly influenced by Southern Pacific Railroad Company officials.[63] The last link in the coast route from San Francisco to Los Angeles, the "gap" between Elwood and Surf, was to be completed within a few weeks.[64] Certainly a school located in any city along the tracks would be of advantage to the Southern Pacific. In any event, success at long last attended the efforts of Angel, Senator Smith, Benjamin Brooks, and

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[59] San Luis Obispo Morning Tribune, February 14, 1901, p. 1.

[60] Ibid., February 27, 1901, p. 4.

[61] Ibid., March 3, 1901, p. 1.

[62] Statutes of California, 1901, p. 115.

[63] Annie M. Morrison, A Historical Sketch of the California Polytechnic School, 1903-1923 (n.p., n.d.), 4-5; Benjamin Brooks, What the Finger Wrote - Historical Sketch of the County of San Luis Obispo (Chicago, 1917), 244-45.

[64] San Luis Obispo Morning Tribune, April 12, 1901, p. 4.

other San Luis Obispans; nor should the labors of Assemblyman John be overlooked. There was much rejoicing in San Luis Obispo over the granting of a state supported educational institution.

The founding act, effective on January 1, 1902, was exceedingly liberal regarding curricular offerings the institution might provide. The first section reads: "The purpose of the school is to furnish to young people of both sexes mental and manual training in the arts and sciences, including agriculture, mechanics, engineering, business methods, domestic economy, and such other branches as will fit the students for non-professional walks of life. This act shall be liberally construed, to the end that the school established hereby may at all times contribute to the industrial welfare of the State of California."[65]

These generous provisions were to prove of great benefit to the institution as it grew through the years. They made possible the establishment of courses of study in a wide variety of fields and the development of a program ranging from the elementary level to that of collegiate education.

The California Polytechnic School Bill called for a seven-man board of trustees: the Governor and State Superintendent of Schools

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[65] Statutes of California, 1901, pp. 115-16.

as ex-officio members, the other five individuals to be appointed by the Governor. The trustees were to discharge their general duties in accordance with the laws regulating the state normal schools - in so far as these were applicable - and were explicitly charged with the selection of a permanent school location.[66] An appropriation of $50,000 was made for site purchase, construction and furnishing of buildings, and maintenance of the school.[67]

In early February, 1902, Governor Gage completed his appointment of the following trustees: for one year, Senator Sylvester C. Smith of Bakersfield and William Graves of San Luis Obispo; for two years, Assemblyman Warren M. John of San Luis Obispo; for three years, Mr. F. A. Hihn of Santa Cruz; for four years, Professor of Horticulture Edward J. Wickson of the University of California.[68] These gentlemen, with Governor Gage and Superintendent of Public Instruction James J. Kirk constituted the original Board of Trustees of the California Polytechnic School.

Within the next four months the trustees made rapid progress, organizing themselves with Trustee Smith as president and Trustee Wickson

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[66] Ibid.

[67] Exactly the same amount was appropriated in 1897 for the founding of the San Diego Normal School.

[68] San Luis Obispo Morning Tribune, February 9, 1902, p. 4.

as secretary,[69] selecting both a site and a director for the school, and giving considerable thought to the vexing problem of determining the proper aims and scope of the institution.

To inspect proposed locations for the school and to be apprised of local sentiment as to the course of study the new school should offer, the trustees scheduled a series of public meetings for March eighth, ninth, and tenth in San Luis Obispo.[70]

From sixteen areas suggested as school locations, one offered by Mr. Dawson Lowe was considered most suitable for the site. In the First Report of the Board of Trustees, it is described as follows: "The School tract is situated outside of the city limits of San Luis Obispo and about one mile in a north easterly direction from the business portion of the city. It lies on the eastern side of the Southern Pacific railway and has a frontage thereon of 29.76 chains. From the railway the tract extends easterly about three-fourths of a mile nearly to the summit of the first range of hills. The soil consists chiefly of rolling land suitable for hay, grain or fruit. About one hundred acres are occupied by hillside, which will provide pasturage, while a small amount is in rich bottom land."[71]

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[69]Report of the Board of Trustees of the California Polytechnic School, November 1, 1902 (San Luis Obispo, 1902), 1.

[70]San Luis Obispo Morning Tribune, March 14, 1902, p. 2.

[71]Report of the Trustees, 1902, p. 3.

Trustee Hihn, acting for the Board in the negotiating of details of the transaction, finally in August reached a mutually satisfactory settlement with Mr. Lowe.[72] The sum of $7709.03 was paid for an area of 28104 acres.[73] Of much profit to the school was the inclusion of the grant of free use of a segment of the Lowe estate to be used as a road from the school grounds to the end of Hathway Avenue. Bordering the east side of the railway tracks, this parcel of land was one hundred feet in width. Moreover, a further clause established that Brizzolero Creek, passing through the school grounds, might be dammed and its waters be appropriated or diverted for any school use or need.[74]

The question of scope and aims of the school was the subject of much discussion in San Luis Obispo during March, 1902. It seemed probable for a time that the trustees would limit the offerings of the institution strictly to those of an agricultural nature.[75] Negotiations for a farm of almost three hundred acres, the limited appropriations of the legislature, and public utterances of several of the trustees[76] were reasons for such a supposition.

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[72]F. A. Hihn to E. J. Wickson, July 18, 1902; August 5, 1902 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo).

[73]Report of the Trustees, 1902, p. 3.

[74]Ibid.

[75]Chase, "History of Cal Poly," 5; Angel, History of the Polytechnic, 66-67.

[76]San Luis Obispo Morning Tribune, February 9, 1902, p. 4; March 4, 1902, p. 3; March 9, 1902, p. 1.

Various well regarded local individuals, including Judge M. R. Venable, advocated that the school curricula comprise courses only in agriculture, dairying, and stockbreeding.[77] However, the majority of influential people of the county took a different stand, favoring a more rounded program of studies. These persons formed a committee, headed by Mr. John Whicher, and brought their views before the trustees during the San Luis Obispo meetings of March ninth and tenth.

According to Chairman Whicher, the greatest need of the people of California was for a school of industrial arts.[78] He was strongly backed by Myron Angel, Benjamin Brooks, and A. H. Hardie, all of whom were convinced that the new institution should include training in industrial areas as well as in agriculture.[79] It was pointed out to the trustees that the wording of the founding act called explicitly for training in mechanics, engineering, business methods, and domestic economy in addition to that in agriculture. Proponents for the broader curricula recognized that a fully developed polytechnic school could not be established in a day; even so, they insisted that the school at its

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[77]Angel, History of the Polytechnic, 71-72; San Luis Obispo Morning Tribune, March 9, 1902, p. 1.

[78]San Luis Obispo Breeze, March 10, 1902, p. 1.

[79]San Luis Obispo Morning Tribune, March 9, 1902, p. 1; March 14, 1902, p. 2; Angel, History of the Polytechnic, 70-76.

inception must be more than an agricultural experiment station. Otherwise, it might never include the truly versatile training it was established to provide.[80]

These local protests against a curriculum limited strictly to agricultural areas were highly effective; the trustees were substantially influenced.[81] When the school opened, it included instruction in agriculture, mechanics, and domestic science.[82]

In selecting a head for the new school, the trustees desired to secure an individual with considerable experience in the field of agricultural education, and one capable of assisting in the determination of the proper scope and purposes of the institution.[83] Secretary Wickson, already charged with curriculum planning for the new institution, was assigned by his fellow trustees the task of nominating a director for the California Polytechnic School.[84] For assistance with these problems, Professor Wickson turned to several of his colleagues in agriculture at the University of California. One of these, Leroy Anderson, an instructor in animal and dairy husbandry, agreed to prepare in writing his

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[80]Chase, "History of Cal Poly," 5.

[81]Ibid.; Angel, History of the Polytechnic, 71.

[82]First Annual Catalogue of the California Polytechnic School, May, 1903 (Sacramento, 1903), 12.

[83]Report of the Trustees, 1902, p. 4.

[84]Leroy Anderson, "Reminiscences at the Tenth Anniversary of the California Polytechnic School, October, 1913" (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 1.

ideas of what the new school should be. His careful analysis and various suggestions appeared in May, 1902, in a letter addressed to the Board of Trustees. Herein he made detailed recommendations as to the following: the course of study, including both practical and academic work; requisite teaching personnel; proper instructional methods; the minimal age of students, amount of their expenses, and the utilization of their time; buildings; and types of animals for the school farm.[85]

Shortly after receiving Mr. Anderson's letter, the Board of Trustees by unanimous vote, nominated him for first director of the California Polytechnic School.[86] Mr. Anderson accepted the offer, taking office June 1, 1902.

Clearly, substantial progress was made during the first six months of 1902. The Governor's appointment of the Board of Trustees had been followed by the procurement of a suitable site and the appointment of a director. Soon workmen would start constructing buildings, and classes would meet. In 1903 the California Polytechnic School would commence its operations as an educational institution.

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[85]Leroy Anderson, "To the Board of Trustees of the California Polytechnic School," May 17, 1902 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 2-9.

[86]Report of the Trustees, 1902, p. 4.

CHAPTER II

THE ADMINISTRATION OF LEROY ANDERSON (1902-1907)

As the first director of the California Polytechnic School Dr. Leroy Anderson was an outstanding success. A hard worker and able organizer, far-sighted in planning the future of the institution, skillful in meeting its immediate problems, apt in his selection of staff members, and possessing both sound common sense and an excellent scholastic background,[1] he was eminently fitted for the position. During his period of service from 1902 to the end of 1907 the institution was permanently established, and its basic philosophy was formulated; the first buildings were erected, and the earliest graduation exercises took place.

Only thirty-six years of age at the commencement of his five and one-half years in office, Anderson went about his tasks with youthful zest and enthusiasm. Of Scottish ancestry "he was tall and lean and rather slow in his motions. His speech, too, was never rapid, but never hesitant; he weighed and balanced ideas before expressing them. He was fond of Socratic questioning and would listen attentively to all opinions and try to discern some good in all. When he disagreed, he expressed his opinion frankly, but so tactfully that the one to whom he

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[1]In June, 1902, Mr. Anderson received the degree of doctor of philosophy from Cornell University, the institution previously granting him both bachelor's and master's degrees.

was talking felt he, too, was contributing something to the conclusion. He had a sort of quizzical humor that added light and warmth to all relationships.[2]

Of considerable aid to the Director was a continuing effective working relationship with the Board of Trustees. During his years at the institution, three of the original appointees of 1902 - Warren M. John, Edward J. Wickson, and F. A. Hihn - continued as trustees. A change in the composition of the Board took place in September, 1902, when Governor Gage named R. M. Shackleford of Paso Robles to succeed the recently deceased Trustee William Graves.[3] Later, after the resignation of Sylvester C. Smith in 1905,[4] the Board of Trustees regained its full complement on the appointment of Mayor George C. Edwards of Santa Barbara by Governor George C. Pardee.[5] Trustees Shackleford and Edwards possessed the same confidence in Anderson as their fellow trustees; invariably his recommendations were approved. Years later in discussing the Board Anderson praised these gentlemen, commending them for their keen interest in the welfare of the school.[6]

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[2]Margaret Chase, "History of Cal Poly" (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 7.

[3]Myron Angel, History of the California Polytechnic School at San Luis Obispo, California (San Luis Obispo, 1908), 90-92.

[4]San Luis Obispo Weekly Tribune, June 20, 1905, p. 4.

[5]Ibid., November 10, 1905, p. 1.

[6]Leroy Anderson, "Reminiscences at the Tenth Anniversary of the California Polytechnic School, October, 1913" (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 4.

Anderson possessed positive views regarding the importance and proper functions of the Polytechnic. To his mind the great need of the times was practical education for the tasks of everyday life.[7] Two California secondary institutions, the Throop Polytechnic Institute of Pasadena and the California School of Mechanical Arts at San Francisco, were successfully training hundreds of students annually for industrial pursuits, but throughout the state there existed an appalling lack of agricultural education.[8] The Director was convinced that the California Polytechnic School should offer three main areas of study: agriculture, mechanics, and household arts,[9] with practical agriculture constituting the chief feature of the institution.[10]

Anderson held the firm conviction that the Polytechnic must emphasize functional education. While the institution was still in the planning stage, he wrote: "The school is affiliated with nothing; it depends on no institution to prepare its students; it prepares its

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[7]Leroy Anderson, "To the Members of the California Legislature," December 20, 1902 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 1.

[8]Leroy Anderson, "To the Board of Trustees of the California Polytechnic School," May 17, 1902 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 1.

[9]Leroy Anderson, "What Modern Farming Means," Sunset (San Francisco), X (March, 1903), 458.

[10]First Biennial Report of the Board of Trustees of the California Polytechnic School Comprising the Reports of the Director and Secretary of the Board 1902 - 1904 (Sacramento, 1905), 20.

students for no institution; it simply tries to prepare them for an active and industrial life."[11] The earliest catalogue of the Polytechnic succinctly stated the function of the school: "to train boys and girls for country life: home, farm, orchard, dairy, and shop."[12] This basic philosophy, the provision of occupational training, has remained the basic purpose of the Polytechnic to this day.[13]

Shortly after his appointment as Director, Anderson, with the purpose of developing plans for the new institution, visited the Kansas Agricultural College, Nebraska State University, the Graduate School of Agriculture at Ohio State University, and several secondary schools in New York state.[14] On his return to California in August,[15] he presented various suggestions to the Board of Trustees.[16] His first recommendation called for the establishment of a dormitory system on the school premises. As the new Polytechnic was to be a state, rather than a local school, it seemed probable that the great majority of those

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[11]Anderson, "To the Board of Trustees," May 17, 1902, p. 9.

[12]First Annual Catalogue of the California Polytechnic School, San Luis Obispo, May, 1903 (Sacramento, 1903), 7.

[13]California State Polytechnic College Bulletin 1956-57 (San Luis Obispo, 1956), 13.

[14]Leroy Anderson, "To the Board of Trustees of the California Polytechnic School," n.d. (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 1-2.

[15]San Luis Obispo Weekly Tribune, August 15, 1902, p. 7.

[16]Anderson, "To the Board of Trustees," n.d., 1-2.

enrolling would come from beyond the confines of San Luis Obispo County and would need living quarters. Moreover, instructors interviewed by Anderson during his Eastern trip were of the opinion that students did much better work when they lived on the campus.[17]

Other recommendations included the appointment of a school architect, the development of a water supply, and the erection of a dormitory and a multi-purpose schoolhouse. Each of these buildings would be supplied with heat and electricity. The dormitory would include kitchen, dining, and laundry facilities, and the second structure would contain work and recitation rooms, laboratories, and offices.[18]

Within a few days the Board of Trustees took action, appointing W. H. Weeks of Watsonville as school architect.[19] In September, after visiting the campus to determine the best location for the proposed buildings, the trustees voted to appropriate $35,000 for the erection of an administration-recitation building and a dormitory, each to contain a basement and two stories.[20] The trustees' discussion as to type of

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[17]Margaret Chase, "History of Cal Poly," 5.

[18]Anderson, "To the Board of Trustees," n.d., 4.

[19]San Luis Obispo Weekly Tribune, August 15, 1902, p. 8.

[20]Ibid., September 19, 1902, p. 8.

construction culminated in the decision for "wood frame with steel lath and cement coating," and the use of metal tile roofing.[21]

Preliminary work soon commenced on the two structures. On January 31, 1903, several hundred persons congregated to witness the corner stone laying of the Administration Building by Orrin S. Henderson, Grand Master of the Masons of California. The chief address of the day was delivered by the president of the University of California, Benjamin Ide Wheeler, who praised Anderson's accomplishments and emphasized the need of cooperation, rather than competition between state educational institutions.[22]

During the ensuing eight months work on the two buildings progressed steadily. In March the legislature appropriated $18,000 for furnishing and equipping them.[23] For the opening of school in the autumn it was planned to use the forty-seven by one hundred feet Administration Building for a number of purposes until additional structures could be added. Hence its full basement contained temporarily both a carpentry shop and a dairy room. The first floor included the Director's office,

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[21] Ibid., November 28, 1902, p. 7.

[22] San Luis Obispo Morning Tribune, February 1, 1903, p. 1.

[23] Statutes of California, 1903, p. 188.

lecture rooms, the library, laboratories, a photographic dark room, a girl's cloak room and lavatory. An assembly hall and several classrooms were located on the second floor.[24]

The dormitory, forty by one hundred feet, was to be used to house a few of the staff and as many students as could be accomodated at one per room. It included a parlor, dining room, kitchen, laundry, five bathrooms, and thirty single rooms, each with a closet.[25]

Meanwhile Anderson had formulated a three-year course of study with concentrations in agriculture, mechanics, and home economy, "each to be interspersed with the same essential academic branches and sciences."[26] Instruction in agriculture was planned to include courses in horticulture, gardening, animal and dairy industry, irrigation, and forestry. Students in home economy would be taught sewing, dressmaking, millinery, cooking, and care of the home. In mechanics there would be training in the care of tools, carpentry, forge work, and the building trades.[27]

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[24]First Annual Catalogue, May, 1903, p. 9.

[25]Ibid.

[26]Leroy Anderson, "The California Polytechnic School; Plan, Purpose, and Scope of a State Institution," Orchard and Farm (San Francisco and Los Angeles), XIII (April 15, 1903), 2.

[27]Ibid.

These suggested curricula and certain school policies recommended by Anderson were readily accepted by the Board of Trustees.[28] Classes were to commence on September 15, 1903; the academic year would comprise two twenty-week terms; there would be no tuition charge, but each term a ten dollar laboratory fee would be assessed. A prospective student was required to be at least fifteen years of age and to possess a certificate of promotion from the eighth grade. Lacking the certificate, one could qualify for entry by passing tests in English, United States history, and arithmetic.[29]

While these plans were being developed with optimism, concern as to the future of the institution became apparent. Anderson's budget estimate for the biennium 1903-1905 was $100,000.[30] However, Governor Pardee and members of the state legislature let it be known that because of the condition of the treasury, all school budgets must be cut, and that the Polytechnic would be fortunate to receive funds in excess of $50,000.[31] Fortunately Warren M. John, school trustee and assemblyman from San Luis Obispo, was quite influential at Sacramento; moreover, the

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[28]"Minutes of the Board of Trustees of the California Polytechnic School," March 24, 1903 (San Luis Obispo, 1903), 3.

[29]First Annual Catalogue, May, 1903, pp. 13-14.

[30]"Minutes of the Board of Trustees of the California Polytechnic School," December 20, 1902 (San Luis Obispo, 1902), 1.

[31]San Luis Obispo Morning Tribune, February 20, 1903, p. 3.

Governor became sympathetic with the needs of the school.[32] Ultimately a total of $64,000 was appropriated for the two years including $33,100 for salaries, library expenses of the trustees, general support, and state printing costs; $5,000 for a power plant; and $8,000 for barns, shops and outbuildings.[33] Thus with the exception of making an allotment for the proposed Domestic Science Building, the legislature provided for most of Anderson's financial requests.[34]

By September, 1903, staff members had been selected and assigned their duties for the opening of the school. In addition to his general administrative duties, Anderson was to instruct in Agriculture and in animal and dairy industry. Oscar L. Heald, a graduate of Throop Institute, would teach carpentry and iron work; Sydney S. Twombley from the University of Maine was responsible for work in science, mathematics, and in horticulture. A recent graduate of Stanford University, Miss Gwendolyn Stewart, agreed to be matron of the dormitory and to teach domestic science,[35] and Miss Naomi Lake accepted an appointment as stenographer and bookkeeper.[36]

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[32] Ibid., February 14, 1903, p. 2.

[33] Statutes of California, 1903, pp. 141; 189.

[34] "Minutes of the Trustees," March 24, 1903, p. 2.

[35] First Annual Catalogue, May, 1903, p. 5.

[36] San Luis Obispo Morning Tribune, October 1, 1903, p. 1.

As it became evident early in September that classes could not be held on the fifteenth, since the buildings would not be ready for occupancy, Anderson announced a two-week postponement of the opening of school.[37] Toward the end of the month came a flurry of activity; on the twenty-ninth the Director and his wife moved from the Ramona Hotel in San Luis Obispo into the dormitory, and on the following day three teachers and fourteen students arrived.[38] At nine o'clock on October 1, 1903,[39] the California Polytechnic School formally commenced operations: Anderson convened an assembly in the dormitory parlor, speaking informally to a dozen students on his plans for the institution.[40]

Students enrolling the first day were Laura and Irene Righetti and Lila Weaver of San Luis Obispo; Kent S. Knowlton, Port Harford; Allen V. and Charles J. Emmert, Arroyo Grande; Mary Bello, Morro; Gustavus and Henry Wade, Goleta, Santa Barbara County; Paul L. Williams, Ventura; William H. Boswell, Soledad; Herbert H. Cox, Morgan Hill; and Frank A. Flinn, Decanso, San Deigo County.[41] Later in the year appeared Archie

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[37]Ibid., September 9, 1903, p. 4.

[38]Ibid., October 1, 1903, p. 1.

[39]Anderson, "Reminiscences at the Tenth Anniversary," 3.

[40]Chase, "History of Cal Poly," 8.

[41]San Luis Obispo Morning Tribune, October 1, 1903, p. 1.

Cheda, San Luis Obispo; George Conradt, El Dorado County; Henry L. James, Santa Barbara; Henry Pezzoni, Guadalupe; and Steve Campbell of Colorado.[42]

Of these twenty students, four registered in household arts, six in mechanics, and ten in agriculture. During the course of the first year, eighteen boys and four girls were in attendance at the school,[43] but only sixteen students remained by the close of the spring term, 1904.[44] As at least fifty students had been expected for the opening year, the light enrollment was a source of disappointment to faculty and townsfolk alike.[45]

The first few months of the initial academic year were difficult for both staff and students. Since the Administration Building was not completed until November, for six weeks classes met only in rooms where painters or carpenters were not immediately occupied.[46] Candles and kerosene lamps provided the only available light until October twenty-eighth, when a gasoline engine, located in an old tool shed behind the Administration Building, commenced producing electricity.[47] This

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[42]Ibid., October 18, 1903, p. 1; Chase, "History of Cal Poly," 8.

[43]Leroy Anderson, Annual Report of the Director of the California Polytechnic School for the Year Closing June 30, 1904 (San Luis Obispo, 1904), 1.

[44]"Minutes of the Board of Trustees of the California Polytechnic School," July 9, 1904 (San Luis Obispo, 1904), 1.

[45]"Minutes of the Trustees," March 24, 1903, p. 3.

[46]Anderson, "Reminiscences at the Tenth Anniversary," 3.

[47]Chase, "History of Cal Poly," 11.

temporary arrangement proved unsatisfactory, but not until the new power plant was complete in September, 1904, was the problem of adequate illumination solved, and then only for a temporary period, as demands for electrical power increased with the growth of the school.[48]

The provision of a sufficient supply of water was to constitute a recurring problem at the Polytechnic. For several months after classes started, two hillside springs furnished water for all school needs, but the original arrangement to heat the buildings aggravated the water situation. As Director Anderson explained: "By and by cold weather approached but no fear, for weren't we installing a boiler on a foundation for a big power house, from which we would have plenty of steam? So it was a glad day when steam was turned into the radiators. But, alas, the greedy boiler consumed all the water from the springs and left none for drink."[49] Several months elapsed before two small wells were drilled near Brizzolero Creek, and a sufficient supply of water was available for the requisites of heating as well as all other necessary purposes.[50]

In 1903-1904 only first year work was offered. All boys, whether they were registered in agriculture or in mechanics, had identical studies:

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[48]"Minutes of the Board of Trustees of the California Polytechnic School," September 10, 1904 (San Luis Obispo, 1904), 2.

[49]Anderson, "Reminiscences at the Tenth Anniversary," 3.

[50]"Minutes of the Board of Trustees of the California Polytechnic School," February 25, 1904 (San Luis Obispo, 1904), 4.

horticulture, gardening, roadmaking, carpentry, masonry, drawing, soils and plant study, commercial arithmetic, algebra, and English composition. Although they took some of their work with the boys, the girls specialized in domestic science with emphasis on sewing.[51]

From the very start the staff placed much emphasis on actual practice. Field work in horticulture, for example, included planting, spraying, pruning, and care of fruit trees and vines.[52] As part of their carpentry training the boys assisted in the construction of needed buildings. During the first year they completed a poultry house and commenced to construct a large forge shop.[53]

By Christmas time of 1903 the dormitory had become established as the center of school life. Here faculty and all the students, except for the girls and two of the boys, resided and had their meals. A friendly atmosphere was fostered by the warmth and friendliness of the Director, and by his wife's generosity in darning sox, mending clothing, and being available for advice. Strong ties were formed; the Andersons came to be regarded as second parents by most of the students.[54]

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[51]First Annual Catalogue, May, 1903, p. 11.

[52]Ibid., 12.

[53]San Luis Obispo Morning Tribune, July 9, 1904, p. 4.

[54]Chase, "History of Cal Poly," 10.

Although classwork kept the students busy, co-curricular activities were encouraged and gradually developed. The first school social function, an affair to which the Andersons and the Polytechnic boys and girls were invited, was an October party in San Luis Obispo at the home of the Reverend Harry Hillard. The students' exemplary conduct and the favorable impression they made formed the basis of a favorable newspaper account.[55] The following March the boys finished building a tennis court which was soon put to much use.[56] There was much excitement that spring regarding a debate with San Luis Obispo High School as a silver cup was to be donated to the institution winning two of the proposed three annual debates.[57] Hence preparations were made with care, and the proceedings closely followed. After the final rebuttal, when the judges decided the Polytechnic debaters had won, there was much rejoicing by the Polytechnic student body.[58]

The outstanding event of the year was the First Annual Farmers' Institute and Basket Picnic. Over two hundred persons came with their lunches to the school grounds, inspected the buildings, and heard short addresses by Trustees Wickson and Smith.[59]

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[55]Ibid., October 4, 1903, p. 4.

[56]First Biennial Report, 1902-1904, p. 18.

[57]Polytechnic Journal (San Luis Obispo), I (January, 1906), 10.

[58]San Luis Obispo Morning Tribune, May 14, 1904, p. 1.

[59]Ibid., May 25, 1904, p. 1.

One of Anderson's keenest interests was in acquiring for the school farm the best breeds of horses, cattle, and swine.[60] By the summer of 1904 the stocking program was well under way. The school possessed a Shorthorn bull, five thoroughbred Ayrshires,[61] two Persheron mares, a Jersey bull, two Jersey heifers, and a Poland China sow.[62]

As the first academic year of the California Polytechnic School ended in June of 1904, great strides forward had been taken. Early difficulties had been surmounted, and the permanence of the institution seemed assured. Anderson should have been well pleased with the progress made and certainly deserved various commendations coming his way.[63]

The period September, 1904, to June, 1906, comprising the second and third academic years in the history of the Polytechnic, was a time of continued growth. Compared with the first year's registration, a five-fold increase in number of students took place; enrollment

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[60]Anderson, "To the Board of Trustees," May 17, 1902, p. 9.

[61]First Annual Catalogue, May, 1903, p. 10.

[62]"Minutes of the Trustees," February 25, 1904, p. 2; ibid., July 9, 1904, p. 2.

[63]"The California Polytechnic School," Pacific Rural Press (San Francisco), LXVII (June 4,1904), 1; San Luis Obispo Daily Tribune, February 1, 1903, p. 1.

figures were sixty for 1904-1905 and one hundred for 1905-1906.[64] As sophomore work was added in 1904 and third year courses the following autumn, Polytechnic School curricular offerings were widened considerably. By 1906,[65] in addition to sewing and cooking, the domestic science course of study included dress making, millinery, house construction and furnishing, bookkeeping, home nursing, catering, serving, and sloyd.[66] During their second and third years at the school both agriculture and mechanics majors were enrolled in geometry, trigonometry, physics, chemistry, history, English, surveying, and forge work; additional requirements for those majoring in agriculture were butter and cheese making, breeds of livestock, irrigation and surveying, feeding and care of animals, physiology, and plans and specifications for buildings. Students in the field of mechanics studied electricity and electrical working, engines and boilers, higher mathematics, and architectural drawing and designing.

In addition to Anderson the 1906 staff included thirteen persons with assignments as follows.[67]

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[64]Second Biennial Report of the Board of Trustees of the California Polytechnic School Comprising the Reports of the Director and the Secretary of the Board 1904-1906 (Sacramento, 1906), 9.

[65]Circular of the California Polytechnic School, San Luis Obispo, June, 1905 (Sacramento, 1905), 10-11.

[66]Wood working; see William Boyd, The History of Western Education (London, 1952), 388-89.

[67]Circular of the California Polytechnic School, San Luis Obispo. June, 1906 (Sacramento, n.d.), 4.

S.S. Twombley	Agriculture, Chemistry, Veterinary Science
James E. Roadhouse	Plant Industry, Irrigation
Harriet Howell	Domestic Art
Edwin W. Yount	Carpentry, Architectural Drawing
May Secrest	Domestic Science
LeRoy B. Smith	English, History, Economics
Herman B. Waters	Physics, Electricity
Chester W. Rubel	Animal and Dairy Husbandry
William F. Ewing	Mathematics
Leo E. Pearson	Freehand Drawing, Sloyd, Forge Work
Helene Smith	Dormitory Manager
Naomi M. Lake	Clerk and Librarian
Marion Jatta	Stenographer

Several of these teachers made notable contributions to the Polytechnic. Miss May Secrest, educated at Kansas State College and Teachers College, New York, came to the school in 1905 from Ohio State University where she had been an associate professor.[68] An able organizer, attractive, tactful, and possessing a keen sense of humor, Miss Secrest was well liked by students and faculty.[69] In addition to teaching classes she acted as manager of the dormitory for several years; then in 1907 she was placed in charge of the newly constructed Household Arts Building, presiding over it most capably for almost a decade. In 1912 Miss Secrest became head of the Household Arts Department,[70] a position she held for five years before leaving the institution to join the staff of the University of California.[71]

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[68] Second Biennial Report, 1904-1906, p. 71

[69] Chase, "History of Cal Poly," 20.

[70] "Minutes of the Board of Trustees of the California Polytechnic School," April 27, 1912 (San Luis Obispo, 1912), 2.

[71] Interview with Miss Margaret Chase, April 8, 1957; Polytechnic Journal (San Luis Obispo) VII (June, 1917),44.

LeRoy B. Smith, a recent Cornell University graduate, left a position as director of educational work in the San Francisco Young Men's Christian Association in 1905 to teach at the Polytechnic. Smith augmented his regular instructional duties by advertising the school throughout the southern part of the state during the summer months.[72] He became vice director of the institution in 1907, and the following year was to succeed Dr. Anderson as director.[73]

From the time the institution first opened its doors there had been public demand for courses in electricity.[74] Such instruction commenced in the autumn of 1906 with the appointment of Herman B. Waters, a most capable individual, who had recently received his degree of Mechanical Engineer from Cornell University.[75]

For three years in addition to his administrative duties, Anderson had taught courses in animal and dairy husbandry. The need of a full time instructor in this area led to the hiring in 1906

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[72]San Luis Obispo Morning Tribune, August 10, 1906, p. 3; June 20, 1907, p. 1.

[73]Third Biennial Report of the Board of Trustees of the California Polytechnic School Comprising the Reports of the Director and Secretary of the Board 1906-1908 (Sacramento, 1908), 8.

[74]San Luis Obispo Morning Tribune, October 1, 1903, p. 4; March 1, 1904, p. 3.

[75]Second Biennial Report, 1904-1906, p. 8.

of Chester W. Rubel, a graduate two years previously of Iowa State College.[76] His excellent work[77] sustained the high recommendations preceding his appearance at the Polytechnic.[78]

Improvements in the physical plant continued. By the autumn of 1904 a forge shop equipped with eight down draft forges had been erected and was in use.[79] A $15,000 appropriation in March, 1905,[80] made possible the completion within a half year of three structures: a carpentry shop with twelve double carpenter benches;[81] a dairy barn with concrete floor, milking room, feedroom, and dairymen's sleeping quarters;[82] and a silo.[83] The following spring an incubator and feeding room were added to the poultry plant, and a greenhouse was under construction.[84] Most important, the 1905 legislature appropriated

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[76] Ibid.

[77] Chase, "History of Cal Poly," 20.

[78] "Minutes of the Board of Trustees of the California Polytechnic School," February 3, 1906 (San Luis Obispo, 1906), 10.

[79] Circular, 1905, p. 9.

[80] Statutes of California, 1905, p. 788.

[81] Circular, 1906, p. 8.

[82] Circular, 1905, p. 8.

[83] Second Biennial Report, 1904-1906, p. 11.

[84] Ibid.

$30,000 for a Domestic Science Building,[85] and ground was broken for this project the following March.[86] An allotment of $6,000 paid for the raising of the old power plant and the erection of a new one, including a small electrical laboratory.[87]

To keep abreast of the growing water needs of the school Anderson arranged for the construction of two large storage tanks during 1905-1906. One of these, a 20,000 gallon redwood tank, was located next to the hillside springs in order to store water from this source.[88] The second reservoir, of concrete and having a capacity of 40,000 gallons, was part of a unit including pumping facilities and a new well - twenty-eight feet deep and nine feet in diameter - near Brizzolero Creek.[89]

Learning by doing has always been emphasized at the Polytechnic. During the course of the second academic year the day's work was arranged so that the students were assigned in the mornings to such

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[85]Statutes of California, 1905, p. 789.

[86]San Luis Obispo Morning Tribune, March 1, 1906, p. 1.

[87]Circular, 1906, p. 9.

[88]Second Biennial Report, 1904-1906, pp. 13-14.

[89]San Luis Obispo Morning Tribune, January 7, 1906, p. 1.

classes as English, mathematics, botany, and drawing; the afternoon hours were given over to practical field work.[90] In January, 1905, three afternoons a week found all the boys assisting with the construction of a dairy barn. The remaining two afternoons were divided: students registered in mechanics were employed in forge work, and those in agriculture participated in gardening, milk testing, or in cheese and butter making.[91]

The precedent of students earning a part of their expenses was established early in the history of the school. By 1905 all janitorial work was done by them; several were employed as waiters in the dormitory dining hall; others cared for the dairy herd and the school horses; one was a post boy carrying mail to and from San Luis Obispo.[92] Many had jobs in town.[93] Prospective students were notified that they should not expect to earn all their expenses while attending school;[94] moreover, those performing manual labor on the school farm received no payment for farm work considered to be of instructional value.[95]

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[90]"Minutes of the Board of Trustees of the California Polytechnic School," January 7, 1905 (San Luis Obispo, 1905), 2.

[91]San Luis Obispo Morning Tribune, January 21, 1905, p. 4.

[92]Chase, "History of Cal Poly," 9.

[93]Second Biennial Report, 1904-1906, p. 19.

[94]Circular, 1905, p. 16; ibid., 1906, p. 18.

[95]Chase, "History of Cal Poly," 9.

Expenses were not heavy. Board and room at the dormitory cost twenty dollars a month; laboratory fees were only ten dollars per year, and supplies were estimated to total no more than twenty-five dollars a year.[96]

Encouraged by the faculty, the students widened the activity program. The debate team continued to defeat the local high school and retired the silver cup in 1905.[97] Membership in the newly formed San Luis Obispo Bay Athletic Association[98] built up interest in athletics. By 1906 interschool competition was available in baseball, tennis, track, and girls' basketball.[99] A monthly publication, the Polytechnic Journal, financed through local advertisements, made its appearance in January, 1906, with LeRoy B. Smith as faculty adviser. Containing accounts of school happenings, essays, poems, stories, and jokes, this publication was an ambitious project for so small a school.

Chief among the social attractions were occasional dances held in the Assembly Room of the Administration Building. These occasions,

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[96]Circular, 1906, p. 17.

[97]San Luis Obispo Morning Tribune, May 6, 1905, p. 1.

[98]Ibid., April 18, 1906, p. 1.

[99]Polytechnic Journal (San Luis Obispo) I (June, 1906), 15-16

which ended at eleven o'clock,[100] were much enjoyed by both students and staff members.[101]

Recreation and education were combined in field trips to such surrounding ranches as the Santa Ysabel near Paso Robles,[102] or student participation in functions like the Arroyo Grande Farmers' Institute.[103]

On March 8, 1906, five years after the signing of the bill establishing the California Polytechnic School, came the first celebration of Founders' Day. Trustee John in an address before the student body, told of the fight for the founding of the institution, and pointed out that to that time appropriations in excess of $225,000 had been granted the school by the state legislature.[104]

Culminating the third school year were exercises held in June, 1906, for the graduating class. A morning assembly was followed by commencement proceedings in the evening where eight students received diplomas: H. Floyd Tout, Sultana, Tulare County and Henry Wade, Goleta, in agriculture; Herbert Cox, Morgan Hill, Santa Clara County and Gustavus Wade, Goleta, in mechanics; Lillian Fox, Pomona, Irene Righetti and Laura Righetti, both of San Luis Obispo, and Katherine Twombley,

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[100]Chase, "History of Cal Poly," 10.

[101]Polytechnic Journal (San Luis Obispo) I (January, 1906), 11; ibid., (February, 1906), 14.

[102]San Luis Obispo Morning Tribune, November 5, 1905, p. 1.

[103]Ibid., May 27, 1905, p. 3.

[104]Polytechnic Journal, (San Luis Obispo) I (June, 1906), 17.

Fullerton, in household arts. Principal addresses were offered by Class President Floyd Tout and Director Anderson, both speaking on various aspects of industrial education.[105]

During the academic year 1906-1907 the student body increased by twenty-five per cent, there being 126 students enrolled.[106] That autumn livestock from the school made a fine showing at the California State Fair at Sacramento: Polytechnic Percherons took first prizes in classes of best four-year-old mare, best three-year-old mare, and best two-year-old mare, and an Ayrshire bull from the school was named grand champion.[107]

A football team, first organized in the fall of 1906, lost its opening game to the faculty, but went on to defeat Salinas High School by a six to five score.[108]

The key event of the year was the completion of the Household Arts Building in April, 1907. This structure, forty-three by one hundred feet, containing an ample basement and two stories, was of excellent

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[105]San Luis Obispo Morning Tribune, June 16, 1906, p. 1.

[106]Third Biennial Report, 1906-1908, p. 9.

[107]Polytechnic Journal (San Luis Obispo) II (October, 1906), 9.

[108]San Luis Obispo Morning Tribune, November 4, 1906, p. 1.

construction and still in use as the Agricultural Education Building fifty years later. It included a reception room for school guests, sewing and millinery rooms, cooking laboratories with both gas and wood ranges, classrooms, and offices.[109]

In the spring of 1907 legislative appropriations for the California Polytechnic School exceeded $167,000.[110] Allotments were included for a $25,000 dormitory, a creamery, two cottages to be used by employees living on the grounds, and several small shops and sheds. Heeding Dr. Anderson's recommendation that thirty acres adjoining the campus be purchased,[111] the legislature specifically appropriated $15,000 for this purpose.[112] The valuable bottom land thus acquired was exceedingly useful for the growing of alfalfa and forage crops and as a source of needed water for irrigation purposes.[113]

The second graduating class comprising sixteen students - seven in household arts, five in agriculture, and four in mechanics - recieved

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[109] Third Biennial Report, 1906-1908, p. 14.

[110] Statutes of California, 1907, pp. 196-98; 872.

[111] Second Biennial Report, 1904-1906, p. 12.

[112] Statutes of California, 1907, p. 196.

[113] Catalogue 1906-1907 of the California Polytechnic School, San Luis Obispo (Sacramento, 1907), 7; Third Biennial Report, 1906-1908, p. 12.

their diplomas in June, 1907. Congressman Sylvester C. Smith, former school trustee and frequent visitor in San Luis Obispo, delivered the principal address at the graduation exercises.[114]

Registration for the fall term of 1907 was the highest yet with twenty-two more enrollees appearing than had been present the opening day of the previous year.[115] However, as the following figures on student enrollment indicate, a trend toward greater student demand for training in mechanics than in agriculture was becoming apparent.[116]

	First Year	Second Year	Third Year
1906-7			
Agriculture	11	16	5
Mechanics	31	13	4
Household Arts	21	11	7
1907-8			
Agriculture	16	15	8
Mechanics	41	21	4
Household Arts	15	14	6

Perhaps this change in student interest was an important factor in Anderson's decision to resign as director of the school. His greatest personal interest lay in the field of agriculture, and especially in

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[114] San Luis Obispo Morning Tribune, June 15, 1907, p. 2.

[115] Ibid., September 7, 1907, p. 4.

[116] Third Biennial Report, 1906-1908, p. 9.

animal and dairy husbandry; his chief goal as director of the Polytechnic had been to develop its agricultural offerings.[117]

In September, 1907, President Benjamin Ide Wheeler of the University of California visited the school to secure helpful suggestions for buildings plans for the new university farm to be established at Davisville.[118] Several weeks later public announcement was made of the acceptance by Anderson of the position of supervisor of the university farm with the rank of professor of agriculture.[119] Anderson's resignation was accepted with regret by the Board of Trustees which appointed LeRoy Burns Smith as his successor.[120]

The Polytechnic played an important part in the history of agricultural education in California during the Anderson administration. In this period not only was it established as "the first public institution in California to teach agriculture on the secondary level,"[121] but with the exception of the University of California

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[117]Leroy Anderson, "What Modern Farming Means," Sunset (San Francisco), X (March, 1903), 458; "Minutes of the Trustees," July 9, 1904, p. 1.

[118]San Luis Obispo Morning Tribune, September 26, 1907, p. 1.

[119]Ibid., October 10, 1907, p. 1.

[120]"Minutes of the Board of Trustees of the California Polytechnic School," December 16, 1907 (San Luis Obispo, 1907), 2.

[121]Otto Mertz, A Study of the Supervised Farming Program in California (Unpublished Ed.D. dissertation, University of California, Los Angeles, 1953), 66.

it was the only institution in the state where this subject was offered.[122]

Throughout his five and a half years as director of the institution Anderson had not spared himself. In addition to his numerous administrative duties, he taught classes, acted as school farm manager, and was secretary of the Board of Trustees.[123] His time was taken up with attending numerous conferences, speaking at many meetings, and preparing not only periodical articles but the various school catalogue and bulletins.[124] Certainly more than any other individual he was responsible for the remarkable growth of the Polytechnic during its early years. During his administration emphasis on vocational training took permanent root. Enrollment increased more than seven fold, from twenty students in 1903-1904 to 141 in 1907-1908.[125] Although the course of study was only three years in length, it included a balanced curriculum providing opportunity for specialization in agriculture, mechanics, or household arts. A library of over 1300 volumes

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[122]S.S. Sutherland, A History of Agricultural Education in the Secondary Schools of California 1901 to 1940 (San Luis Obispo, 1940), 3.

[123]"Minutes of the Trustees," December 16, 1907, p. 2.

[124]San Luis Obispo Morning Tribune, April 21, 1903, p. 1; May 10, 1904, p. 3; June 11, 1907, p. 2.

[125]Third Biennial Report, 1906-1908, p. 2.

had been collected.[126] In addition to three major structures and a number of small farm buildings, there had been erected and fully equipped a power plant and electrical laboratory in addition to carpentry, machine, and forge shops. The acquisition of additional rich bottom land brought school holdings to approximately 310 acres.[127] The school farm was stocked with Jersey, Ayrshire, and Shorthorn cattle, Percheron and Clydesdale horses, Berkshire and Poland China swine, White Wyandotte, Buff Orpington, and White Leghorn fowls. There was sufficient water and electricity. Two miles of crushed rock road, suitable in both winter and summer weather had been laid; approximately three thousand threes and shrubs had been set out and were gradually changing the appearance of the former treeless fields; over one hundred palm trees now formed borders on each side of the road leading from the main buildings to San Luis Obispo.[128]

Although he was a firm disciplinarian Anderson had always been regarded by the students as a true friend, and his impending departure

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[126] Ibid., 9.

[127] California Polytechnic School Catalogue, 1907-1908 (Sacramento, 1908), 6.

[128] Third Biennial Report, 1906-1908, pp. 17-18.

was keenly felt by them.[129] As the special feature of a final assembly convened in his honor, the boys and girls sang as a farewell his favorite song, "Holy, Holy, Holy."[130]

On leaving the California Polytechnic School in December, 1907, its first director departed "with a deep sense of satisfaction that so many of his ambitions for the Polytechnic had been realized and the belief that soon the future would bring still richer development."[131]

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[129]Chase, "A History of Cal Poly," 7-8.

[130]Polytechnic Journal (San Luis Obispo) III (January, 1908), 9.

[131]Chase, "A History of Cal Poly," 22.

CHAPTER III

THE ADMINISTRATION OF LEROY BURNS SMITH (1908-1914)

From January, 1908, to June, 1914, LeRoy B. Smith was chief executive of the California Polytechnic School. The decision of the Board of Trustees to offer him the position vacated by the resignation of Dr. Leroy Anderson was a logical one for Mr. Smith had been vice-director of the institution since June of 1907 and for two years prior to that time had served it as teacher of history and English. On commencing his administrative duties, Director Smith was well acquainted with school policies and problems.

The second director's background did not include training or experience in agricultural or industrial education. Before completing his preparations for college at Ithaca High School, New York, Smith taught in country schools. In 1901 he was graduated from Cornell University, having specialized in history, political science, and English. For the ensuing two years he was General Secretary of the University of Wisconsin's Young Men's Christian Association. In August of 1903 Smith enrolled as a graduate student in the Department of Education of the University of California, then six months later accepted a position as director of educational work in the Young Men's Christian Association of San Francisco. From there in 1905 he had

moved to San Luis Obispo where he was to remain a member of the staff of the Polytechnic for almost a decade.[1]

Director Smith's concepts as to the basic aims and general organization of the California Polytechnic School were similar to those of his predecessor; moreover, he highly approved of the instructional methods and general policies in effect when he became director of the institution.[2] During his administration of the Polytechnic he did not advocate radical changes in fundamental policies but tended to direct the school along the lines instituted by Dr. Anderson.

Under Smith's leadership the Polytechnic faculty emphasized, as it had since 1903, practical training for the tasks of life. By assigning the students to classroom studies during the morning hours and scheduling them to work in the laboratories, fields, and shops in the afternoons, the staff continued to stress learning by doing.[3]

Agriculture, mechanics, and household arts, retaining their original objectives, remained the three lines of instruction offered at

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[1]Second Biennial Report of the Board of Trustees of the California Polytechnic School Comprising the Reports of the Director and the Secretary of the Board 1904-1906 (Sacramento, 1906), 7-8.

[2]LeRoy B. Smith, "Work of the California Polytechnic School," California Outlook (Los Angeles and San Francisco), XIII (Nov. 23, 1912), 10.

[3]Polytechnic Journal (San Luis Obispo) VI (June, 1911), 3.

the school.[4] The purpose of agricultural training was to develop the practical farmer; the objective of the mechanics courses was to train the student to make a living as an artisan; the intent of the household arts program was to instruct in the care and management of the home.[5]

Courses of study at the Polytechnic did not duplicate the offerings of the typical high school, nor did the faculty attempt to prepare students to meet university entrance examinations.[6] The institution continued its basic function of providing vocational education at the secondary level.

Smith's administration was a period during which several notable improvements were made at the California Polytechnic School. That having the greatest effect on the subsequent history of the institution was the decision in 1913 of the Board of Trustees to lengthen the regular course of study from three to four years.[7] This announcement did not come as a surprise. As early as 1904, Dr. Anderson

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[4]California Polytechnic School Catalogue, 1913-1914 (Sacramento, 1914), 5-7.

[5]Sixth Biennial Report of the Board of Trustees of the California Polytechnic School. Comprising the Reports of the Director and Secretary of the Board 1912-1914 (San Luis Obispo, 1914), 7-8.

[6]Polytechnic Journal (San Luis Obispo)VI (June, 1911), 12.

[7]San Luis Obispo Morning Tribune, August 17, 1913, p. 1.

proposed adding a fourth year of study,[8] and the faculty had long been on record as approving such a change.[9]

In 1909 and 1910 the Board of Trustees disregarded Director Smith's recommendations that an additional year of study be required for graduation.[10] Without doubt the twenty-six per cent decrease in enrollment during the academic year 1912-1913[11] had played an important part in impressing the Trustees with the need for approving the four year program.[12]

Adoption of the lengthened curriculum made little difference at the school during the remaining year of the Smith administration. Starting in September of 1913, new students enrolled in the four year course of study, while those who had commenced their studies in 1911 or in 1912 continued in the "old" three year program leading to

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[8]First Biennial Report of the Board of Trustees of the California Polytechnic School Comprising the Reports of the Director and Secretary of the Board 1902-1904 (Sacramento, 1905), 15.

[9]Third Biennial Report of the Board of Trustees of the California Polytechnic School Comprising the Reports of the Director and Secretary of the Board 1906-1908 (Sacramento, 1908), 14.

[10]"Minutes of the Board of Trustees of the California Polytechnic School," May 15, 1909 (San Francisco, 1909), 8; June 16, 1909 (San Francisco, 1909), 2; October 29, 1910 (San Luis Obispo, 1910), 2.

[11]"Records of Enrollments" (Files of the Admissions Officer, California State Polytechnic College, San Luis Obispo), 1.

[12]"Minutes of the Board of Trustees of the California Polytechnic School," August 16, 1913 (San Luis Obispo, 1913), 7.

graduation.[13] There was no change in fees or in entrance requirements.[14]

The Polytechnic moved forward between 1908 and 1914 in such areas as the students' activities program, the annual farmers' picnics, the extension of the library collection, and the improvement of school livestock.

Social activities flourished. Debating, athletics, and dancing continued to be exceedingly popular.[15] School membership in the San Luis Bay Athletic Association bolstered the sports program which now included interschool competition in football, basketball, baseball, tennis, and track.[16] Polytechnic athletes usually did well in high school competition; during the year 1909-1910, for example, teams from the Polytechnic won championships in every sport except basketball.[17]

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[13] California Polytechnic School Catalogue, 1912-1913 (Sacramento, 1913), 8.

[14] Ibid., 7.

[15] California Polytechnic School Catalogue, 1909-1910 (Sacramento, 1910), 23; Polytechnic Journal (San Luis Obispo) VII (December, 1911), 21.

[16] Polytechnic Journal (San Luis Obispo) V (October, 1909), 5; California Polytechnic School Catalogue, 1912-1913 (Sacramento, 1913), 28.

[17] Polytechnic Journal (San Luis Obispo) V (June, 1910), 83.

That autumn the football players challenged the University of Southern California to a game and were outclassed by a score of fifty-one to zero.[18] However, during the ensuing two months they easily defeated conference opponents representing the high schools in San Luis Obispo and Santa Maria.[19]

Director Smith encouraged the forming of social organizations at the institution. He, himself, sponsored a campus chapter of the Young Men's Christian Association, which grew rapidly and was very active.[20] Clubs set up during this period included Amapola, named for the California poppy, the Agricultural Club,[21] the Literary Society, and the Younger Set Club.[22] The Amapola Club, which was limited to girls, held regular meetings each two weeks and assisted at all school social affairs.[23] The student continued to publish the Polytechnic Journal.

In 1909 with the blessings of the staff, the Polytechnic boys and girls established a student body association. Membership, assessed at

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[18]San Luis Obispo Morning Tribune, October 10, 1909, p. 1.

[19]Ibid., November 26, 1909, p. 4; December 12, 1909, p. 1.

[20]Polytechnic Journal (San Luis Obispo) V (October, 1909), 5.

[21]Ibid., V (November, 1909), 3.

[22]Ibid., VII (April 11, 1911), 10.

[23]San Luis Obispo Morning Tribune, February 4, 1910, p. 1; Polytechnic Journal (San Luis Obispo) X (June, 1914), 53.

the rate per term of one dollar for boys and fifty cents for girls was not compulsory, but all students were strongly urged to join.[24]

Theoretically, the student body association was in charge of debating, athletics, publications, and social events.[25] However, the exact amount of student responsibility for these activities remained a question which was the topic of considerable discussion from time to time.[26] In any event, the students enjoyed a greater degree of freedom in the co-curricular program during the administration of Mr. Smith than they had previously.[27]

As some of the boys took advantage of Smith's forgiving nature and his tendency to overlook lapses in deportment,[28] in 1911-1912 it became necessary for him to assign assistant proctors to the boys' dormitory.[29]

In the period 1908-1914 the annual Farmers' Institute and Basket Picnics were among the important events in the central coast counties

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[24]California Polytechnic School Catalogue, 1909-1910, p. 23.

[25]California Polytechnic School Catalogue, 1910-1911 (Sacramento, 1911), 25.

[26]Polytechnic Journal (San Luis Obispo) VII (December, 1911), 24; ibid., VII (March, 1912), 7.

[27]Margaret Chase, "History of Cal Poly" (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 8.

[28]Interview with Jewett Johnston, December 23, 1956.

[29]"Minutes of the Board of Trustees of the California Polytechnic School," October 28, 1911 (San Luis Obispo, 1911), 6; "Minutes of the Finance Committee of the Board of Trustees," August 24, 1912 (San Luis Obispo, 1912), 4.

of California. Held on the school grounds, these affairs provided the faculty and students an excellent opportunity to advertise the school, especially its agricultural features.

One of the most successful meetings was that of 1910 when the center of attraction was the new creamery with its modern equipment. During the picnic week-end the Pacific Coast Railroad Company reduced its round trip fares to San Luis Obispo and over 800 persons visited the institution.[30] Judge Peter J. Shields of Sacramento delivered an outstanding address on "Education for the Agriculture of the Future."[31]

In 1913 the school staff decided to combine the annual picnic with a gigantic decennial celebration of the founding of the Polytechnic. The people of San Luis Obispo readily responded when called upon for assistance. To help finance this event, the County Board of Supervisors contributed $500 and the Board of City Commissioners donated $250;[32] moreover the townsfolk assisted in drawing up the general plans,[33]

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[30]San Luis Obispo Morning Tribune, May 4, 1910, p. 1.

[31]Ibid., May 21, 1910, p. 1.

[32]Ibid., April 27, 1913, p. 4.

[33]Ibid., April 12, 1913, p. 1.

served on numerous committees,[34] and provided lodging for many visitors.[35] Notices in 170 California newspapers and in 5000 folders distributed throughout the state advertised June 13 as the big day.[36] Special trains from both north and south helped to swell the crowd to over 3000 persons who swarmed over the campus, enjoyed the free barbecue and coffee, and heard Dr. Leroy Anderson deliver a special commemorative address.

The featured entertainment was a pageant including more than 150 participants. Here the spectators saw a portrayal of both Indian and Mexican dances, the arrival in California of Junipero Serra, the raising of the Bear Flag and later of the Stars and Stripes, the coming of the railroad, and the founding of the California Polytechnic School.[37]

The decennial was the most important affair in San Luis Obispo for years and was an outstanding success.[38]

The school library, housed in the Administration Building, continued to make steady, but unspectacular growth. In 1908 when the

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[34]Ibid., June 11, 1913, p. 1.

[35]Ibid., May 29, 1913, p. 1.

[36]"Minutes of the Board of Trustees of the California Polytechnic School," May 13, 1913 (San Luis Obispo, 1913), 1.

[37]San Luis Obispo Morning Tribune, June 13, 1913, pp. 1-4.

[38]Ibid., June 14, 1913, p. 1.

librarian instituted the Dewey Decimal system of classification, the collection included 1336 volumes;[39] several years later it was in excess of 2000 titles.[40]

The annual library budget allotment, which had been $500 from 1908 to 1910, became $750 during the latter part of Smith's administration.[41] Library accounts for the academic year are typical of this period: the salary of the librarian was $360; the total amount charged to purchase of books and magazines was $152, and included as library costs were bills for the glee club music and for general advertising.[42]

The Polytechnic livestock herds were improved during the period 1908-1914. As the legislatures of 1909, 1911, and 1913[43] each appropriated funds earmarked for the purchase of livestock for the school, Polytechnic faculty members continued the practice instituted by Dr. Anderson of acquiring superior animals for the institution.

During 1912 some particularly valuable additions were made. Instructor C.W. Rubel in March purchased an outstanding Percheron

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[39]"Minutes of the Board of Trustees of the California Polytechnic School," March 9, 1908 (San Luis Obispo, 1908), 3.

[40]Catalogue, 1910-1911, p. 9.

[41]Statutes of California, 1909, p. 1121; ibid., 1913, p. 1345

[42]Sixth Biennial Report, 1912-1914, p. 17.

[43]Statutes of California, 1909, p. 1121; ibid., 1911, p. 1384; ibid., 1913, p. 1345.

stallion, "Ibidem," for $1650;[44] and a few months later from herds in the San Joaquin Valley he selected six Holstein heifers for $1350.[45]

A livestock census taken the following yaar listed the following animals on the school farm: sixteen Percherons, five Clydesdales, fifteen Jerseys, twelve Holsteins, 110 Berkshires, and seventy-six Poland Chinas.[46]

Through the years of the Smith administration Polytechnic students exhibited school livestock at numerous fairs throughout California and in several instances won first prizes.[47]

Hence in various respects the school was considerably stronger in 1914 than it had been in 1908. However, certain weaknesses had developed during this period: after reaching a peak in 1910, the building program came to a halt; the enrollment of regular students took a heavy slump after 1912, and a series of short courses drew few special students; on two occasions the school water supply fell to dangerously low levels; reduction in overall appropriations brought attendent problems; and a strong local influence developed in the Board of Trustees.

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[44]"Minutes of the Finance Committee of the Board of Trustees of the California Polytechnic School," March 9, 1912 (San Luis Obispo, 1912), 1.

[45]"Minutes of the Finance Committee," August 24, 1912, p. 2.

[46]"Minutes of the Board of Trustees of the California Polytechnic School," October 26, 1913 (San Luis Obispo, 1913,) 5.

[47]San Luis Obispo Morning Tribune, September 9, 1908, p. 1; September 22, 1912, p. 1; October 2, 1913, p. 1.

New buildings continued to appear on the campus until 1910, but the structures completed that year were the last to be built during the years Smith was director. In 1907 the legislature appropriated funds for a new dormitory and a creamery,[48] but construction had not started on these structures because of a statute of 1906. The legislation in question delegated to the state architect the responsibility of providing plans for all buildings henceforth financed by state funds, and directed the state engineer to oversee and inspect all such construction.[49]

Not until March, 1908, did Smith receive from the state architect complete specifications for the dormitory and for a forty by sixty feet creamery.[50] Workmen soon commenced erecting the two buildings, and the creamery and the dormitory, which included fifty single rooms and two faculty suites,[51] were ready for use in September, 1909.[52]

Appropriations of the 1909 legislature included $10,000 for a dining hall, $10,000 for a new power and lighting plant, which would include mechanical and electrical laboratories, $5,000for barns, and

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[48]Statutes of California, 1907, pp. 197-98.

[49]Ibid., 1906, pp. 215-224.

[50]"Minutes of the Trustees," March 9, 1908, p. 1.

[51]California Polytechnic School Catalogue, 1907-1908, p. 7.

[52]Ibid., 1908-1909, p. 8.

$2300 for an employees' cottage.[53] Director Smith hoped for the completion of the badly needed dining hall by the start of the 1909-1910 school year, but this was not to be. Students ate their first meals in the new structure, which seated 150 persons, on February 5, 1910.[54] Within the next several weeks the poultry house and farm cottage were completed, and the power plant commenced operation about six months later.[55]

With the exception of a $4000 outlay for a new barn in 1917[56] the 1909 appropriations were the last the Polytechnic received for new buildings for more than a decade. The legislature continued to make funds available for improvements and repairs, but not for new construction.

In 1911, after considering Smith's request of $45,000 for new buildings, the legislature approved a bill providing $20,000 for this purpose, but Governor Hiram Johnson vetoed it.[57] Some major improvements were made that year as the legislature appropriated over

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[53]Statutes of California, 1909, pp. 845-48.

[54]"Minutes of the Trustees," May 15, 1909, p. 11; Catalogue, 1908-1909, p. 8.

[55]"Minutes of the Board of Trustees of the California Polytechnic School," May 14, 1910 (San Luis Obispo, 1910), 4.

[56]Statutes of California, 1917, p. 470.

[57]San Luis Obispo Morning Tribune, June 8, 1911, p. 1; "Minutes of the Board of Trustees of the California Polytechnic School," November 8, 1912 (San Luis Obispo, 1912), 2.

$15,000 for such purposes.[58] The greatest amount of activity took place in December when classes were suspended because of a scarlet fever scare.[59] Workmen proceeded to renovate the dining hall kitchen and to install new equipment in the electrical and mechanical laboratories.[60]

In 1912 on the basis of a careful survey of conditions at the Polytechnic by State Engineer J. W. Wollett, Director Smith included in the general estimate of school needs, $92,000 for new buildings and for repairs.[61] Of this amount the school was granted only $19,000 --- none of which was designated for new construction.[62]

The following chart shows enrollment figures during the years Smith was director of the institution. During this period total annual enrollment increased from 141 in 1907-1908 to 194 in 1913-1914, a gain of 37 per cent.

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[58] Statutes of California, 1911, pp. 377; 453; 1070.

[59] San Luis Obispo Morning Tribune, December 2, 1911, p. 1.

[60] Ibid., December 31, 1911, p. 1.

[61] Ibid., November 9, 1912, p. 4.

[62] Statutes of California, 1913, pp. 135; 900.

ENROLLMENT AT THE CALIFORNIA POLYTECHNIC SCHOOL (1907-1914)[63]

	Regular Students	Students in Short Courses	Total Students
1907-1908	141	0	141
1908-1909	140	11	151
1909-1910	150	23	173
1910-1911	176	0	176
1911-1912	192	0	192
1912-1913	142	20	162
1913-1914	173	21	194

The short courses, referred to in the third column of the chart, were offered from time to time primarily as a service for interested adults in San Luis Obispo County. These sessions usually featured some aspect of agriculture and were designed for persons unable to attend the institution as regular students.

The first of these, a short course in butter and cheese making, held in the autumn of 1908, was a disappointment in that less than a dozen persons were in attendance.[64] Nevertheless, members of the school

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[63]Compiled from information in Sixth Biennial Report, 1912-1914, p. 4; "Minutes of the Board of Trustees of the California Polytechnic School," June 12, 1908 (San Luis Obispo, 1908), 3; ibid., October 29, 1910, p. 1.

[64]San Luis Obispo Morning Tribune, November 22, 1908, p. 1.

staff planned an ambitious series of demonstrations and lectures in dairying, dairy manufacturing, and poultry husbandry for January of 1910.[65] To advertise these courses the faculty distributed throughout the county a bulletin entitled Short Courses for Farmers. This publication indicated that for the three week session no tuition was to be charged, although an assessment of five dollars would be made to cover the cost of materials needed.[66] For the January meeting Director Smith assembled a notable faculty including Dr. Leroy Anderson and Professor E. H. Hagerman from the University of California Farm at Davis, and Dr. C. M. Herring from Berkeley.[67] Unfortunately, only six persons registered for this series of short course;[68] however, a number of local residents attended the free evening lectures and visited the new creamery.[69]

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[65]Ibid., November 21, 1909, p. 2; December 16, 1909, p. 2.

[66]Short Courses for Farmers, January 1910, California Polytechnic School, San Luis Obispo, (Sacramento, 1909), 1-6.

[67]San Luis Obispo Morning Tribune, January 21, 1910, p. 1.

[68]"Minutes of the Trustees," May 14, 1910, p. 11.

[69]San Luis Obispo Morning Tribune, January 8, 1910, p. 4; January 9, 1910, p. 4; January 12, 1910, p. 1.

A similar course offered two years later attracted twenty persons.[70] Other short courses featured cooking in both 1910[71] and 1913,[72] and leather and metal working in 1912.[73]

Although registration was invariably low for the short courses, these sessions provided excellent advertising for the school and reached local residents unable to attend the Polytechnic as regular students.

Lack of sufficient water was a recurring problem during Smith's administration and one not solved by 1914. The water supply system established earlier proved insufficient to meet the increasing demands of the institution.

Following an extremely light rainfall during the winter of 1907-1908 Brizzolero Creek and the large hillside springs, the sources of water for the two school reservoirs, almost dried up completely.[74] For nearly a year water could be used only sparingly at the school.

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[70]Short Courses for Farmers and Dairymen, January 4-28, 1911, California Polytechnic School, San Luis Obispo (Sacramento, 1911), 1-3; Catalogue, 1913-1914, p. 13.

[71]"Minutes of the Trustees," May 14, 1910, p. 2.

[72]San Luis Obispo Morning Tribune, April 12, 1913, p. 1.

[73]"Minutes of the Board of Trustees of the California Polytechnic School," October 26, 1912 (San Luis Obispo, 1912), 2.

[74]Ibid., April 15, 1908, p. 2.

An appropriation in 1909 of $6,000 to develop the Polytechnic water system was soon put to use.[75] This allotment paid for an additional 40,000 gallon reservoir fed by Brizzolero Creek water,[76] and for the drilling of two forty feet wells near Stenner Creek, a small stream running through the thirty acre plot purchased by the school in 1907. These wells gave indication that plenty of water would be available from this source.[77]

During the ensuing months Instructor H.B. Waters developed a comprehensive campus water plan which included the addition of a 100,000 gallon concrete tank to store Stenner Creek Water.[78] In May of 1910 the sinking of six wells in Stenner Creek as the first step in Waters' scheme exhausted remaining funds for water development; further action depended on grants of the 1911 legislature. Unhappily the appropriation of that year for water development at the Polytechnic was only $3,000, a sum far too small to carry out the envisioned project.[79] With the resignation of Waters that summer, the Stenner Creek tank idea was abandoned.[80]

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[75] Statutes of California, 1909, p. 847.

[76] "Minutes of theTrustees," May 15, 1909, p. 1.

[77] Ibid., October 2, 1909, p. 3.

[78] Ibid., October 29, 1910, p. 2.

[79] Statutes of California, 1911, p.415.

[80] San Luis Obispo Morning Tribune, June 8, 1911, p. 1.

Fortunately for all concerned, for the next several years the three reservoirs with their combined storage facilities of 100,000 gallons met school needs. Then came the dry years of 1912-1913 and a crisis of such severity that it was almost necessary to close the school.[81] As the 1913 legislature made an emergency appropriation of $5,000 for water development,[82] under the direction of Instructor Robert W. Ryder, wells were deepened, temporary pumps were installed, the hillside springs were cleaned out, and the school weathered the drought.[83]

Concluding that the Polytechnic water needs could not be met by relying on sources within the school grounds, the Director in 1914 recommended purchase of a watershed and the construction of a dam thereon to ensure the institution of a sufficient and permanent water supply.[84]

As the chart below indicates, total appropriations for the California Polytechnic School diminished each successive biennium from 1909 to 1914. However, the amounts designated for general support and maintenance were not lessened, and funds for salaries were increased.

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[81]"Minutes of the Trustees," May 10, 1913, p. 1; Sixth Biennial Report, 1912-1914, p. 7.

[82]Statutes of California, 1913, p. 135.

[83]Sixth Biennial Report, 1912-1914, p. 8.

[84]Ibid., 11.

BIENNIAL APPROPRIATIONS FOR THE CALIFORNIA POLYTECHNIC SCHOOL[85]
(1909-1914)

	Total	Support and Maintenance	Salaries	Other
1909-1910	$142,800	$25,000	$55,000	$62,800
1911-1912	128,200	25,000	60,000	43,200
1913-1914	126,700	28,000	70,000	38,700

The cuts in appropriations affected new construction, supplies, equipment, repairs, improvements, extensions, and enlargements. Toward the end of Director Smith's term of office there was considerable need of painting, plastering, and roof repairs.[86]

For three years during the Smith administration, housing on the campus was available for girl students. In 1909 when the boys occupied the new dormitory, non-resident girls were permitted to move into the old one with a lady faculty member as supervisor.[87] However, in 1912, a section of the women's dormitory was converted into badly needed mechanical drawing rooms,[88] and now the administration could no longer provide campus housing for all out of town girl students desiring it.

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[85]Compiled from Statutes of California, 1909, pp. 845-49; 1121; ibid., 1911, pp. 358; 377; 453-54; 1070; 1384; ibid., 1913, pp. 135; 900; 1345.

[86]"Minutes of the Trustees," August 16, 1913, p. 1.

[87]Catalogue, 1909-1910, p. 7; during the next several years the old dormitory was designated as the "Women's Dormitory."

[88]Sixth Biennial Report, 1912-1914, p. 10.

Commencing in 1913 the school catalogues included information to the effect that lady faculty members would help non-resident girls to find housing with suitable families in San Luis Obispo.[89]

Toward the latter stages of Smith's administration, significant changes took place in the Board of Trustees. In March, 1911, this body, which then included Professor E.J. Wickson of Berkeley, Edward Simpson of Pacific Grove, Thomas J. Field of Monterey, Archibald McNeil of Santa Maria, and Edward Shipsey of San Luis Obispo,[90] decided henceforth to convene in regular meetings only semi-annually and that the presence of four members would constitute a quorum. Moreover, Board President McNeil appointed Shipsey as chairman, Simpson and Field as members of a Finance Committee.[91]

At the next regularly scheduled session of the Board there were present in addition to Director Smith, only Trustees Shipsey, Field, and Simpson. Lacking a quorum as the Board, the three trustees resolved the meeting into a session of the Finance Committee and proceeded to carry on business as if the meeting had been a regular one of the Board of Trustees.[92] Actions of the Finance Committee at this time and at a

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[89]Catalogue, 1912-1913, p. 26.

[90]Catalogue, 1910-1911, p. 4.

[91]"Minutes of the Board of Trustees of the California Polytechnic School," March 25, 1911 (San Luis Obispo, 1911), 8-9.

[92]"Minutes of the Finance Committee of the Board of Trustees of the California Polytechnic School," April 29, 1911 (San Luis Obispo, 1911), 1-5.

session called by Chairman Shipsey for June 17, 1911, were indorsed in August by the Board of Trustees.[93]

During the following year local influence became strong in both the Board of Trustees and its Finance Committee. On the expiration of Trustee Field's term in 1912, Governor Johnson filled the vacancy thus created by appointing to the Board Warren M. John of San Luis Obispo.[94] Thus three of the five appointed trustees were now from San Luis Obispo or Santa Maria. The Board decision in April that three members present henceforth would suffice for a quorum made possible official meetings attended only by local members.[95] Now as Trustee John received the place in the Finance Committee vacated by Field, this important group too was dominated by members from San Luis Obispo.[96]

During the balance of Director Smith's administration the Finance Committee was active and seemed gradually to be taking over proper functions of the Board of Trustees.[97]

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[93]"Minutes of the Board of Trustees of the California Polytechnic School," August 26, 1911 (San Luis Obispo, 1911), 1.

[94]Catalogue, 1912-1913, p. 3.

[95]"Minutes of the Board of Trustees of the California Polytechnic School," April 27, 1912 (San Luis Obispo, 1912), 1.

[96]San Luis Obispo Morning Tribune, August 25, 1912, p. 1.

[97]"Minutes of the Finance Committee of the Board of Trustees of the California Polytechnic School," March 9, 1912; June 13, 1912; August 24, 1912; January 21, 1914; March 28, 1914 (San Luis Obispo, 1912-1914).

In addition to such factors as declining appropriations, increasing local control in the Board of Trustees, and fluctuations in enrollment, two other disquieting trends were evident at the Polytechnic. The agricultural program, considered by Director Smith to be the most important responsibility of the institution,[98] was attracting proportionately fewer students each year. Although in 1903, fifty percent of the students had enrolled in this category, the figure had fallen to twenty-nine per cent in 1912-1913 and to twenty-six per cent a year later.[99] Moreover, the percentage of students from San Luis Obispo continued to mount. It rose from thirty per cent in 1907-1908[100] to forty-six per cent in 1912-1913.[101]

Director Smith was well aware of these conditions as he prepared a report for the Board of Trustees in the summer of 1913.[102] In this statement he pointed out certain state-wide educational developments transpiring since the institution first opened its doors in 1903. At that time the California Polytechnic School had truly been a pioneer in California vocational training. Meanwhile high school education had

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[98]"Minutes of the Trustees," August 16, 1913, p. 8.

[99]Sixth Biennial Report, 1912-1914, pp. 4-5.

[100]"Minutes of the Trustees," June 12, 1908, p. 3.

[101]Sixth Biennial Report, 1912-1914, p. 5.

[102]"Minutes of the Trustees," August 16, 1913, pp. 8-10.

become more common throughout the state, and dozens of secondary institutions had commenced offering vocational and industrial education, especially in domestic science, metal, and wood shops.[103] These developments had not helped the Polytechnic. Increasingly parents were questioning the advisability of sending their children away from home to a three year vocational school, which did not offer college preparatory work and which had as its chief objective training for life.

To acquire information useful in developing plans for the Polytechnic, Director Smith requested funds for an inspection of vocational schools throughout the United States.[104] The Board of Trustees granted Smith's request, and during October and November, 1913, he visited various educational institutions in the Midwest, East, and South.[105]

A special report prepared by the Director on his return in December was a disappointment from the standpoint of specific recommendations regarding definite action to be taken for the future operation of the Polytechnic. After a lengthy account of the organization

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[103]According to the Report of the Commissioner of Industrial and Vocational Education for the Biennial Period Ending June 30, 1916 (Sacramento, 1916), pages 13-15, by 1913 sixty-six California Public high schools were offering classes in wood work, 16 in iron work, 13 in crafts, 55 in domestic arts, and 17 in agriculture.

[104] Minutes of the Board of Trustees, August 15, 1913, p. 9.

[105]San Luis Obispo Morning Tribune, November 29, 1913, p. 1.

and procedures of five key vocational institutions, and a discussion of the place of occupational training in various state systems of education, the Director concluded his statement by hoping that in regard to agricultural education in California the Polytechnic would assist the newly formed California Board of Education in "working out an intelligent plan for the state."[106]

Some twenty months earlier Smith had tendered his resignation, suggesting that it be effective July 1, 1912, "or such date in July or August next as may later be agreed upon."[107] He mentioned that he took this action only for personal reasons and that he had enjoyed the hearty support and loyal cooperation of the Board of Trustees. The resulting action of the Board was to refuse to accept this proposal, to increase Smith's salary by $200 to an annual total of $2600, and to prevail upon him to continue as chief executive of the Polytechnic.[108]

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[106]LeRoy B. Smith, "To the Board of Trustees, California Polytechnic School," December 12, 1913 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 10.

[107]LeRoy B. Smith, "To the Honorable Board of Trustees, California Polytechnic School," April 27, 1912 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 1.

[108]Minutes of the Finance Committee, August 24, 1912, p. 5.

Now in 1914, having accepted a position at the University of California, Director Smith once again made known his desire to leave the institution. On this occasion the Board of Trustees accepted his resignation with regret, praising him for his earnest and diligent labors on behalf of the school.[109] In May, 1914, the Trustees appointed Robert W. Ryder, head of the Mechanical Department of the institution, to succeed Smith as of June 1, 1914.[110]

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[109]San Luis Obispo Morning Tribune, April 28, 1914, p. 1; Minutes of the Board of Trustees of the California Polytechnic School, May 9, 1914 (San Luis Obispo, 1914), 1.

[110]San Luis Obispo Morning Tribune, May 10, 1914, p. 1.

CHAPTER IV

THE ADMINISTRATION OF ROBERT WEIR RYDER (1914-1921)

Robert W. Ryder, director of the Polytechnic from June 1, 1914, to July 1, 1921, was the first chief executive of the school with training and experience in the field of engineering. A graduate of the College of Mechanics of the University of California, he worked several years for the Sierra and San Francisco Power Company and at the Mare Island Naval Yard[1] before coming to the Polytechnic in 1911 as head of the Mechanics Department, a position he held for three years.[2] In this capacity he gained the reputation of being a capable administrator and an excellent teacher of physics, electricity, and surveying.[3] Moreover, he demonstrated considerable versatility: during 1911-1912 he directed the installation of machinery and equipment in the recently completed power plant and drew up a new master water plan for the institution.[4] The following year, at the request of the office of the California State Department of Engineering, Ryder supervised the expenditure of

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[1]"Minutes of the Board of Trustees of the California Polytechnic School," March 25, 1911 (San Luis Obispo, 1911), 7.

[2]Polytechnic Journal (San Luis Obispo) XI (June, 1921), 15.

[3]California Polytechnic School Catalogue, 1912-1913 (Sacramento, 1913), 4; Polytechnic Journal (San Luis Obispo) IX (June, 1914), 44.

[4]San Luis Obispo Morning Tribune, August 25, 1912, p. 1.

$10,000 appropriated by the legislature for necessary repairs at the school.[5] By 1914, when the Board of Trustees unanimously chose him as director of the Polytechnic,[6] Ryder had become well acquainted with general school policies and procedures and was thoroughly familiar with all aspects of the Mechanics Department.

A number of important changes took place at the institution during the first four years of Director Ryder's tenure of office. The Polytechnic became a four year school with an expanded music program and a new Academic Department. The staff and faculty reorganized the curricula into four distinct divisions, instituted military training, sponsored a popular series of farmers' institutes, re-established the semester plan, and greatly reduced fees. The school received partial accreditation from the University of California and acquired an additional 625 acres of land. Hence, the period 1914 to 1918 was one of significant developments.

Music was an optional, co-curricular activity at the Polytechnic when Ryder became director of the institution. For an individual interested in singing membership was available in the Boys' and Girls'

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[5]Ibid., August 12, 1913, p. 1.

[6]Ibid., May 10, 1914, p. 1.

Glee Club,[7] but the great majority of students did not join these groups. Commencing in the autumn of 1914 came a change: a regular course in music was added to the curriculum, and henceforth graduation requirements for all students included certain designated courses in this field.[8]

Several years later came the completion of a far more important development. From 1903 to 1916 the Polytechnic had been a three year institution offering work in agriculture, mechanics, and household arts. Then during the academic year 1916-1917 the staff completed the shift, commenced in 1913,[9] to a four year course of study.[10] Thus commenced the upgrading of the educational level of the institution, a trend which was to lead it several decades later to the attainment of collegiate status.

About this same time the Academic Department made its appearance. The first new department since 1903, it was originally set up as a convenience for a small minority of Polytechnic students planning to go on to college. In order to satisfy college entrance requirements,

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[7]Polytechnic Journal (San Luis Obispo) IX (June, 1914), 40-41.

[8]Ibid., X (June, 1914), 48; California Polytechnic School Bulletin of Information, 1916-1917 (Sacramento, n.d.), 25; 34; 41; 47.

[9]See page 53.

[10]Seventh Biennial Report of the Board of Trustees of the California Polytechnic School to the Governor of the State of California Comprising the Reports of the Director and the Secretary of the Board 1914-1916 (San Luis Obispo, 1916), 5.

these students had found it necessary to transfer to high schools accredited by the University of California; moreover, they received no credit for work taken at the California Polytechnic School. In 1915 Director Ryder appointed Miss Margaret Chase, instructor in English and history, to meet with officials of the University of California to discuss the problem of acceptable credits. She succeeded in securing the agreement that for certain Polytechnic courses, commencing in 1917, the University would grant full credit toward entrance requirements.[11] Director Ryder then designated these particular courses as "academic" and placed them under the supervision of a mathematics instructor, A. D. King.[12]

During the ensuing months while the transition to the four year program was taking place, a handful of parents and students recommended that the Polytechnic add a college preparatory program to its curriculum. At first Director Ryder showed faint interest in developing a field of study not purely vocational in nature, but soon he changed his mind. Possibly he felt that a college preparatory course would bring increased enrollment or/and it would enhance the prestige of the institution. In any event, by setting up a sequence of English, history, and mathematics courses and by adding offerings in foreign language, Ryder found

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[11] Ibid.

[12] Bulletin of the California Polytechnic School, 1914-1916 (Sacramento, 1915), 19; 22.

that the school could develop an academic major acceptable to the University of California for accreditation.[13] For the fall term of 1916 he hired an instructor of Spanish and appointed Miss Margaret Chase as head of the Academic Department, assigning her the duty of developing the college preparatory program.[14]

The new department grew slowly. A student's entry into it was contingent upon a strong scholarship record and a written request from his parents.[15] However, by 1918, under the capable leadership of Miss Chase, who was by then also vice director of the institution, the Academic Department was on firm footing and recognized as an important and respectable part of the school.[16] Among the thirty-five graduates in 1917, six were academic majors;[17] students in this category comprised at least one third of the graduating classes of 1918 and 1919.[18]

The inauguration of the Academic Department led to the reorganization of the curricula into four distinct departments designated as

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[13]Ibid., 19; 21.

[14]Ibid., 4; 19; Seventh Biennial Report, 1914-1916, p. 5.

[15]California Polytechnic School Bulletin, 1916-1917, p. 23.

[16]"Minutes of the Board of Trustees of the California Polytechnic School," April 27, 1918 (San Luis Obispo, 1918) p. 5.

[17]San Luis Obispo Morning Tribune, June 9, 1917, p. 1.

[18]San Luis Obispo Daily Telegram, June 13, 1918, p. 3; June 30, 1919, p. 6.

Agricultural, Engineering-Mechanics, Household Arts, and Academic, each with its respective head appointed by the director.[19]

A shift came in the school calendar in 1916 as two eighteen week semesters replaced the former three term academic year; moreover, the Trustees agreed to a reduction in tuition rates to two dollars per semester.[20] The school catalogue at this time gave notice to the prospective student to estimate the need of approximately $250 to cover expenses of a year at the institution.[21] As campus housing was available only for boys, arrangements were made for girl students to secure meals and furnished rooms in certain approved private homes. These accommodations were under direct faculty supervision.[22]

A major change in the life of the Polytechnic, commencing in the second year of Ryder's administration, came with the inception of compulsory military training for men students. Director Ryder set up a modified military regimen at the institution[23] shortly after an act of the 1915 legislature became effective. The statute in question

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[19]California Polytechnic School Bulletin, 1916-1917, p. 4.

[20]Ibid., 15-17.

[21]Ibid., 19.

[22]Ibid.

[23]It may well be that Mr. Ryder considered the institution of military life at the Polytechnic as the most effective way to cope with mounting problems of discipline.

which amended a 1911 bill dealing with the same subject,[24] concerned itself with cadet companies in secondary institutions in the state. The enactment, which permitted the organization of a cadet company in any California high school having a minimum of forty students, included regulations as to drill, uniforms, target practice, and annual inspections by officers of the state national guard, and provided for a commandant of cadets with the rank of major in each school maintaining a cadet company. A proviso regarding the commandant was that he "shall wear the same uniform and shoulder straps as a major of infantry in the national guard of California, with cap and collar ornaments designating the California high school cadets."[25]

Official announcements by the Polytechnic Administration pertaining to the military phases of its program made no mention of the state legislation. Peculiarly, appearing in the school bulletin for 1915-1916, and duplicated in each succeeding catalogue until 1932, was an announcement that "by act of Congress all State Agricultural Schools are required to give instruction in the elements of military science."[26]

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[24] Statutes of California, 1911, pp. 635-36.

[25] Ibid., 1915, pp. 683-84.

[26] Bulletin of the California Polytechnic School, 1915-1916, p. 27.

During the autumn of 1915, D. L. Schlosser, who had been employed by Director Ryder to instruct in military drill and music,[27] organized a school battalion of two companies and commenced working with a twenty piece military band.[28] For several months the students drilled in mufti, but during February, 1916, they received uniforms consisting of olive drab woolen blouses and trousers, campaign hats, and canvas leggings.[29] For the last two items officers came to substitute military caps and leather puttees.[30] As yet, drill was without rifles.

Meantime, having received his commission, Major Ryder was both commandant of cadets and director of the Polytechnic School.[31] His actual military rank during the next several years is obscure as contemporary publications refer to him as "major" or "colonel."[32]

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[27]Seventh Biennial Report, 1914-1916, p. 2.

[28]San Luis Obispo Daily Telegram, November 5, 1915, p. 1; Polytechnic Journal (San Luis Obispo) XI (June, 1916), 19.

[29]San Luis Obispo Daily Telegram, February 8, 1916, p. 1.

[30]Margaret Chase, "Cal Poly Survives Troubled Span of Years," San Luis Obispo County Telegram-Tribune, May 16, 1956, p. 1A.

[31]Polygram, March 16, 1921, p. 1.

[32]Polytechnic Journal (San Luis Obispo) VII (June, 1917), 40; ibid., XI (June, 1921), 15; San Luis Obispo Daily Telegram, March 6, 1921, p. 1.

By the latter part of 1916 the military program was well established. Captain George Ray, a retired United States army cavalry officer, accepted an appointment to command and instruct the cadets of the California Polytechnic School, and reported for duty in September.[33] A policy of military discipline was now in effect at the institution. As members of the school battalion, all men were required to drill and to perform guard duty. Those living in the dormitory reported five mornings a week for pre-breakfast marching and setting up exercises, had assigned study hours, and could expect unannounced room inspections at any time. On registering, a male student paid a fifteen dollar deposit for his uniform and was required to wear it daily from eight-fifteen in the morning until four o'clock in the afternoon.[34]

Late in 1916 the cadets were issued rifles and gradually became adept in performing the manual of arms.[35] Drilling, standing guard duty, and participating in reviews and parades became commonplace.[36]

The students had little objection to military training, especially after the United States entered World War I in 1917 and were amenable

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[33]Polytechnic Journal, June, 1917, p. 40.

[34]California Polytechnic School Bulletin of Information, 1916-1917, pp. 17-18.

[35]Polytechnic Journal, June, 1917, p. 43.

[36]Polygram, November 19, 1919, p. 1.

to a proposal in 1917 that a regular and permanent cadet corps under direct control of the army be established at the Polytechnic. From this action would accrue such advantages as free uniforms and travel allowances. However, the Board of Trustees refused to sanction the change in question,[37] and military training continued under the direction of a regular member of the faculty.

Except for those duties and requirements necessitated by military discipline, students at the Polytechnic found their lives little changed during the early years of Ryder's administration; they continued their participation in athletics, debating, dramatics, and clubs.[38] Innovations instituted during this period included the Polygram, a bi-weekly publication commenced by the students in 1916,[39] and the Block P Club, organized by the athletes the following year.[40]

From 1915 to 1917 members of the Polytechnic faculty carried on considerable adult education extension work throughout San Luis Obispo

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[37]Margaret Chase, "Cal Poly Survives Troubled Span of Years," San Luis Obispo County Telegram-Tribune, May 16, 1956, p. 1A.

[38]Polygram, January 13, 1917, p. 1; Polytechnic Journal, June, 1916, pp. 32-34; 47; ibid., June, 1917, pp. 38-39.

[39]Polytechnic Journal, June 1917, p. 27.

[40]Ibid., June, 1918, p. 32.

County. The most successful period was 1915-1916 when approximately 750 persons attended a series of school sponsored lectures in Arroyo Grande, Edna, Paso Robles, Santa Margarita, and Cambria.[41] At these meetings the public heard Polytechnic staff members discuss such topics as "The Purposes of the Polytechnic School," "Hogs," or "Dairy Cows."[42] Lantern slide illustrations and selections by the school band enlivened the proceedings.[43]

Direction of the extension program fell to Instructor Carl Nichols, who was also San Luis Obispo County Horticultural Commissioner, during the following year.[44] In addition to writing several pertinent articles for the local newspapers, Nichols scheduled numerous lectures in the outlying grammar schools.[45]

The extension program went into a serious decline after the summer of 1917.[46] The resignation of Nichols and the reduction of personnel in the teaching staff were two factors contributing to this situation.

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[41] Seventh Biennial Report, 1914-1916, p. 6.

[42] San Luis Obispo Daily Telegram, October 23, 1915, p. 1; December 18, 1915; p. 1; December 24, 1915, p. 1; March 30, 1916, p. 1; April 12, 1916, p. 1.

[43] Ibid., April 27, 1916, p. 1.

[44] Ibid., November 22, 1915, p. 1.

[45] California Polytechnic School Bulletin of Information, 1916-1917, p. 4.

[46] "Minutes of the Board of Trustees of the California Polytechnic School," April 27, 1918 (San Luis Obispo, 1918), p. 5.

According to Director Ryder, the teachers were so busy with their regular classes they had no time for extra work.[47] By 1918 regular adult extension work by the institution had given way to a program of military training of youths in county secondary schools.

A final accomplishment of the period 1914-1917 was the acquisition of additional land. Heeding Director Ryder's recommendation that a watershed be purchased in order to assure the institution of an adequate water supply,[48] the California legislators appropriated a total of $75,000 in 1915[49] and 1917.[50] This sum was used to buy the Johnson tract, a 625 acre parcel lying north and adjacent to the school grounds.[51] The campus and farm now comprised approximately one thousand acres.

American entry and participation in World War I had considerable effect on the California Polytechnic School between 1917-1921. Enrollment figures fell far below the annual average of the previous decade, and students participated in a number of war relief projects. The institution did not escape entirely the post-war influenza epidemic

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[47] Ibid., 4.

[48] Sixth Biennial Report of the Board of Trustees of the California Polytechnic School. Comprising the Reports of the Director and the Secretary of the Board 1912-1914 (San Luis Obispo, 1914), 10-11.

[49] Statutes of California, 1915, p. 482.

[50] Ibid., 1917, p. 1605.

[51] "Minutes of the Board of Trustees," April 27, 1918, p. 4.

which swept the country. Members of the school staff organized a rehabilitation and vocational program for disabled war veterans, established a new major field of study, the Commercial Department, and helped with the military training programs in several San Luis Obispo county secondary schools. These same years saw the introduction of tractors on the Polytechnic farm.

As the following figures show, from the commencement of Ryder's administration in 1914 until 1918, the number of Polytechnic students increased annually:

1914-1915 - 162	1916-1917 - 180
1915-1916 - 176	1917-1918 - 190[52].

It was not until a year and a half after American entry into World War I that enrollment figures declined, reaching the lowest point in a decade. The forty-two per cent drop of 1918-1919, when there were in attendance only 110 students, of whom sixty-three were freshmen,[53] was due principally to two reasons. First, country boys tended to remain on the farm. The demands for agricultural products both in the United States and abroad had driven price levels to such heights that farmers,

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[52]Records of Enrollments, 1.

[53]Polytechnic Journal (San Luis Obispo) IX (June, 1919), 33.

still lacking mechanized equipment, kept their sons at home in preference to sending them away to school. In the second place, an increasing number of students enlisted in the army, navy, or marine corps. By June of 1917 only six Polyites had gone into the service,[54] but four months later the number had reached forty-one, and Jewett Johnston, an instructor in carpentry, resigned to attend officers' training camp.[55] Student enlistments tended to increase when it became common knowledge at the institution that fully ninety per cent of the Polytechnic ex-students, with their advantage of previous military training, were rapidly becoming commissioned or non-commissioned officers.[56]

The general exodus alarmed Director Ryder. During a special assembly on June 12, 1918, he strongly urged every student to complete his education at the school, pointing out the need of the country for well trained technicians.[57]

The total contribution of the Polytechnic to the armed services was 147 men, of whom three died in action.[58]

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[54] Ibid., June, 1917, p. 4.

[55] Polygram, October 17, 1917, p. 1.

[56] "Minutes of Board of Trustees," April 27, 1918, p. 5.

[57] San Luis Obispo Morning Tribune, June 13, 1918, p. 1.

[58] Polytechnic Journal, June, 1919, p. 15.

After the low point of 1918-1919 enrollments commenced to rise slowly. In the autumn of 1919, 145 students registered for classes, and a year later 175 students were in attendance.[59]

During 1918-1919 the students shelved much of the regular activities program, putting their efforts into war relief. Such organizations as the Amapola Club and the Junior Red Cross raised hundreds of dollars through various projects,[60] and students as individuals helped the cause by purchasing Thrift Stamps.[61] The new Pig Club,[62] established with the primary purpose of producing bigger and better hogs, was quite popular during 1918-1920.[63]

Major Ray, of the Polytechnic faculty, assisted in establishing military training programs in several schools throughout the county.[64] At Arroyo Grande, Templeton, and Paso Robles he directed drills and

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[59]Records of Enrollments, 1.

[60]Polytechnic Journal (San Luis Obispo) VIII (June, 1918) pp. 14; 41; June, 1919, pp. 26-27; June, 1920, p. 27.

[61]San Luis Obispo Daily Telegram, March 22, 1918, p. 1; Polytechnic Journal, June, 1918, p. 41.

[62]Polytechnic Journal, June, 1918, p. 36.

[63]Ibid., June, 1920, p. 34.

[64]Polygram, May 1, 1918, p. 1.

reviews involving more than one hundred boys, and made arrangements for these trainees to use the Polytechnic rifle range.[65]

The nation-wide post-war epidemic of a virulent form of influenza was felt throughout the coast counties of central California during the winter of 1918-1919. The "flu" was so serious in San Luis Obispo that a city ordinance, in effect for almost a month,[66] prohibited on penalty of a fine of fifty dollars, the appearance of any person in public unless he was wearing a mask over his nose and mouth.[67] Although the city schools were closed that autumn, the Polytechnic remained in session until the Christmas holidays.[68] However, Director Ryder placed the institution under military quarantine during November and December; students except when in their rooms were required to wear masks; moreover, cadet guards barred the public from entry into the school grounds.[69]

As a serious recurrence of the disease occurred in San Luis Obispo during January, it was decided to postpone for a few weeks the opening

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[65]San Luis Obispo Morning Tribune, October 1, 1918, p. 4. Polygram, December 12, 1917, p. 4.

[66]San Luis Obispo Morning Tribune, October 27, 1918, p. 1. November 22, 1918, p. 1.

[67]Ibid., October 30, 1918, p. 1.

[68]Polytechnic Journal, June, 1919, p. 27.

[69]San Luis Obispo Morning Tribune, November 1, 1918, p. 1; November 9, 1918, p. 4.

of the spring semester. Classes did not start again until February 17, 1919.[70]

A creditable service of the Polytechnic was its provision of special education opportunities for several hundred disabled veterans of World War I.

Early in 1920 Director Ryder reached a settlement with the Federal Board for Vocational Education[71] to the effect that the California Polytechnic School would "afford disabled service men opportunity to try out certain vocations ... to determine which they are best fitted for."[72]

The first fifty of these "federal men," as they were popularly called, arriving in small groups between April and June of 1920, were assigned to laboratories, classes, and shops with the regular students.[73] Commencing with July there came a change. Having hired three additional teachers, Director Ryder provided the veterans a series of special vocational courses running through the calendar year,[74] and scheduled

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[70] Ibid., February 14, 1919, p. 1.

[71] "Minutes of the Board of Trustees," April 24, 1920, p. 4.

[72] Polytechnic Journal, June, 1920, p. 37.

[73] Ibid., June, 1921, p. 47.

[74] Ibid., June, 1922, p. 39.

at such hours as not to conflict with the programs of the regularly enrolled boys and girls.[75]

The service men, averaging twenty-eight to thirty years of age, were kept segregated from the regular students as much as possible;[76] they were encouraged to organize their own assemblies and athletic events,[77] and except during the summer months they lived and took their meals in San Luis Obispo.[78]

During 1920 and 1921 an average of ninety federal men were in daily attendance at the institution, the largest number on hand at any one time being 130.[79] Most of them remained at the Polytechnic from sixty to ninety days.[80]

Director Ryder was highly pleased with the serious attitude of the veterans, whom he described as most desirable citizens.[81] Reports on the service men leaving the school were gratifying: for the most part

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[75] Ibid., June, 1921, p. 48; Polygram, October 20, 1920, p. 2.

[76] Polygram, June 8, 1921, p. 4.

[77] Ibid., November 17, 1920, p. 1; January 11, 1921, p. 1.

[78] "Minutes of the Board of Trustees," April 24, 1920, pp. 4-5.

[79] Polytechnic Journal, June, 1922, p. 39.

[80] Ibid., June, 1921, p. 48.

[81] "Minutes of the Board of Trustees," April 24, 1920, p. 4.

they were gainfully employed and making an effective adjustment to civilian life.[82] During the spring of 1922 this program included only a handful of men,[83] and it came to end a year later.[84]

In September of 1920 the staff widened curricular offerings by establishing a Commercial Department.[85] Originally planned and operated as a part of the disabled veterans' training program,[86] the Commercial Department was opened in the autumn of 1921 to regularly enrolled students.[87] It comprised a four year program including courses in typewriting, commercial law, bookkeeping, and advertising and was designed to prepare students for business occupations.[88] An evidence of the rapid growth in popularity of this department was the establishment by eighteen students of the Commercial Club in October, 1921.[89]

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[82]San Luis Obispo Morning Tribune, March 30, 1921, p. 1.

[83]Polytechnic Journal, June, 1922, p. 43.

[84]Polygram, May 10, 1923, p. 1.

[85]California Polytechnic School Bulletin of Information, 1921-1922, pp. 30-31.

[86]Polytechnic Journal, June, 1920, p. 27.

[87]Ibid., June, 1921, p. 48

[88]California Polytechnic School Bulletin of Information, 1921-1922, p. 30.

[89]Polytechnic Journal, June, 1922, p. 35.

An additional post-war change came in 1918 when the school acquired its first power driven farm machinery. That spring the agricultural instructors became familiar with the operation and maintenance of several tractors, the first in the general area, loaned to the school by a manufacturing concern.[90]

Considerable local interest in these machines led the staff to secure permission to use them for a special short course in tractor skills.[91] Twenty farmers attended this successful five-day session in June;[92] that same month at the annual campus Farmers' Picnic the tractor demonstrations were the center of interest.[93]

Before long the school owned three tractors. Director Ryder purchased a forty-five horse power Holt, which was put into use in October;[94] and in 1919 he traded a Percheron stallion to the Atascadero Colony for two caterpillars.[95] Gradually these three tractors replaced

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[90]"Minutes of the Board of Trustees," April 27, 1918, p. 3.

[91]San Luis Obispo Daily Telegram, May 18, 1918, p. 7.

[92]Ibid., June 7, 1918, p. 1.

[93]San Luis Obispo Morning Tribune, June 4, 1918, p. 1.

[94]"Minutes of the Board of Trustees," November 9, 1918, p. 14.

[95]Ibid., April 26, 1919, p. 6.

the horses for most of the heavy work around the school farm. As the institution added such machinery as a mower[96] and a harvester,[97] the need for the horses continued to decline. Hence, Ryder arranged for the sale of about half the school's thirty head of Clydesdales and Percherons.[98]

The curriculum kept in step with the times; in 1920, the courses in tractor operations and auto mechanics were offered for the first time.[99]

A history of the California Polytechnic School during the Ryder administration would be incomplete without a summary of legislative appropriations of 1915-1920 and an examination of the relationships during these seven years of the Director with the State Board of Control, the Board of Trustees of the California Polytechnic School, and with his teaching staff.

The chart below shows legislative appropriations for the three bienniums commencing with 1915.

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[96] Ibid., November 8, 1919, p. 1.

[97] Ibid., June 27, 1919, p. 5.

[98] Ibid., April 26, 1919, p. 7; November 8, 1919, p. 4; April 24, 1920, p. 11.

[99] Polytechnic Journal, June, 1921, p. 6.

Appropriations for the California Polytechnic School[100] (1915-1920)

Years	Total Appropriation	Support and Maintenance	Salaries	Water Supply	Other
1915-1916	$150,200	$30,000	$75,000	$20,000	$25,200
1917-1918	203,500	37,500	85,000	55,000	26,000
1919-1920	162,800	53,800	97,000	0	12,000

These allotments fell considerably below the amounts requested by Ryder. For example, in 1918 he estimated a minimum of $35,000 as absolutely necessary for urgently needed repairs,[101] but the following year the school received only $12,000 for this purpose. The legislators seemed oblivious to the growing requirements of the institution, rising prices, and competition for teaching staff. In 1920 Director Ryder reported the salary and support appropriations to be less than half the amounts actually requisite.[102] He pointed out that buildings and grounds were badly run down, the sewerage system was obsolete, the main structures were in dire need of painting, plastering, and roofing, and serious shortages existed in shop and laboratory equipment.[103] The

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[100]Compiled from Statutes of California, 1915, pp. 482-83; ibid., 1917, pp. 470; 438; 502; 560; 1605; ibid., 1919, pp. 836; 1324.

[101]"Minutes of the Board of Trustees," November 9, 1918, p. 5.

[102]Ibid., April 24, 1920, pp. 12-14.

[103]Ibid., 6-9.

problem of an adequate water supply for the institution was not yet solved as lack of funds precluded the construction of a reservoir on the recently acquired Johnson property.[104]

Ryder was convinced that in addition to the niggardly appropriations of the legislature, much of the difficulty of the Polytechnic stemmed from actions of the California Board of Control.[105] Established in 1910,[106] this body had caused no particular trouble for the school until the summer of 1918 when it assigned F. L. Lathrop to make a thorough inspection of the operation of the school farm. Shortly after receiving Lathrop's report, a highly critical document,[107] the Board of Control recommended that the Polytechnic be moved from San Luis Obispo, or be discontinued altogether.[108]

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[104] Ibid., 5.

[105] Ibid., November 9, 1918, p. 1.

[106] Statutes of California, 1910, pp. 591-98.

[107] F. L. Lathrop, "Report on Agricultural Operations of California Polytechnic School, San Luis Obispo, Calif. July 13th-18th, 1918" (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo).

[108] "Minutes of the Board of Trustees," August 13, 1918, p. 1.

During the autumn of 1918 the Board of Control changed the budgeting procedure of all state institutions, including that of the Polytechnic, much to the disgust of Director Ryder.[109] In his opinion this group in Sacramento, not comprehending the problems of the school or its true function, was forever "disapproving and delaying orders for supplies, handicapping school work."[100]

Friction between the institution and the Board of Control reached its height in 1919 when Director Ryder and Board Chairman Marshall De Motte exchanged angry letters regarding the question of school needs for such items as water pipes and publication of catalogues.[111] During 1920 the Board checked each item of every request of the institution,[112] and insisted that Director Ryder institute a new accounting system at the Polytechnic.[113] His experiences with the Board of Control seem to have greatly exasperated Ryder.

Meantime the Director was on good terms with the Board of Trustees of the institution. The trustees assisted him with the negotiations

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[109] Ibid., November 9, 1918, p. 4.

[110] Ibid., 1.

[111] Attached to "Minutes of the Board of Trustees," April 26, 1919.

[112] "Minutes of the Board of Trustees," December 4, 1920, p. 3.

[113] Ibid., December 4, 1920, p. 2.

for the Johnson property[114] and the sale of school livestock,[115] in appearing before the California Board of Control,[116] and by occasionally interviewing prospective faculty members.[117]

During Ryder's administration there were few changes in the appointed membership of this body. In 1915, to fill vacancies caused by the untimely death of Trustee Warren M. John and the resignation of Trustee Edward J. Wickson, Governor Hiram Johnson appointed Louis F. Sinsheimer of San Luis Obispo,[118] and Irwin J. Muma of Los Angeles.[119] Hence in that year the Board of Trustees included the following persons:[120]

> Mr. Archibald McNeil of Santa Maria (date of term expiration- 1914)
> Mr. Louis F. Sinsheimer of San Luis Obispo (date of term expiration - 1916)
> Mr. Edward Simpson of Pacific Grove (date of term expiration- 1917)
> Mr. Irwin J. Muma of Los Angeles (date of term expiration- 1919)
> Mr. Edward Shipsey of San Luis Obispo (date of term expiration- 1919).

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[114] Ibid., April 27, 1918, p. 14.

[115] Ibid., November 8, 1919, p. 4.

[116] Ibid., November 9, 1918, pp. 1; 4.

[117] Ibid., November 8, 1919, p. 12.

[118] San Luis Obispo Morning Tribune, February 4, 1915, p. 1.

[119] Ibid., July 11, 1915, p. 1.

[120] Bulletin of the California Polytechnic School, 1915-1916, p. 3.

Although their official terms had expired, these men continued to act as the trustees of the school until 1921 when a legislative enactment dissolved the Board of Trustees and placed the California Polytechnic School under the direction of the California Director of Education.[121]

During the seven years Ryder was director of the Polytechnic there was an excessive turnover in the teaching staff. Of the sixteen instructors on duty in 1914-1915, only one, Miss Margaret Chase, remained on the faculty of eighteen in 1921.[122] On two occasions there were marked shifts in personnel. When the fall term opened in 1916, seventy per cent of the teachers were new to the Polytechnic;[123] moreover, of the staff hired for the year commencing September, 1919, one half had had no previous teaching experience.[124]

World War I was but one of several reasons for this deplorable situation. Unfortunately, Director Ryder did not enjoy happy relationships with his staff.[125] Then, too, teachers resigned for such reasons

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[121] Statutes of California, 1921, p. 1035.

[122] Bulletin of the California Polytechnic School, 1915-1916, p. 41; "Minutes of the Board of Trustees," May 14, 1921, pp. 1-3.

[123] "Minutes of the Board of Trustees," April 24, 1920, p. 14.

[124] Ibid., November 8, 1919, p. 10.

[125] Ibid., May 27, 1918, p. 4; April 26, 1919, p. 5; April 24, 1920, p. 15; May 14, 1921, p. 1; R. W. Ryder, "To the Faculty," April 1, 1916 (Manuscripts Division, California State Polytechnic College, San Luis Obispo), 1-5.

as low pay, and the lack of a salary scale,[126] or the failure to receive a promised war allowance.[127] A factor promoting much dissatisfaction was the ineligibility of instructors at the Polytechnic to participate in the state retirement system for secondary teachers.[128] A 1919 law changed this situation; commencing with that year a teacher at the Polytechnic School, provided that he held a valid teaching credential, qualified for membership in the state teachers' retirement system.[129]

During these years the philosophy of the institution did not change. Such factors as compulsory military training, the establishment of the Academic Department, and the effects of World War I made little difference in this respect.

As aptly described in the school bulletin for 1915-1916 the educational field of the institution lay between the trade school and the university; the function of the Polytechnic was to train "directors of workmen or educated practical farmers, mechanics, or homemakers."[130]

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[126]"Minutes of the Trustees," November 9, 1918, p. 1.

[127]Ibid., November 8, 1919, p. 12; May 14, 1921, p. 3.

[128]Ibid., August 3, 1918, p. 1.

[129]Statutes of California, 1919, pp. 151; 500.

[130]Bulletin of the California Polytechnic School, 1915-1916, p. 7.

The object of the Engineering-Mechanics Division was to prepare its students to become "draftsmen, inspectors, engineers' assistants, assistants to foremen, master mechanics, power plant operators, surveyors, or erection foremen."[131] Training in the household arts program taught the girls to become competent housekeepers, dietitians, trained nurses, seamstresses, milliners, designers, or decorators.[132]

However, in Ryder's opinion the agricultural course was "the most important function of the school."[133] During his last five years at the institution, in addition to performing his duties as director, he retained for himself the position of Head of the Agricultural Division.[134] In this capacity he stressed learning by doing, insisting that every student in agriculture operate farm machinery, milk, feed, and care for livestock.[135] Thus the Polytechnic would be fulfilling the objective of preparing its graduates in agriculture "to make more money on the farm and to make farm life more attractive."[136]

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[131] California Polytechnic School Bulletin, 1916-1917, p. 33; Polygram, December 12, 1917, p. 3.

[132] California Polytechnic School Bulletin, 1916-1917, p. 39.

[133] Robert W. Ryder, "Letter to the Editor," San Luis Obispo Morning Tribune, August 9, 1918, p. 1.

[134] California Polytechnic School Bulletin, 1916-1917, p. 33; ibid., 1919-1920, p. 4.

[135] "Minutes of the Board of Trustees," April 27, 1918, pp. 3-4.

[136] Polygram, December 12, 1917, p. 3.

The newly established Academic Department provided college preparatory courses for a small number of students, but the great majority of those attending the California Polytechnic School were there strictly for its primary function, vocational training.

During the autumn of 1920 Ryder submitted his resignation as Director of the institution.[137] Difficulties with the Board of Control and poor relationships with the faculty undoubtedly influenced Ryder in his decision to leave the school. Then, too, he had received a commission in the Corps of Engineers, United States Army, and expected an assignment in Alaska or the Orient.[138] During March, 1921, the Board of Trustees made public Ryder's decision and announced as his successor Nicholar Ricciardi, a specialist in vocational education.[139]

To show their appreciation to the departing director, the students dedicated to "Colonel" Ryder the 1921 Polytechnic Journal, featuring his picture in the uniform of a colonel in the Corps of Engineers, praising him for his efforts on behalf of the Polytechnic, and wishing him success in his new venture.[140]

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[137]"Minutes of the Board of Trustees," December 4, 1920, p. 4.

[138]San Luis Obispo Morning Tribune, March 6, 1921, p. 1; Polygram, March 16, 1921, p. 2.

[139]San Luis Obispo Morning Tribune, March 6, 1921, p. 1.

[140]Polytechnic Journal, June, 1921, pp. 15-16.

CHAPTER V

THE ADMINISTRATIONS OF NICHOLAS RICCIARDI (July 1921-February 1924) AND OF MISS MARGARET CHASE (February-August 1924)

During the spring of 1921 the Board of Trustees selected Nicholas Ricciardi to succeed Robert W. Ryder as chief executive of the California Polytechnic.[1]

Ricciardi's experience lay in the field of education. A graduate of the University of California, he had taught several years in both elementary and secondary schools and had been a principal before accepting an appointment as director of vocational training in the Oakland school system.[2] Subsequently he served in the federal occupational education program, resigning as Head of the Twelfth District Board for Vocational Training in order to take over the directorship of the Polytechnic on July 1, 1921.[3]

Shortly after the commencement of Ricciardi's term of office came a change in the control of the institution. A legislative en-

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[1] Polytechnic Journal (San Luis Obispo) XI (June, 1921), 24.

[2] Polygram, January 25, 1924, p. 1.

[3] Ibid., March 16, 1921, p. 2.

actment, effective July 30, 1921, abolished the California Polytechnic School Board of Trustees and placed the school under the State Director of Education;[4] moreover, it substituted the term "president" for "director" and provided that in the future a president was to be nominated by the Director of Education and appointed with the approval of the State Board of Education.[5]

These changes in its control were to benefit the school. Heretofore a sort of stepchild of the state, the Polytechnic was now recognized as a part of the California system of education.

Ricciardi made two notable contributions to the California Polytechnic. He strengthened the school in the area of vocational guidance and succeeded in publicizing its activities throughout the entire state.

Ricciardi was of the conviction that the primary function of the school was to develop "vocational efficiency and efficient citizenship" in its students.[6] Hence, as he put it, it was the responsibility of the staff to fit the man for the job - to train the student for

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[4]The Superintendent of Public Instruction was ex-officio State Director of Education. This act also abolished the boards of trustees of the state normal schools and the boards of trustees of the schools for the blind and the deaf. All these state institutions, in addition to the California Polytechnic, were placed under the control of the Director of Education.

[5]Statutes of California, 1921, pp. 1033-35.

[6]San Luis Obispo Morning Tribune, June 12, 1921, p. 4.

the vocation for which he was best fitted.[7] For the institution to produce occupationally competent graduates, he believed its counseling methods must be expanded and improved.[8]

With Ricciardi's personal assistance the faculty constructed comprehensive sets of rating scales and guides designed to determine vocational aptitude and to predict occupational success.[9] For several years sections of these charts comprised the first several pages of the annual school bulletins.

Through the use of these scales and charts and of the Terman reading ability tests[10] the staff became well aware of the vocational interests and capabilities of each student. Moreover, new students took a course in occupations. This included a series of short try-out periods in various fields of training available at the Polytechnic.[11]

The teachers also put into practice an elaborate counseling system calling for a daily conference between each student and his adviser.[12]

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[7]Polygram, September 27, 1922, p. 1; San Luis Obispo Morning Tribune, September 17, 1921, p. 1.

[8]San Luis Obispo Morning Tribune, September 17, 1921, p. 1.

[9]Bulletin of the California Polytechnic School, 1922-23, pp. 10-11.

[10]Polygram, February 22, 1922, p. 1; San Luis Obispo Morning Tribune, February 26, 1922, p. 3.

[11]Eliza R. Pendry, "The California Polytechnic School Plan of Guidance," School and Society (New York), XVII (March 31, 1923), 357.

[12]San Luis Obispo Daily Telegram, October 7, 1922, p. 8.

Because of the effectiveness of the school guidance program Ricciardi was convinced that California Polytechnic graduates would not become occupational misfits as "round pegs in square holes."[13] The President further built up the vocational counseling program by instituting a placement bureau[14] and by arranging follow-up interviews with graduates on the job.[15]

In advertising the Polytechnic Ricciardi was particularly effective. In this respect his numerous appearances before parent-teacher associations and women's clubs in Los Angeles, Long Beach, San Jose, and Sacramento were of great value.[16] He reached principals throughout the state by addressing them at their 1921 convention[17] and again by mailing each a copy of a form letter describing the guidance program and vocational education opportunities at the California Polytechnic.[18] He so interested Los Angeles Rotarians that their president

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[13]Nicholas Ricciardi, "Letter to California Principals," January 16, 1923 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 1.

[14]San Luis Obispo Daily Telegram, September 17, 1921, p. 1.

[15]Pendry, "The California Polytechnic School Plan of Guidance," School and Society (New York), XVII (March 31, 1923), 360.

[16]San Luis Obispo Daily Telegram, November 5, 1921, p. 6; January 16, 1922, p. 6; May 1, 1922, p. 1; September 9, 1922, p. 8; January 21, 1923, p. 8.

[17]Ibid., September 30, 1921, p. 1.

[18]Ricciardi, "Letter to California Principals," p. 1; San Luis Obispo Morning Tribune, January 16, 1923, p. 3.

made a special trip to San Luis Obispo to inspect the institution.[19] Ricciardi's publicity program was extremely successful in spreading over California information regarding the Polytechnic.[20]

Ricciardi's thirty-one months as president of the California Polytechnic actually comprised two distinct periods divided by the spring and summer of 1923. The first part of his administration was a time of optimism and of overall expansion. During these years the institution had available the largest financial allotment it had ever received; old structures were renovated and new buildings appeared on the campus; an increasing number of students enrolled; the course in printing commenced; and the athletic program was expanded.

In the spring of 1921 the legislature voted $297,300 for the California Polytechnic,[21] the greatest appropriation in the history of the institution. During the ensuing eighteen months a number of physical improvements were made at the school; in the budget $92,000 was earmarked for badly needed repairs, improvements, and equipment,[22] and $7500 for paving the road from the campus to the northern limits

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[19]San Luis Obispo Morning Tribune, October 7, 1922, p. 8; December 6, 1922, p. 8; December 12, 1922, p. 1.

[20]Polygram, January 25, 1924, p. 2; San Luis Obispo Daily Telegram, June 6, 1922, p. 1.

[21]Statutes of California, 1921, pp. 637; 1598; 1713.

[22]Ibid., 637.

of San Luis Obispo.[23] These funds were soon used for the specified purposes. For the first time in a number of years new units of construction appeared - an auto shop, a horse barn, a warehouse, poultry houses, and hog units.[24]

Enrollments increased. In the autumn of 1921 there were at the Polytechnic 188 students, and a year later 228 registered for classes.[25]

Commencing in the autumn of 1922 the institution added a valuable four year course in printing. Presses at the school were printing the annual catalogues, the Polytechnic Journal, the Polygram, and various pamphlets by the spring of 1923.[26]

For the first time since 1914 the Polytechnic acquired additional livestock.[27] During the autumn of 1921 members of the agricultural staff purchased Hereford cattle, Poland China and Berkshire hogs valued at over $12,000.[28]

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[23]Ibid., 1598.

[24]Polytechnic Journal (San Luis Obispo) XII (June, 1922), 20; ibid., XIII (June, 1923), 25.

[25]"Records of Enrollments" (Files of the Admissions Officer, California State Polytechnic College, San Luis Obispo), 1.

[26]Polytechnic Journal, June, 1923, p. 30.

[27]"Minutes of the Board of Trustees of the California Polytechnic School," April 24, 1920 (San Luis Obispo, 1920), 11.

[28]San Luis Obispo Morning Tribune, October 30, 1921, p. 4.

The sports program expanded during the autumn of 1922 when the football team commenced league competition with Loyola University of Los Angeles and the state colleges of Fresno and Santa Barbara in the southern division of the recently formed Central Coast Conference.[29]

Ricciardi was highly pleased with the developments of 1921-1922. The combination of campus improvements, favorable reactions to his publicity campaign, and enlarged student body together with the strong backing and keen interest of Director of Education Will C. Wood,[30] led Ricciardi to envisage a rapid expansion of the school and to predict an enrollment of over one thousand students by the mid-1920's.[31]

To carry out his plans for the academic year commencing in July, 1923, Ricciardi estimated he would need $250,000 and was prepared to ask the legislature for a half million dollars for the forthcoming biennium.[32] It was at this time when the future of the

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[29]Polygram, May 17, 1922, p. 1; Polytechnic Journal, June, 1923, p. 65.

[30]San Luis Obispo Morning Tribune, December 23, 1921, p. 3.

[31]San Luis Obispo Daily Telegram, June 9, 1922, p. 1.

[32]Polygram, April 26, 1923, p. 2.

Polytechnic seemed the brightest in years that it was to receive a setback from which it barely recovered. In 1923 the institution was involved in a struggle for its very existence.

The threat to the school stemmed from the budgetary action of newly elected Governor Friend W. Richardson.[33] In his gubernatorial campaign during September and October of 1922, Richardson had emphasized strongly the need for rigid curtailment in all governmental expenditures, and shortly after his election he had recommended a fifty per cent reduction in the salaries of many state officials.[34] Ricciardi, alarmed as he realized the proposed economy measures of the Governor could lead to a substantial cut in allotments for the Polytechnic, arranged a meeting in December with Director of Education Wood and several sympathetic members of the legislature to discuss means of procuring adequate funds for the school.[35]

During the spring of 1923 the blow fell. Governor Richardson chose to ignore the findings of a special committee appointed by the 1921 legislature to investigate agricultural education in California. The report of this group, published in January, 1923, showed the great need for farm schools in the state; moreover, it recommended the

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[33]San Luis Obispo Morning Tribune, November 8, 1922, p. 1.

[34]Ibid., November 23, 1922, p. 1.

[35]San Luis Obispo Daily Telegram, December 1, 1922, p. 1.

careful, efficient, and attractive development of the California Polytechnic School and the transfer to it of all non-degree work being offered by the University of California campus at Davis, except for certain short courses for persons beyond high school age.[36] Actually, this report may have been far more harmful than helpful to the California Polytechnic.

Influenced by the advice of Mrs. Nellie Brewer Pierce, Chief of the Division of the Budget, Governor Richardson in a message on the proposed budget stated that the California Polytechnic was "out of joint with the state educational system," and recommended that the school be turned over to some other agency or used in some other capacity.[37]

Alumni and friends of the institution rallied to save it from extinction. At Sacramento Assemblyman Alex McMillan of Shandon and Director of Education Wood, working to secure funds for the Polytechnic, were joined by George M. Wilson, subsidized by contributions from Polytechnic graduates to lobby for the school.[38]

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[36]San Luis Obispo Daily Telegram, February 2, 1923, p. 1.

[37]San Luis Obispo Morning Tribune, February 2, 1923, p. 1; San Luis Obispo Daily Telegram, July 16, 1923, p. 1; Statutes of California, 1923, p. 261.

[38]San Luis Obispo Daily Telegram, January 18, 1923, p. 3; February 19, 1923, p. 1; March 16, 1923, p. 4; April 15, 1923, p. 8.

The combined efforts of those backing the institution achieved the inclusion of a biennial appropriation of $254,000 for the Polytechnic in the budget sent to Governor Richardson.[39] The action of the Governor was to reduce this amount to $124,500[40] with the remark that if the state was in the business of running Polytechnic schools, it should have dozens of them.[41] The Governor's economy campaign led to a total budget of $79,000,000 for the biennium 1923-1924, a sum $12,000,000 less than that of the previous two year period.[42]

Meantime Assemblyman McMillan succeeded in securing enactment of Assembly Concurrent Resolution Number Twenty-one, which provided for an investigation of the California Polytechnic School by a joint legislative committee. The committee was to report by September 1, 1924, whether the institution should be continued or terminated.[43]

Ricciardi, who had estimated that the school could operate perhaps twelve months on its reduced appropriation,[44] stayed on as president of the Polytechnic for less than a year after the drastic

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[39]Statutes of California, 1923, p. 256.

[40]Ibid., 261.

[41]San Luis Obispo Morning Tribune, May 8, 1923, p. 4.

[42]San Luis Obispo Daily Telegram, May 7, 1923, p. 1.

[43]Ibid., April 15, 1923, p. 1; April 16, 1923, p. 1; April 25, 1923, p. 1; Bulletin of the California Polytechnic School, 1923-24, p. 1; Statutes of California, 1923, pp. 1655-56.

[44]San Luis Obispo Daily Telegram, May 7, 1923, p. 1.

slash in the school budget. The period from the summer of 1923 to February 1924, comprising the concluding part of Ricciardi's administration, was one of retrenchment. Uncertainty regarding the future of the institution replaced the optimism of the preceding twenty-four months.

In line with the economy program decreed for the Polytechnic, the Board of Control ordered the disposal of most of the school livestock.[45] Of the 58 Holstein and Jersey cattle, 150 hogs, 12 horses, and 500 chickens on hand, with the exception of some of the Jersey cows and a few horses, all were to be sold at public auction early in September.[46] Because ranchers and farmers from San Luis Obispo County purchased the animals at low prices, the state treasury realized only $8500 from the sale, a sum far less than the actual value of the livestock.[47]

In compliance with the recommendations of Director of Education Wood, the academic year 1923-1924 opened with courses offered only in agriculture, mechanics, and printing. As all work in the commercial department, household arts, Spanish, music, and drawing was discontinued,

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[45] Ibid., September 11, 1923, p. 8.

[46] San Luis Obispo Morning Tribune, August 17, 1923, p. 3.

[47] San Luis Obispo Daily Telegram, September 12, 1923, p. 8.

it seemed certain that girls would no longer attend.[48] Entrance qualifications were raised. New students were required to have completed at least one year of high school with passing marks in English, algebra, and general science.[49] Students with more than a year of high school work were welcome and would receive full transfer credit.[50]

The staff, exactly fifty per cent of that of the previous year, included the following persons:[51]

President Nicholas Ricciardi
Miss Margaret Chase, vice president
C. E. Knott, mechanics
G. W. Wilder, electrical shop and drafting
E. T. Cunningham, machine shop
John Perrozzi, carpentry and forging
R. Stroble, auto shop
W. G. Duddleson, agriculture
R. C. Davis, print shop
Miss Hope Jordan, mathematics
A. Agosti, science and athletics
Captain Joseph Deuel, military and librarian.

School commenced in the autumn of 1924 with 106 students, including only fourteen new boys, the smallest enrollment in eight years.[52] To

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[48] Polytechnic Journal (San Luis Obispo) XIV (June, 1924), 8; San Luis Obispo Morning Tribune, May 25, 1923, p. 3; San Luis Obispo Daily Telegram, November 21, 1923, p. 8.

[49] Bulletin of the Polytechnic School, 1923-24, p. 1.

[50] Ibid., 5.

[51] San Luis Obispo Daily Telegram, September 11, 1923, p. 8.

[52] Polygram, September 28, 1923, p. 1; Records of Enrollments, 1; El Rodeo, 1927, p. 16.

the surprise of all, five co-eds registered on the opening day; shut out from all other work, they succeeded in gaining admittance to printing courses.[53] By November a total of nine girls had returned to the school, all taking classes in the printing department.[54] The co-eds were of great value to the institution during this trying period; they kept alive the waning school spirit and contributed much to the activities program, especially in backing the football team and with the production of the Polygram.[55] The total enrollment for 1923-24 was 114, precisely half that of 1922-1923.[56]

Early in January Ricciardi submitted his resignation, effective February first, as president of the Polytechnic, in order to accept the position of Commissioner of Vocational Training for California.[57] In token of his many efforts on behalf of the school, at a farewell assembly the students presented the retiring executive a complete golfing outfit.[58]

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[53]San Luis Obispo Daily Telegram, November 21, 1923,p. 8.

[54]Polygram, November 23, 1923, p. 1.

[55]Margaret Chase, "Cal Poly Survives Troubled Span of Years," San Luis Obispo County Telegram-Tribune, May 16, 1956, p. 4A.

[56]Records of Enrollments, 1.

[57]San Luis Obispo Daily Telegram, January 11, 1921, p. 1.

[58]Polytechnic Journal, June, 1924, p. 12.

Miss Margaret Chase, vice president of the school, was acting president for the remainder of the academic year.[59] This most capable woman, a member of the staff since 1908, was highly responsible for fostering the feeling that the institution would surmount the obstacles it faced and would survive this most crucial year of its history. During the year 1923-24 she, more than anyone else, encouraged the students, notwithstanding the small enrollment, to continue as much as possible the regular activities program. Somehow they managed to publish the Polygram as usual, to maintain the Students Affairs Committee and such organizations as the Engineering-Mechanics Club, and to participate in athletics.[60] During the spring of 1924 the students put on a highly successful dramatic performance, "The Seven Keys to Bald Pate," at the Elmo Theater in San Luis Obispo.[61]

A result of the higher entrance requirements was to reduce the number of younger students. The average age of Polytechnic students in the spring of 1924 was eighteen years and four months; forty-one per cent of those attending classes were over nineteen years of age.[62]

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[59] San Luis Obispo Daily Telegram, January 25, 1924, p. 1.

[60] Polygram, October 12, 1923, p. 3; Polytechnic Journal, June, 1924, p. 19.

[61] Polytechnic Journal, June, 1924, p. 29.

[62] San Luis Obispo Morning Tribune, April 10, 1924, p. 1.

The year closed with the graduation of twenty-one seniors.[63] The chief speaker at the exercises was LeRoy B. Smith, former director of the Polytechnic.[64]

Meanwhile during February of 1924 Director of Education Wood requested a group of San Luis Obispans, acting as the "Local Committee of Fifteen," to make a study of the school in order to determine its proper educational objectives and to nominate a president for it.[65] Included in this group were such prominent citizens as Louis F. Sinsheimer, Benjamin Brooks, and Dr. Howard B. Kirtland.[66]

The Committee convened a number of times during the spring months, often consulting experts for advice on various matters, before issuing its recommendations that the institution emphasize agricultural training, that courses in home making be re-instituted, and that the project method be put into widespread use.[67] After considering a number of applications for the presidency of the school, the Committee suggested

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[63] Ibid., May 28, 1924, p. 1.

[64] San Luis Obispo Daily Telegram, June 7, 1924, p. 1.

[65] Ibid., February 14, 1924, p. 1; Bulletin of the California Polytechnic School, 1924-1925, p. 4.

[66] San Luis Obispo Daily Telegram, June 12, 1924, p. 4.

[67] Ibid., April 30, 1924, pp. 1; 4; May 20, 1924, p. 8; San Luis Obispo Morning Tribune, May 4, 1924, p. 4; Bulletin of the California Polytechnic School, 1924-1925, p. 4.

the appointment of Dr. Benjamin R. Crandall of the University of California faculty.[68]

With the approval of the State Board of Education, Wood offered the position to Crandall, who agreed to commence his duties at the Polytechnic during the following summer.[69]

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[68]San Luis Obispo Daily Telegram, June 4, 1924, p. 1; June 12, 1924, p. 4.

[69]Polytechnic Journal (San Luis Obispo) XV (June, 1924), 7.

CHAPTER VI

THE ADMINISTRATION OF BENJAMIN RAY CRANDALL (1924-1933)

Dr. Benhamin R. Crandall came to the California Polytechnic school with a strong and varied background in education. Upon graduating at eighteen years of age from Andover Academy in Andover, New York, Crandall taught in rural schools of New England for several years. In the mid-1890's he enrolled in Alfred University, New York, completing all requirements for a bachelor of science degree in 1899.

During the ensuing sixteen years Crandall combined a wide range of administrative experience with graduate study in several universities. In the autumn of 1899 he became principal of the high school in Hammond, Louisiana, a position he held for three years. From 1902 to 1907, while serving in Rawlins, Wyoming, as superintendent of schools, Crandall earned two degrees: bachelor of pedagogy from the University of Wyoming and master of arts from the University of Denver. In 1907 he commenced an eight year period as superintendent of schools of Idaho Falls, Idaho. During this interim he received the degree of doctor of pedagogy from Alfred University (1911) and a doctor of philosophy degree from the University of Denver (1915).

Crandall moved in 1915 to Holtville, California, where he was principal of the high school for four years; during the ensuing twenty-four months he served as superintendent of schools of San Bernardino. From 1921 to 1924 Crandall was a member of the University of

California staff as supervisor of agricultural teacher training and lecturer in education.[1] It was during the latter part of this period that he was offered the presidency of the Polytechnic.

In May, 1924, the San Luis Obispo Local Committee of Fifteen, searching for a new president for the Polytechnic, arranged interviews with several individuals, including Crandall.[2] Impressed with his wide educational background, his successful experience as a school executive, and his interest in agricultural education, the Committee nominated him for the presidency.[3] Both Miss Chase, acting president of the Polytechnic, and members of the State Board of Education under whose direct control the institution had been placed a few months earlier, strongly urged him to accept.[4]

Crandall was in a quandary. He greatly enjoyed his teaching duties and associates at the University of California and had not sought another position; yet he missed full time administrative work. Although the position at Berkeley offered security and the future of the Polytechnic seemed uncertain, the problems of the San Luis Obispo

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[1]Benjamin R. Crandall, "Statement of Professional Experience and Training," October 17, 1929 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 1-2.

[2]San Luis Obispo Daily Telegram, May 20, 1924, p. 1.

[3]Ibid., June 12, 1924, p. 4.

[4]Catalogue of the California Polytechnic School, 1925-1926, p. 1; interview with Miss Margaret Chase, April 8, 1957.

institution were a great challenge.[5] Before coming to a decision Crandall scheduled separate conferences with Governor Richardson and the Board of Control.[6] On hearing the educator's plan for the institution and the methods he would establish, the Governor recommended that Crandall accept the position and agreed henceforth to support the school.[7] The promise of cooperation by members of the Board of Control and their assurance that sufficient funds would be made available to carry on the institution, led Crandall to accept the new post.[8] He resigned from the University of California and commenced his duties in San Luis Obispo on July 1, 1924.[9]

In many respects the California Polytechnic underwent considerable expansion and improvement during the nine years Crandall was its director. The staff broadened the curriculum, established and operated a junior college division, inaugurated the project system in agriculture, extended the activities program, and strengthened student self-government. Enrollment figures rose to a record of 407 during 1929-1930.

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[5]Ben R. Crandall to Harr Wagner, August 6, 1924; B. R. Crandall to F. L. Griffin, July 11, 1924 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo).

[6]Ben R. Crandall, "A Few 'High Lights' after Twenty-Four Years," May 1, 1957 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo).

[7]Ibid.

[8]B. R. Crandall to author, May 1, 1957 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo).

[9]San Luis Obispo Daily Telegram, July 2, 1924, p. 1.

The acquisition of additional land expanded the grounds to approximately 1200 acres; six new major buildings and considerable minor construction greatly improved campus facilities. However, the agricultural program was neglected, and the household arts courses were discontinued.

During the first three years of Crandall's administration, enrollment figures mounted steadily, rising from 124 students registered for classes in September, 1924, to 372 in attendance at the close of the 1927 spring term.[10] An important factor contributing to this increase of 300 per cent was the reinstatement of the lenient entrance requirements in effect prior to 1923; once again any boy or girl, who was a graduate of the eighth grade, or who was at least fifteen years of age and of average ability, qualified for admittance to the Polytechnic.[11]

By 1926 Crandall had restored all courses removed from the curriculum during 1923-24. He added Miss Evabelle Fuller to the staff in September, 1924, to instruct in music, public speaking, and drama.[12]

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[10]"Records of Enrollments" (Files of the Admissions Officer, California State Polytechnic College, San Luis Obispo), 1.

[11]Catalogue of the California Polytechnic School, 1925-26, p. 13.

[12]San Luis Obispo Daily Telegram, September 13, 1924, p. 8.

A year later Mrs. Pearl P. Knott resumed the work in home making,[13] Miss Marian Knox commenced instruction in girls' physical education, and Miss Margaret Brown took over direction of the glee club and orchestra.[14] Meantime, Miss Margaret Chase successfully revived the college preparatory courses.[15]

With an instructional staff of thirty-six,[16] the California Polytechnic included by 1927 five major divisions designated as the "School of Agriculture," the "School of Engineering," the "School of Home Arts," the "Academic Department," and the "School of Printing." The courses were organized as follows.[17]

Major Work in the School of Printing

Linotype Operation
Head Composition
Presswork

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[13]San Luis Obispo Morning Tribune, September 17, 1925, p. 1.

[14]Catalogue of the California Polytechnic School, 1925-1926, p. 1.

[15]Ibid., 28.

[16]California Polytechnic Bulletin, 1927-1928, pp. 2-3.

[17]Catalogue of the California Polytechnic School, 1926-1927, p. 32; Interview with Miss Margaret Chase, July 25, 1957.

Major Work in the School of Agriculture

General Agriculture
Dairying
Hog Raising
Farm Crops
Horticulture
Farm Management
Poultry Raising
Truck Gardening
Animal Husbandry
Farm Mechanics
Floriculture
Green House Propagation
Farm Shop
Butter Making
Cheese Making
Ice Cream Making

Major Work in the School of Engineering

Carpentry
Cabinet Making
Gas Engines
Electricity
Auto Mechanics
Surveying
Forging
Machine Shop
Hydraulics
Drafting
Aeroplane Motors
Radio
Battery Building and Charging

Major Courses in the School of Home Making

Cooking
Sewing
Millinery
Garment Making
Budgets and Accounts
Child Care
Sanitation
First Aid
Home Nursing
Dietetics
Cafeteria Cooking and Management
Home Planning
Home Decoration
Landscape Gardening
Applied Arts
Household Science

Special Work in the Academic Department

English
Mathematics
Band
Citizenship
Physical Education
Music
Chemistry
Physics
History
Public Speaking
Hygiene
Biology
Dramatics
Athletics
Foreign Language
Applied Science
Economics
Photography

President Crandall was keenly interested in the welfare of the boys and girls attending the Polytechnic as he thought of the students as members of his own family.[18] He urged them to become more self-reliant by extending student self-government and to widen their interests by extending the program of co-curricular activities.[19]

With his enthusiastic encouragement the Student Affairs Committee, composed of representative of every major campus organization and of each of the four classes, broadened its functions.[20] This group planned and directed the three most important social affairs of the year; home-coming in November, the Christmas party, and the academic holiday on May first, and assisted in scheduling the assembly programs.[21] Although Crandall retained the right of veto in meetings of the Student Affairs Committee, he rarely used it.[22]

In addition to such long established campus organizations as Amapola, Poly-Y,[23] Block P, and the Mechanics' Association, a number of

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[18]Emanuel E. Erickson, "A Unique State Institution," Industrial Education Magazine (Peoria) XXVIII (July, 1926), 19; Ben R. Crandall, "A Few 'High Lights' after Twenty-four Years," May 1, 1957.

[19]Polygram, September 23, 1927, p. 2; September 20, 1929, p. 1.

[20]Catalogue of the California Polytechnic School, 1925-1926, p. 9; El Rodeo, 1927, p. 31; California Polytechnic Bulletin, 1927-1928, p. 9.

[21]San Luis Obispo Daily Telegram, November 3, 1927, p.1; November 1, 1928, pp. 1-2; October 26, 1929, p. 1; Polygram, April 20, 1928, p. 1; November 2, 1928, p. 1; El Rodeo, 1929, p. (44).

[22]Interview with Miss Margaret Chase, April 8, 1957.

[23]Campus chapter of the Young Men's Christian Association.

new clubs appeared between 1924 and 1927. These included the Junior Farm Center, Galley Slaves,[24] Camera Club, Dormitory Club, Dramatics Club and Press Club.[25] During this period members of the Amapola Club, which restricted its membership to co-eds, recommended to President Crandall that in the interests of "democracy and economy" every girl student be required to wear a uniform.[26] He accepted the suggestion; from the opening of the fall term of 1926 each girl was required to wear a "white middy with blue detachable collar and a navy blue box-pleated skirt."[27]

The campus book store, popularly termed the "co-op," was expanded during this period. Readily accessible and selling at prices generally lower than those in San Luis Obispo, the store was a convenience to both students and faculty.[28] During 1925-1926 when H. M. Tennant was in charge of the store, he increased its popularity by

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[24]An organization of the students in the printing course.

[25]Polygram, October 14, 1926, p. 46; March 10, 1927, p. 1; California Polytechnic Bulletin, 1927-1928, p. 9; El Rodeo, 1927, p. 30.

[26]San Luis Obispo Morning Tribune, November 20, 1925, p. 3.

[27]Catalogue of the California Polytechnic School, 1926-1927, p. 11.

[28]Interview with Miss Margaret Chase, June 2, 1957.

adding to its stock such items as bedding, army shirts in several grades, and leggings.[29] The following year, in addition to her other duties, Miss Chase became the co-op manager.[30] Under her direction business increased.[31] To the students employed from time to time, the co-op furnished both experience and a means of earning needed money.[32]

In the field of publications the popular Polygram continued to appear at two week intervals. A change regarding the yearbook occurred in 1927 when the students voted that henceforth its title should be El Rodeo, rather than the Polytechnic Journal.[33]

Athletic highlights of the mid-1920's included a baseball victory over San Jose Teachers College,[34] and the subsequent entry into professional baseball of Thornton Lee, an outstanding pitching prospect.[35] In football competition the 1925 team lost a close contest to the

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[29]H. M. Tennant, "Report on Book Store as of This Date," March 4, 1926 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo).

[30]Polygram, February 24, 1927, p. 1.

[31]Ibid., April 10, 1930, p. 1.

[32]San Luis Obispo Morning Tribune, March 24, 1925, p. 3.

[33]Polygram, March 10, 1927, p. 1.

[34]San Luis Obispo Daily Telegram, April 24, 1926, p. 1.

[35]Ibid., January 15, 1927, p. 1.

Stanford University freshmen by a score of twenty to nineteen.[36] That same year tennis was added to the list of interschool sports.[37] The California Polytechnic track and field squad took fourth place in 1927 in the Central Coast Conference meet, held at San Luis Obispo.[38] For the most part the various Polytechnic teams made representative showings in the various sports.

The outstanding innovation at the Polytechnic during the early years of the Crandall administration was the inauguration of the project system in agriculture. In 1924, both the Superintendent of Public Instruction and the San Luis Obispo Local Committee of Fifteen had recommended the inclusion of projects as a part of the Polytechnic agricultural program.[39] A criteria of the Committee in recommending a future president of the school had been the attitude of the candidate in regard to the project system. In this respect Crandall's successful experience in setting up and administering this type of activity at Holtville in 1919-1921 made an exceedingly good impression.[40]

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[36] Ibid., October 17, 1925, p. 1.

[37] Ibid., February 27, 1925, p. 8.

[38] Polygram, May 12, 1927, p. 4; San Luis Obispo Daily Telegram, April 21, 1927, p. 8.

[39] San Luis Obispo Daily Telegram, April 30, 1924, p. 1.

[40] Ben R. Crandall to Sam H. Cohn, November 29, 1927 (Files of the President's Office, California State Polytechnic College, San Luis Obispo).

The project method in agricultural education had made considerable headway in secondary institutions throughout the state during the five years following the enactment of the Smith-Hughes (Federal Vocational Education) Act of 1917. By 1924, sixty-three public high schools in California had established departments of vocational agriculture and were receiving Smith-Hughes aid.[41] To qualify for these funds, it was necessary for each of these institutions to provide supervised practice in agriculture (projects) for at least six months of the year. The value of the project system was widely recognized. Writing in 1924 of high school agricultural practices, the California Commissioner of Industrial and Vocational Education noted:[42] "The project method predominates in all phases of agricultural instruction. It is the best method because it provides for practical business experience, instruction in farm economics, plant and animal care, and farm science." Certainly at the Polytechnic, where most of the students lived away from home and were paying for their room and board, the adoption of a system combining managerial and marketing experience with the opportunity of earning money would be highly desirable.

One of the first acts of the new president on arriving in San Luis Obispo was to hire A. J. Rathbone, an agricultural teacher at

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[41] Biennial Report of the State Department of Education For the School Years Ending June 30, 1927, and June 30, 1928 (Sacramento, 1928), Part I, p. 149.

[42] Report of the Commissioner of Industrial and Vocational Education for the Biennial Period Ending June 30, 1924 California State Board of Education (Sacramento, 1924), p. 34.

Petaluma High School, an institution where the project system had been in use since 1919.[43] Rathbone was appointed head of the Agricultural Department and assigned the task of setting up the project system at the Polytechnic.[44]

During 1924-1925 Rathbone and the agricultural staff, under Crandall's close supervision, developed school policy in regard to student projects: these were to be of a practical nature,[45] they were to be carried on under faculty guidance,[46] and they must last from sixty days to an entire school year.[47] They were available in stock, poultry, dairying, grain, or vegetable production, and provided the student with credit toward graduation.[48] Under this program, which was carried on under the motto "earn while you learn," the student spent his mornings in the classroom and the rest of the day on his project.[49]

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[43]A full time class in vocational agriculture was established at Petaluma High School in 1919; by 1923-1924 this school was one of seven in California having as many as four full time classes of this nature. See Report of the Commissioner of Industrial and Vocational Education. 1924, p. 59.

[44]San Luis Obispo Daily Telegram, July 15, 1924, p. 1.

[45]Catalogue of the Polytechnic School, 1925-1926, p. 13.

[46]San Luis Obispo Daily Telegram, August 24, 1924, p. 8.

[47]Ibid., August 23, 1924, p. 8.

[48]Catalogue of the California Polytechnic School, 1925-1926, p. 13.

[49]Ben R. Crandall, "A Few 'High Lights' after Twenty-four Years," May 1, 1957, p. 1.

In taking up a project the student had the advantage of working under ideal conditions and having expert advice at hand. He could purchase and incubate hundreds or thousands of chicks, feed, care for, and finally sell the young poultry. He could buy young stock to fatten and sell. He could lease land from the school or proceed on a share-crop basis in preparing the soil, seeding it, and harvesting a crop in vegetables or grain.

A typical project during the spring of 1925 was that undertaken by two boys who planted four acres of peas. The school furnished the tools, land, seed, and half the picking cost; in return it received fifty- per cent of the crop.[50] During this same time - the first year the system was in use - other students were engaged in swine and poultry projects.[51]

The following enumeration of projects carried on during the autumn of 1925 shows the rapid growth at the Polytechnic of the project system:[52]

4½	acres in peas
41	acres in beans
2	acres in tomatoes
3	acres in sweet corn
18	acres in field corn
330	hogs handled
149	beef cattle handled
4000	chickens hatched.

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[50] San Luis Obispo Morning Tribune, March 1, 1925, p. 3.

[51] Ibid., March 12, 1925, p. 3; March 24, 1925, p. 3.

[52] Ibid., November 23, 1925, p. 3; San Luis Obispo Daily Telegram, November 26, 1925, p. 6.

Beef production commenced as a popular and lucrative type of student project in 1925 when twelve boys took over 125 calves.[53] Within six months California Polytechnic baby beef had become well known on the Los Angeles market where it was highly praised and brought high prices.[54] During the following year students sold their project beef in both San Francisco and Los Angeles.[55] Through their projects Polytechnic students produced agricultural products worth $120,000 between 1924 and 1928.[56]

Tied in closely with the project system was the Junior Farm Center, established by President Crandall on the Polytechnic campus in 1924.[57] All agricultural students qualified for membership in this local organization, founded with the primary purpose of helping students earn their way through school.[58] The Junior Farm Center was exceedingly active as it sponsored all campus agricultural activities.[59]

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[53] San Luis Obispo Daily Telegram, October 10, 1925, p. 6.

[54] Ibid., March 9, 1926, p. 8; May 28, 1926, p. 1.

[55] Ibid., March 30, 1927, p. 8; December 8, 1927, p. 6.

[56] Biennial Report of the State Department of Education, 1927-1928, Part I, p. 289.

[57] Polytechnic Journal (San Luis Obispo) XV (June, 1925), 46. The development of this organization at the Polytechnic paralleled similar action in California high schools offering courses in agriculture. Names for the groups varied, but the usual designation was "Junior Aggies" or "Junior Farm Center."

[58] El Rodeo, 1929, p. (47).

[59] Ibid., 1930, p. (59).

By 1926, with a membership in excess of fifty and having President Crandall as adviser, the Junior Farm Center gained representation on the Student Affairs Committee and was firmly established at the Polytechnic.[60] It continued to be highly important during the next five years.

The Junior Farm Center Loan Fund was of assistance to many students engaged in projects.[61] To finance his project, a student could borrow from a local bank, if he had the permission of the head of the agricultural department and of the president of the school, but it was far more convenient for him to make a loan from the Junior Farm Center.[62] Unfortunately this source was ordinarily insufficient to meet the demand.[63]

Members of the Junior Farm Center engaged in a number of worthwhile activities and functioned in various ways. On April 25, 1925, they were official hosts to over one thousand guests visiting the campus on Junior Farm Center Day.[64] In both 1927 and 1929 the organization invited the numerous San Luis Obispo County farm bureaus to hold their

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[60] Ibid., 1927, pp. 31; 39; California Polytechnic Bulletin, 1927-1928, p. 9.

[61] El Rodeo, 1927, p. 39.

[62] Bulletin of the California Polytechnic, 1929-1930, p. 16; El Rodeo, 1927, p. 39; ibid., 1928, p. 46.

[63] Biennial Report of the State Department of Education, 1927-1928, Part I, p. 289.

[64] San Luis Obispo Daily Telegram, April 23, 1925, p. 1; San Luis Obispo Morning Tribune, April 26, 1925, p. 1.

annual meetings on the Polytechnic grounds.[65] Students belonging to the Junior Farm Center advertised the school as individuals and/or as team members by winning dozens of ribbons, cups, and other prizes in local and state fairs and shows.[66] In 1931 the Junior Farm Center of the Polytechnic School ceased to exist; it was replaced by a local chapter of the Future Farmers of America, a strong national and state organization.[67]

Among the reasons for President Crandall's early successes was the favorable attitude of influential state officials and legislators. Governor Richardson, after his meeting with Crandall, no longer attacked the Polytechnic in his speeches; indeed, in 1925, after a visit to the campus, he praised the school.[68] Superintendent of Public Instruction Will C. Wood worked diligently for the advancement of the institution,[69] and the legislature showed its confidence by greatly

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[65] San Luis Obispo Daily Telegram, May 14, 1927, p. 1; April 25, 1930, p. 1.

[66] Ibid., December 7, 1929, p. 1; El Rodeo, 1928, p. 46; ibid., 1931, p. (55); California Polytechnic Bulletin, 1927-1928, p. 10; San Luis Obispo Daily Telegram, December 7, 1929, p. 1.

[67] San Luis Obispo Daily Telegram, September 1, 1931, p. 1; El Rodeo, 1932, p. (55).

[68] San Luis Obispo Daily Telegram, June 30, 1925, p. 1.

[69] Polygram, January 14, 1926, p. 1; June 1, 1928, p. 1; California Polytechnic Bulletin, 1927-1928, p. 2.

increasing appropriations for the school. In 1925 the Polytechnic was allotted $244,430, earmarked for the following purposes:[70]

Construction and equipment of one or more buildings	$50,000
Salaries	127,400
Support	55,530
Permanent improvements, consisting of construction of poultry houses, silo, water pump, sewage disposal, fire protection	11,500

Clearly, the earliest part of Crandall's administration, the period from 1924 to 1927, was a time characterized by restoration, overall improvements, and general growth of the Polytechnic School.

The years 1927-1931 comprised a second phase of Dr. Crandall's presidency. Among the gains of this four year period were the founding and operation of a junior college division, the completion of a number of new major buildings, a continued upward trend in enrollment figures, and the acquisition by the school of an additional 175 acres of land. However, the agricultural program of the Polytechnic came under considerable criticism, girls were banned from the school, and all work in household arts was discontinued.

Most spectacular of these developments was the change in the Polytechnic to a six year institution with a junior college division. Having the authorization of Superintendent of Public Instruction William John Cooper and of the State Board of Education, the California Poly-

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[70] Statutes of California, 1925, pp. 56; 377; 832-33.

technic commenced junior college classes with the opening of the autumn semester in 1927.[71] According to Crandall, this was the greatest day in the history of the institution.[72]

The original purpose of the junior college division was "to train high class assistants, foremen, or superintendents in trades and industries and in agriculture."[73] However, as the State Board of Education - much to the consternation of the staff of the school[74] - ruled that the Polytechnic junior college was not to offer work in agriculture,[75] the objective was to provide training for non-agricultural semi-

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[71] California Polytechnic Bulletin, 1927-1928, p. 31.

[72] San Luis Obispo Daily Telegram, April 20, 1927, p. 1.

[73] California Polytechnic Bulletin, 1927-1928, p. 31.

[74] Without doubt, pressure from University of California officials was behind this ruling. A report of Professor F. L. Griffin of the College of Agriculture of the University to Superintendent of Public Instruction William J. Cooper (1928) pointed out that during 1918-1924 the Davis branch of the University and the Polytechnic had been in competition for students. In 1925 an upgrading of the curricula had been completed at Davis and entry was limited to high school graduates or students over eighteen years of age. Institution of agricultural work on the junior college level at the Polytechnic would lead to serious competition. See Biennial Report of the State Department of Education, 1927-1928, Part I, pp. 287-89. On general opposition of University officials to the provision of junior college courses by the Polytechnic, see R. G. Sproul to Senator Ralph Hughes, January 14, 1924 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo).

[75] Bulletin Number One The Junior College Division of the California Polytechnic, 1930-1931, p. 9; San Luis Obispo Dailey Telegram January 11, 1929, p. 5.

professional occupations.[76] President Crandall asserted that the addition of the new department would in no way alter the dominant function of the Polytechnic - preparation for efficient occupational service.[77]

There was definite need in California for a junior college specializing in terminal education. By the mid-1920's a number of junior colleges existed throughout the state, but for the most part their curricula were little more than duplications of the first two years of university work.[78] Less than one third of the courses they offered were of non-academic nature.[79] Not one of these institutions had the shops, laboratories, or equipment available at the Polytechnic, nor its atmosphere of learning by doing. During the ensuing half decade the California junior colleges generally were deficient in developing occupational and technical curricula, although there was a great need in the state for individuals with semi-professional training.[80] The Polytech-

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[76]Bulletin Number Two The Junior College Division of the California Polytechnic, 1931-1932, p. 1.

[77]Bulletin Number One Junior College Division, 3; Walter C. Eells, The Junior College (Cambridge, 1931), 106.

[78]Bulletin Number Two Junior College Division, 6.

[79]Eells, The Junior College, 484-87.

[80]"Minutes of the California State Board of Education," October 2 and 3, 1931, p. 215.

nic junior college, with its stress on vocational education, filled an important gap in the state educational system.

A more immediate need for organizing the junior college division was to provide proper training for the ever increasing number of high school graduates enrolling in the California Polytechnic.[81] Members of the 1926-27 student body, ranging in age from thirteen to thirty-five, included sixty-three individuals with high school diplomas.[82] These older students desired engineering, mechanical, and agricultural training and skills beyond those offered in the four year division. By setting up the junior college department the Polytechnic staff could provide suitable courses for the more advanced students.[83]

Only high school graduates were permitted to enroll in junior college classes. There was no charge for registration or tuition, but each student paid a seven dollar student body fee.[84] Junior college men were not exempt from the Polytechnic School military regulations regarding dress, drills, inspections, and parades. The natty uniform prescribed for the upper division students was the envy of the boys in

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[81] Bulletin Number Two Junior College Division, 8.

[82] California Polytechnic Bulletin, 1927-1928, p. 11.

[83] Interview with Miss Margaret Chase, April 8, 1957.

[84] Bulletin of the California Polytechnic, 1929-1930, p. 12.

the four year department. It consisted of a military cap, long trousers worn without leggings or puttees, and a blouse of much smarter style than those worn by the lower division boys.[85]

To graduate from the junior college a student was required to complete successfully sixty-four semester hours of work;[86] few achieved this within two years as most students who entered the junior college program were deficient in English and/or mathematics and had to take additional pre-college standard courses in these subjects.[87]

From 1927 to 1932 junior college and lower division students of the Polytechnic shared faculty members, the library, athletic facilities, shops, mechanical drawing rooms, and most buildings. By 1932 one dormitory, a section of the cafeteria, and the Junior College Buildings - formerly used for household arts work - were reserved for the junior college students.[88]

Miss Margaret Chase, in addition to her duties as vice president, registrar, recorder, head counselor, and head of the Academic Department, was dean of the junior college division from 1928 to 1932.[89]

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[85] San Luis Obispo Daily Telegram, August 31, 1927, p. 1; interview with Miss Margaret Chase, July 25, 1957.

[86] California Polytechnic Bulletin, 1928-1929, p. 29.

[87] Bulletin Number One Junior College Division, 8.

[88] Bulletin Number Two Junior College Division, 4.

[89] Polygram, November 2, 1928, p. 1; Bulletin of the California Polytechnic, 1930-1931, p. 2; interview with Miss Margaret Chase, April 8, 1957.

When the junior college division opened in 1927, it attracted seventy-six first year students.[90] Sixty of these registered in engineering-mechanics and the remainder in the university-transfer curriculum.[91] In 1928-1929 junior college enrollment was 119, including 78 freshmen and 41 seniors.[92] During the next three years, while the junior college department enrollment remained between 120 and 160 students,[93] the four year division continually drew from two to four times as many entrants. Total enrollment figures for both divisions from 1927 to 1932 follow:[94]

1927-1928 - 360
1928-1929 - 403
1929-1930 - 407
1930-1931 - 384
1931-1932 - 334.

Comparatively few students were graduated from the California Polytechnic Junior College. The first of these, Frederick W. Bowden, was the single graduate in the class of 1929.[95] The following year Willard

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[90] California Polytechnic Bulletin, 1928-1929, p. 29.

[91] El Rodeo, 1928, p. 30.

[92] Ibid., 1929, pp. (39-41).

[93] Ibid., 1933, p. (11); ibid., 1932, p. (31); Bulletin Number Two Junior College Division, 20; San Luis Obispo Daily Telegram, June 18, 1930, p. 1.

[94] "Records of Enrollments," 1.

[95] San Luis Obispo Daily Telegram, June 5, 1929, p. 1.

Stout and John Millsap received diplomas;[96] there were eleven graduates in 1931,[97] thirteen in 1932, and twelve in 1933, or a grand total of thirty-nine.[98] During these years dozens of other junior college students received various types of certificates of completion.[99]

The engineering-mechanics area was by far the most important field of instruction in the junior college division. Junior college entrants primarily interested in agriculture could obtain the practical training available in the four year division and were encouraged to adopt projects in agriculture, but for all such work they received no credit toward graduation from the junior college.[100] A few students enrolled in the Academic Division with the intent of transferring to a university,[101] but this department was never stressed.[102]

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[96] Ibid., June 5, 1930, p. 1.

[97] El Rodeo, 1931, p. (41).

[98] Ibid., 1933, p. (11).

[99] San Luis Obispo Daily Telegram, June 7, 1929, p. 5; June 5, 1930, p. 3; May 27, 1931, p. 1.

[100] Bulletin Number One Junior College Division, 10-16.

[101] Eells, The Junior College, 105.

[102] Polygram, November 1, 1929, p. 1; Bulletin Number One Junior College Division, 7.

Junior college offerings in the engineering-mechanics area were organized under the following headings: aeronautics, electrical engineering, architectural drafting, civil engineering, mechanical drafting, printing, and mechanical engineering.[103] Electives were available in agriculture and in auto shop, but work in these fields was not rated as of college standard.[104]

The fields of aeronautics and electricity were especially popular, with the former consistently attracting more persons than any other department in the junior college.[105] For example, in 1929-1930, of the total enrollment of the junior college, forty per cent of the students were majoring in aeronautics.[106] The aeronautics courses were organized to fulfill two main objectives: first, to provide every student with sufficient training to permit him to obtain either or both an airplane-engine mechanic's license and an airplane mechanic's license; second, to provide a sound technical foundation so that a graduate might advance to positions superior to that of mechanic.[107]

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[103] Bulletin Number Two Junior College Division, 10; 17.

[104] Ibid., 15-16.

[105] Eells, The Junior College, 105; San Luis Obispo Daily Telegram, August 16, 1928, p. 1; September 9, 1929, p. 1; September 10, 1931, p. 7.

[106] El Rodeo, 1930, p. (35).

[107] Bulletin Number Two Junior College Division, 10.

From its inception in 1927 aeronautics training centered around work in ship construction, motors, and acetylene welding.[108] It was expanded by 1930 to include courses in aerodynamics, elementary meteorology, and navigation.[109]

In the autumn of 1927, shortly after the completion of a new aeronautics laboratory,[110] the San Diego Air Station donated to the Polytechnic a $20,000 Martin monoplane and four aircraft motors.[111] This equipment proved to be of great value to the program.

An outstanding achievement during 1927-28 was the construction of an airplane, the Glenmont, a replica of Lindberg's Spirit of St. Louis.[112] Under the supervision of instructors H. G. Warren and J. C. Montijo, thirty young men, averaging nineteen years of age, built - with the exception of motor and wheels - this six passenger craft.[113] Equipped with a 250 horsepower motor, the Glenmont made a successful flight in March, 1928,[114] and a short time later Warren

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[108] California Polytechnic Bulletin, 1927-1928, p. 7.

[109] Bulletin of the California Polytechnic, 1929-1930, p. 24.

[110] California Polytechnic Bulletin, 1927-1928, p. 7.

[111] San Luis Obispo Daily Telegram, October 6, 1927, p. 1.

[112] Interview with C. E. Knott, June 6, 1957.

[113] Polygram, September 23, 1927, p. 1; San Luis Obispo Daily Telegram, March 22, 1928, p. 1.

[114] San Luis Obispo Daily Telegram, March 28, 1928, p. 1.

flew it from San Luis Obispo to Long Beach, California, at an average cruising speed of 140 miles per hour.[115] Both Dr. Crandall and his wife enjoyed rides in this plane, the precursor of several fabricated by students of the aeronautics department.[116] These planes were believed to be the first ever to be constructed in the United States by students.[117]

In 1931 the United States Department of Commerce licensed the Polytechnic Aeronautics Department as an approved aircraft repair station.[118] This action considerably enhanced the reputation of the institution as it was the only school in California to receive such certification.[119] Over the next few years the aeronautics students, having access to equipment valued over $100,000 in addition to carrying on their prescribed course work, overhauled and repaired many damaged planes and aircraft motors.[120]

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[115] Ibid., April 24, 1928, p. 6.

[116] Ben R. Crandall, "A Few 'High Lights' after Twenty-four Years," May 1, 1957, p. 2.

[117] San Luis Obispo Daily Telegram, August 22, 1929, p. 1; August 29, 1929, p. 1.

[118] Ibid., May 16, 1931, p. 1; Bulletin of the California Polytechnic School, 1933-1934, p. 15.

[119] San Luis Obispo Daily Telegram, September 28, 1931, p. 1.

[120] El Rodeo, 1931, p. (79); Margaret Chase, "Cal Poly Survives Troubled Span of Years," San Luis Obispo County Telegram-Tribune, May 16, 1956, p. 4A.

Next in popularity to aeronautics was the Electrical Engineering Department. Students trained in this field ordinarily found employment opportunities in such organizations as Western Electric or the Westinghouse Corporation, although a few continued their studies at universities or colleges.[121] Completion of a new Electrical Engineering Building in 1928 was of great advantage to students in this course.[122]

During the period 1927-1931 considerable building took place on the campus. Shortly after President Crandall had arrived at the school, he commenced preparing plans for a gymnasium and additional dormitory.[123] In 1925, when the legislature allotted $50,000 for "construction and equipment for one or more buildings at the Polytechnic School,"[124] it appeared that construction work would soon commence, but differences of opinion as to whether this sum should be used for one or both structures led to a deadlock not broken until the 1927 budget bill was passed.[125] For the biennium 1927-1929 the Polytechnic received an appropriation of

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[121] Interview with Miss Margaret Chase, April 8, 1957.

[122] El Rodeo, 1928, p. 30.

[123] B. R. Crandall to F. L. Griffin, July 11, 1924; B. R. Crandall to B. Cramer, July 12, 1924 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo).

[124] Statutes of California, 1925, pp. 832-33.

[125] San Luis Obispo Daily Telegram, April 15, 1925, p. 4; April 17, 1925, p. 8; February 3, 1926, p. 1.

$429,925 earmarked as follows:[126]

President's house	$20,000
Boys' dormitory	40,000
Addition to dining hall	15,000
North wing of mechanical unit	25,000
Purchase of gas or Diesel engine . . .	10,000
Repairs, improvements, equipment . . .	27,975
Support	291,950

Contracts were soon readied for the buildings, and groundbreaking for the gymnasium formed a part of the official homecoming ceremonies in November, 1927.[127]

During the following spring as work continued steadily on the new structures, Crandall announced their official designations as Crandall Gymnasium, Heron Hall, the Electrical Engineering Building, and the President's Home.[128] The students living in the "Old Dormitory," which had been completed in 1909,[129] now petitioned successfully that the name of the structure be changed to Deuel Dormitory.[130] Captain Joseph Deuel had come to the Polytechnic shortly after the conclusion of World War I, taking over the administration of the military activities of the institution. In this capacity and as baseball coach,

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[126] Statutes of California, 1927, p. 274.

[127] Polygram, September 23, 1927, p. 4; San Luis Obispo Daily Telegram, September 23, 1927, p. 1; November 3, 1927, p. 1.

[128] Polygram, March 23, 1928, p. 1.

[129] See page 62.

[130] Polygram, April 20, 1928, p. 1.

librarian, and dormitory proctor, he had earned the respect of the students who now wished to honor him.

On June 2, 1928, Crandall Gymnasium was finished, and within a month both Heron Hall, with its accommodations for fifty-eight men, and the President's Home were ready for occupancy.[131] Two additional dormitories, Jesperson Hall and Chase Hall, were completed in 1930 and 1932 respectively.[132]

Other major improvements of this period included the installation of a new 120 horsepower Diesel engine to replace the old gas model in the school power plant and the complete renovation of Deuel Dormitory.[133]

Very little of the $674,355 granted by the legislature to the Polytechnic for the four fiscal years starting July 1, 1925, was used for agricultural installations or agricultural improvements. Of the 1925 budget, less than five per cent ($11,500) had been earmarked for certain permanent fixtures including a silo and some poultry houses,[134] and in the budget approved two years later no funds were allocated

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[131]San Luis Obispo Daily Telegram, June 2, 1928, p. 1; June 7, 1928, p. 1; California Polytechnic Bulletin, 1927-1928, p. 6.

[132]Bulletin of the California Polytechnic, 1930-1931, p. 5; Polygram, January 29, 1932, p. 1.

[133]San Luis Obispo Daily Telegram, August 8, 1928, p. 4; September 22, 1928, p. 1.

[134]See page 138.

specifically for agricultural purposes. For the biennium 1927-1929 about seven per cent of the total appropriation was allotted for repairs, improvements, and equipment of all kinds; of this sum a small portion may have been set aside for agricultural improvements. During these years Crandall evidently overlooked the agricultural phases of the Polytechnic program as he prepared his budgetary requests.

During the late 1920's, while the junior college division emphasized work in engineering-mechanics, the Polytechnic four year department was enrolling a greater number of students with each succeeding year. On this lower level of instruction offerings in agriculture, mechanics, household arts, printing, and academic subjects were available.

In 1928-1929 there was considerable disapproval of certain aspects of the school, especially of its agricultural and household arts programs. These criticisms followed the appointment of William John Cooper as successor to Will C. Wood as Superintendent of Public Instruction in 1928. Shortly after accepting his new office, Cooper made short visits of inspection to each of the various institutions under the jurisdiction of the State Board of Education: the state colleges, the schools for the deaf and the blind, and the California Polytechnic.[135]

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[135] Biennial Report of the State Department of Education, 1927-1928, Part I, p. 273.

In reporting on his observations of the Polytechnic, Cooper wrote: "Although I found the president and the faculty earnest and sincere, they were not quite sure what functions the state wished the school to discharge and were somewhat discouraged by lack of equipment and poor housing conditions for students."[136] Feeling that all was not entirely satisfactory at the institution, and to obtain additional data on which to base his recommendations to the State Board of Education, Superintendent Cooper instituted five separate surveys of the Polytechnic within the ensuing eighteen months.[137]

The reports emanating from three of these studies were of particular importance. Earliest to appear was that jointly prepared by Deputy Director of Education Sam H. Cohn and Chief of the Bureau of Agricultural Education Julian A. McPhee, assigned to make a general survey of the institution. Their report, issued on February 14, 1928, praised certain aspects of the school. The auto,printing, machine, and carpentry shops and the aeronautics department were found to be reasonably well equipped and adequately utilized, and the appearance of the grounds in the vicinity of the main classroom buildings was excellent; however, instructional costs, especially in the household

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[136] Ibid., 284.

[137] In addition to the three studies described, Maude I. Murchie, Chief of the Bureau of Home-Making Education and J. P. Iverson, Chief Of the Division of Animal Industry each prepared a report. See Biennial Report of the State Department of Education, 1927-1928, Part I, pp. 284-289; 307-08.

arts department, were excessive, and as no systematic record was kept of graduates, it was impossible to measure the success of the vocational training of the Polytechnic. The Agricultural Department was heavily criticized. It had no definite objectives, friction existed among its members, there was little correlation between classroom instruction and practical work on the school farm, projects were entirely under the supervision of A. J. Rathbone, and record keeping was inadequate. In general, the barns, corrals, and fences were in disrepair, the farm was unsanitary, dirty, and untidy, and the agricultural division of the institution received only a small portion of the budget.[138]

Professor F. L. Griffin of the University of California, sent to San Luis Obispo in the summer of 1928 to make a study of the agricultural education phases of the Polytechnic, found that effective work had been done with projects. These had "stimulated a new interest in agriculture, but best results have not been possible because of inadequate facilities and insufficient supervision and organization."[139]

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[138]Sam H. Cohn and Julian A. McPhee, "Report of a Study Made of the California Polytechnic School at San Luis Obispo, California," February 14, 1928 (Files of the President's Office, California State Polytechnic College, San Luis Obispo).

[139]Biennial Report of the State Department of Education, 1927-1928, Part I, pp. 287-89.

He reported the school livestock in most cases to be unfit for breeding or instructional purposes and described the farm buildings as being unsanitary and needing repairs.

A report based on a survey by the State Department of Public Health showed the living quarters of the students to be greatly overcrowded, an absence of means for care of the sick, unsatisfactory methods of handling sewage disposal, and insufficient fire protection.[140]

Two occurrences affecting the agricultural program of the Polytechnic took place in 1929. Early in the year Crandall requested an appropriation for the purchase of additional land for the school farm.[141] Shortly after a legislative allotment of $65,000 was made for this purpose,[142] the Fiscalini family of San Luis Obispo sold to the state a 175 acre plot adjoining the school grounds to the west.[143] This increment brought campus holdings to approximately 1200 acres.[144]

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[140] Ibid., 285-86.

[141] San Luis Obispo Daily Telegram, January 18, 1929, p. 1.

[142] Statutes of California, 1929, p. 87.

[143] "List of Real Property Owned by the State of California," August 1, 1950 (Files of the Business Manager, California State Polytechnic College, San Luis Obispo).

[144] Bulletin of the California Polytechnic School, 1931-1932, p. 4.

Most of the newly acquired parcel was useful only for pasturage, but it included fifteen acres of excellent bottom land and a good well.[145]

During the same year President Crandall submitted to the State Board of Education a long range campus development and building program. In order to secure information on which to base its actions regarding the general agricultural features of Crandall's plan the Board appointed the Chief of the Bureau of Agricultural Education, J. A. McPhee, to prepare a report on the "agricultural layout" of the California Polytechnic.[146] After inspecting once again the agricultural features of the institution, and meeting in lengthy conference with Andrew P. Hill, Chief of the Division of Schoolhouse Planning, Dr. Crandall, L. E. McFarland, head of the Agricultural Department of the Polytechnic,[147] and Elmer Dunning, instructor in agricultural mechanics, McPhee prepared his report. In many respects this document was similar to the Cohn-McPhee Paper of the previous year. It decried the dilapidated appearance of the agricultural structures and the poor condition of roads and fences; it pointed out

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[145]San Luis Obispo Daily Telegram, September 10, 1931, p. 7.

[146]"Minutes of the California State Board of Education," June 21 and 22, 1929 (Sacramento, 1929), 2.

[147]Mr. McFarland replaced Mr. Rathbone as head of the department in 1928.

that at this state institution "one would expect to see fine, pure-bred stock in ideal fields, corrals, and barns. Cleanliness, business-like organization, adequate storage and service and fine, healthy stock, are our goals."[148] The report suggested the "dire need of a basic plan for agriculture" at the school,[149] and concluded with the recommendation that the agriculture program be organized around four major activities: animal husbandry, horticulture, agronomy, and farm mechanics.

Over the next several years President Crandall took action in regard to some of the criticisms of the Polytechnic. In a report to the State Board of Education in 1930 he pointed out that he had made arrangements for improving the fire protection system, and by renting a small building adjacent to the school grounds, he had provided a temporary infirmary for the students. Moreover, sanitary conditions were considerably improved with the completion of the remodeling of the kitchen and dining hall.[150]

In connection with the personnel and facilities in agriculture, Crandall made a number of changes. In 1928 he appointed L. E. McFarland as head of the Agriculture Department, and the following

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[148]Julian A. McPhee, "Report of Conference on Tentative Ten-Year Building Program for San Luis Obispo Technical School-August 15, '29" (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 1.

[149]Ibid., 9.

[150]Biennial Report of the State Department of Education, 1929-1930, Part I, p. 211.

year he employed Vernon H. Meacham, graduate of the University of California, and agriculture teacher at Manteca High School, as instructor in dairy production.[151] Richard Leach, a product of Montana State College, joined the staff in 1930 as a full time instructor in poultry husbandry and commenced building up the work in that field.[152] A new dairy barn and a large poultry unit were completed and in use by 1930, and during that spring the Polytechnic acquired 1800 feet of irrigation pipe.[153] During 1929 President Crandall purchased for the institution ten Jersey heifers, a number of ewes of good stock, and "considerable high class and modern farm equipment."[154] Meanwhile, the main emphasis in this department was on the project system; a general reorganization of the agricultural curriculum was not made. The 1930-1931 course of study was essentially the same as that of 1924-1925.

In 1929 the California legislature passed a bill barring girls from attending the Polytechnic School. There were several reasons behind this legislative enactment. For almost a decade comparatively few co-eds were in attendance; in 1924-1925, for example, only ten

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[151] California State Polytechnic Circular of Information 1937-1938, p. 9.

[152] Polygram, October 24, 1930, p. 1; March 6, 1931, p. 1.

[153] San Luis Obispo Daily Telegram, January 28, 1930, p. 1.

[154] Biennial Report of the State Department of Education, 1929-1930, Part I, p. 211.

girls registered for classes,[155] and during the ensuing several years co-eds comprised less than five per cent of each annual enrollment.[156] As only seven girls were majoring in household arts in 1927, the cost of maintaining the department had become far too expensive.[157] Moreover, the need for the Polytechnic to offer work in home economics had declined considerably; by the mid-1920's more than forty California public high schools (including the Margarita Black Union High School in Atascadero, about fifteen miles north of San Luis Obispo,) had enrolled more than 1,000 students in this subject.[158]

Polytechnic girls tended increasingly to come from local homes; in the autumn of 1928 all nineteen of the co-eds registered were from San Luis Obispo County.[159] There was lack of dormitory accommodations for girls and urgent need to expand facilities for the rapidly growing number of men students.

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[155]Ibid., May 31, 1929, p. 5.

[156]Bulletin of the California Polytechnic, 1929-1930, p. 12.

[157]Biennial Report of the State Department of Education, 1927-1928, Part I, p. 285.

[158]Report of the Commissioner of Industrial and Vocational Education for the Biennial Period Ending June 30, 1926 California State Board of Education (Sacramento, 1926), 114-116.

[159]San Luis Obispo Daily Telegram, September 27, 1928, p. 2.

Because of these factors plus the recommendation of Superintendent Cooper,[160] the legislature decided that "on or after June 30, 1929, no female student shall be admitted as a new student at the California Polytechnic School. On or after June 30, 1930, no female student now in attendance shall be permitted to register, be enrolled, or attend said school."[161]

At the graduation exercises of 1930 the Polytechnic co-eds made their final appearance during the Crandall administration.[162] Within the next two years the San Luis Obispo Parent-Teachers Association, County Superintendent of Schools R. L. Bird, and Charles E. Teach, city superintendent of schools, all called upon the legislature to permit the return of girl students to the Polytechnic, but their suggestions were not heeded.[163]

During the late 1920's co-curricular activities flourished at the school. Sports, clubs, and publications increased as both divisions of the institution were expanding.

Athletics moved forward under the direction of Alfred P. Agosti, instructor in physics and head coach.[164] From 1922 to 1931

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[160]Biennial Report of the State Department of Education, 1927-1928, Part I, p. 290.

[161]Statutes of California, 1929, p. 588.

[162]San Luis Obispo Daily Telegram, June 5, 1930, p. 3.

[163]Ibid., March 12, 1932, p. 1; April 16, 1932, p. 1.

[164]Bulletin of the California Polytechnic School, 1925-1926, p. 2; Polygram, January 18, 1929, p. 1.

Polytechnic teams competed in the Central Coast Conference, a league with varying membership, but which included in 1930 the junior colleges of the California Polytechnic, San Mateo, Marin, Marysville, Menlo, Modesto, Santa Rosa, and Sacramento.[165] In 1931, because of time lost from classes and the cost of the long trips necessitated by affiliation with the Central Coast Conference, the staff recommended withdrawal from that group.[166] The following year the Polytechnic joined the newly formed Central California Coast Conference, an association including teams representing Moran Junior College of Atascadero, Santa Maria Junior College, Salinas Junior College, and the Santa Barbara Teachers College Freshmen.[167]

Especially between 1928 and 1932 there was much athletic activity, for in addition to the junior college squad competition, teams from the Polytechnic high school met local secondary schools in football, basketball, baseball, and track.[168]

Factors strengthening the sports program were the completion of Crandall Gymnasium, the use of student managers for the various teams,

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[165]A. P. Agosti to Ted Shipkey, April 28, 1930 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 1.

[166]Polygram, April 17, 1931, p. 1.

[167]Ibid., March 11, 1932, p. 4.

[168]Ibid., May 18, 1928, p. 3; September 26, 1930, p. 4; El Rodeo, 1929, pp. (68-77); ibid., 1930, pp. (85-90); ibid., 1931, pp. (89-95).

and the provision of a turf surface for the football field.[169]

In the area of publications the students began in 1928 to publish the Parakeet, a literary magazine, in addition to producing the Polygram and El Rodeo.[170]

Participation in music was popular. Merritt B. "Pop" Smith built up the band to a membership of over seventy and commenced the organization of an orchestra. Students participating in these two groups joined to form the Orphous Club.[171]

By the late 1920's, as co-curricular activities continued to expand at the Polytechnic, the Students Affairs Committee increased in size, and the scope of its functions widened. In 1930 this group was replaced by the Student Affairs Council, composed of twenty students and six of the faculty. Members of the Student Affairs Council were the president and vice president of the student body, the cheer leader, the football team manager, the presidents of the six classes, and one representative from each of the following groups: publications, Block P, Poly-Y, Junior Farm Center, Poly Phase, Orphous Club, Mechanics' Association, Aeronautics Club, Auto Mechanics' Club, and Building Trades

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[169]San Luis Obispo Daily Telegram, June 2, 1928, p. 1; September 27, 1928, p. 2; Polygram, January 18, 1929, p. 4.

[170]El Rodeo, 1928, p. 22.

[171]Polygram, November 15, 1929, p. 2; El Rodeo, 1930, p. (55).

Club. Representing the faculty were the president and vice president of the school, the advisers for athletics, publications, and finances, and one member at large appointed by President Crandall.

In its first year of operation the Student Affairs Council assessed each student seven dollars, allocating the use of this fee as follows: for athletics five dollars, for El Rodeo and the Polygram one dollar and fifty cents, and for the general fund fifty cents. In return the students had free admission to all athletic contests on the campus, received El Rodeo and issues of the Polygram, and gained entry to other activities.[172]

During the concluding two years of the Crandall administration, the period ending May, 1933, the Polytechnic School was in a stage of transition. Enrollment figures declined, moving downward from 384 in 1930-1931 to 334 the following year, and to 117 in 1932-1933.[173] For the biennium commencing July 1, 1932, the legislature appropriated for the institution the sum of $383,730, almost $70,000 less than its budget for the preceding two years.[174]

The academic period 1931-1932 was the last year the staff of the Polytechnic operated the school on the complete six year program

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[172]El Rodeo, 1930, p. (51); ibid., 1932, p. (48).

[173]"Records of Enrollments," 1.

[174]Statutes of California, 1929, p. 87; ibid., 1931, pp. 5; 304-05

instituted in 1927. During these two semesters the enrollment in the junior college division was 155, with the great majority of men majoring in aeronautics or electrical industries.

In the four year department were 179 students; 114 of these were specializing in engineering-mechanics; 42 were in agriculture; and 23 were studying in the academic-transfer curriculum. The lower division students came from near and far. San Luis Obispo was the home of about one third, or 57, and 113 came from 71 other places in California, including many small towns. Other states or territories of the United States furnished 16, and three were from foreign countries. In respect to age, 98 were over nineteen, and eleven were older than twenty-one years of age.[175]

The institution received a damaging blow in 1932. On the basis of a recommendation by the State Board of Education that a committee be established to study problems of higher education in California,[176] the legislature set up $25,000 for a survey of colleges and universities in the state.[177] In response to the proposal of Governor James J. Rolph that the Carnegie Foundation for the Advancement of Teaching

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[175] Biennial Report of the State Department of Education, 1931-1932, Part II, p. 333; Margaret Chase, "Some Notes on the History of the California Polytechnic School," (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 14.

[176] "Minutes of the California State Board of Education," March 27 and 28, 1931 (Sacramento, 1931), 176.

[177] Statutes of California, 1931, p. 1072

undertake the project, Henry Suzzallo, its president, accepted the offer and appointed a special Commission of Seven to commence gathering pertinent data.[178] Dr. Suzzallo, himself, visited the California Polytechnic Junior College, spending several days checking records, investigating procedures, and interviewing faculty and students.[179] In 1932 the Recommendations of the Commission of Seven, popularly termed the "Suzzallo Report," appeared. According to this document, not only was the cost per student excessively high at the Polytechnic, but the institution was not performing functions which differed from those carried out by many California junior colleges and high schools. Hence, it was the recommendation of the Report - in the interests of economy and to avoid wasteful duplication - that the California Polytechnic School be abolished as an education institution.[180]

Beginning in 1931 important changes took place in the agricultural program of the Polytechnic, due to the interest and activities of Julian A. McPhee. As Chief of the Bureau of Agricultural Education, McPhee during the late 1920's had become especially concerned with such matters as the provision of adequate training for teachers of agriculture entering the profession; the institution of in-service summer

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[178]State Higher Education in California, Report of the Carnegie Foundation for the Advancement of Teaching. Recommendations of the Commission of Seven (Sacramento, 1932), 13.

[179]Interview with Miss Margaret Chase, June 2, 1957.

[180]Report of the Carnegie Foundation, 65.

courses to upgrade teachers in the field; and the establishment of a strong Future Farmers of America organization within the state.[181] McPhee reached the conclusion that the best way to solve the problems of vocational agriculture in California was to place a state agricultural school at the disposal of the Bureau of Agricultural Education; through such an institution the Bureau would "centralize, coordinate, and integrate the entire program."[182] He suggested that the California Polytechnic be so utilized.[183]

With the approval of the State Board of Education, McPhee announced in May, 1931, a reorganization of the State Bureau of Agricultural Education with the selection of the California Polytechnic School as the centralizing agency of the entire California program in secondary agricultural education, and as the state headquarters of the Future Farmers of America. After July 1, 1931, the agricultural

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[181]Julian A. McPhee, "Suggested Plan for the Utilization of the California Polytechnic School in the Further Development and Integration of the California Agricultural Education Program," n.p., n.d. (Files of the President's Office, California State Polytechnic College, San Luis Obispo), 7-12; S. S. Sutherland, A History of Agricultural Education in the Secondary Schools of California 1901 to 1940 (San Luis Obispo, 1940), 31-34.

[182]McPhee, "Suggested Plan for the Utilization of the California Polytechnic School," 9.

[183]Ibid., 13.

department of the California Polytechnic was to be under the direct supervision of the State Department of Education. [184]

During 1931-1932 agricultural activities at the Polytechnic expanded considerably. First came a widened use of campus facilities for meetings of agricultural teachers from over the state. As early as 1925 an agricultural conference had met at the Polytechnic, in 1929 some 250 high school students had visited the school for several days,[185] but commencing with 1931, McPhee arranged extensive and systematic use of the institution during the summer months. Following a two week refresher course attended by 206 vocational agriculture teachers in July of that year, [186] the Polytechnic campus was the locale of the annual conference of California teachers of agriculture. Appearing before this group were such speakers as Superintendent of Public Instruction Vierling Kersey,[187] Assemblyman Chris Jesperson,

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[184]Julian A. McPhee, "To the Teachers of Vocational Agriculture," May 20, 1931. Circular Letter No. 20, Bureau of Agricultural Education (Files of the President's Office, California State Polytechnic College, San Luis Obispo), 1; California Schools (Sacramento) II (July, 1931), 303.

[185]San Luis Obispo Daily Telegram, August 3, 1925, p. 1; May 8, 1929, p. 1.

[186]California Schools (Sacramento) II (September, 1931), 367.

[187]San Luis Obispo Daily Telegram, July 17, 1931, p. 1; July 20, 1931, p. 1; July 25, 1931, p. 1.

President Crandall, and McPhee.[188] Again in the summer of 1932 vocational agriculture teachers from the state convened at the Polytechnic for summer courses.[189] These meetings were especially helpful in acquainting agriculture teachers from over the state with the facilities and program of the Polytechnic.

In 1931-1932, a training program for vocational agriculture cadet teachers was established at the Polytechnic.[190] During the autumn months nine prospective instructors [191] received systematic instruction in teaching methods and procedures on the campus under the supervision of S. S. Sutherland, while nine additional candidates were working in agriculture departments of various California high schools. In January the cadets changed assignments: those in the field came to the Polytechnic, and those who had been on the campus moved out to high schools.[192]

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[188]Mr. Kersey was appointed to replace Mr. Cooper in 1929, when the latter accepted an appointment as United States Commissioner of Education.

[189]San Luis Obispo Daily Telegram, July 12, 1932, p. 6.

[190]Polygram, January 15, 1932, p. 1.

[191]Included in this group was Lyman L. Bennion, who became a member of the California Polytechnic staff in 1938.

[192]Biennial Report of the California Department of Education, 1931-1932, Part I, p. 53. Minutes of the meetings of the State Board of Education show the concern of that body regarding the training of prospective agricultural teachers, and the appointment by that body of Superintendent Kersey and President Robert G. Sproul of the University of California to study this problem and make recommendation. "Minutes," January 8, 1932, include Mr. Kersey's report stating that agricultural teacher training was the mutual responsibility of the State Board of Education and of the University of California.

New additions to the staff in San Luis Obispo in 1931-1932 included S. S. Sutherland, a professor of agricultural education from Montana State College; J. I. Thompson, nationally recognized livestock expert and former head of the animal husbandry department at the Davis Campus of the University of California; C. O. McCorkle, elected president of the California Agriculture Teachers Association in the summer of 1931[193] and one of the outstanding teachers in the state; George M. Drumm, formerly an instructor at the Davis branch of the University of California, educated at Kansas State and Iowa State Colleges, and with much experience as herdsman and manager on various commercial dairy farms; and George P. Couper, who left a position as city editor of the Dalles, Oregon, Chronicle to accept this new assignment.[194]

Jointly appointed by McPhee and Crandall, these recently employed staff members divided their time between duties at the Polytechnic and in the service of the Bureau of Agricultural Education. On the campus Sutherland was supervisor of cadet teachers,[195] Thompson advised the animal husbandry instructors, McCorkle

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[193]San Luis Obispo Daily Telegram, July 25, 1931, p. 1.

[194]Polygram, January 15, 1932, p. 1; February 12, 1932, p. 1; California State Polytechnic Circular of Information, 1937-1938, pp. 6-7.

[195]In August of 1933 Sutherland was assigned half time to the Davis campus of the University of California, but he continued to train cadets at the Polytechnic half of each year.

became assistant teacher-trainer in agriculture and was executive secretary of the California Future Farmers, Drumm taught dairy courses, and Couper assisted with journalism.

Vocational agriculture teachers in California high schools could turn to experts at the Polytechnic for advice: Sutherland in farm mechanics, Thompson in animal husbandry, and Drumm in dairying. Couper, in charge of all publicity for the Bureau of Agricultural Education, commenced publication of The California Future Farmer in March, 1932.[196]

For the academic year 1931-1932 the Bureau of Agricultural Education provided several beneficial changes in the agricultural curricula of the Polytechnic. Only students with definite vocational objectives were permitted to enter the program, which was now built around work in the fields of meat animals, dairy husbandry, and poultry production. Although the project system was wholeheartedly continued, henceforth each agriculture student was to devote at least half of his time in classes where the emphasis was to be on individual instruction.[197]

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[196]El Rodeo, 1932, pp. (14; 17); Sutherland, A History of Agricultural Education, 34-36. Published ten times annually, this publication was available to vocational agriculture students throughout the state; it contained information for class use, pictures, and news articles about future farmer activities in the state and at the Polytechnic.

[197]"Announcement of the Vocational Agricultural Education Program at the California Polytechnic School," 1931. California State Department of Education Division of Secondary Education Bureau of Agricultural Education, n.p., 1931 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 1-2.

Thus began a gradual improvement in the agricultural training provided by the school.

In May, 1932, the State Board of Education announced a drastic reorganizational plan for the California Polytechnic, assigning the State Director of Education, the Chief of the Bureau of Agricultural Education, the Chief of the Bureau of Industrial Education, and the president of the school to make the necessary changes.[198] Within a year the institution was to eliminate entirely its junior college division and all high school courses carrying credit for university transfer; it was to continue only vocational training, preparing students for work in agriculture or in industry. The members of the Board called for this revision because, as they put it, the institution "has been operated without distinct educational objectives, distinct from and different than those educational objectives governing the public schools of the state" and because the school had been needlessly costly.[199]

During 1932-1933 the Polytechnic underwent a transformation. In accordance with the dictum of the Board of Education, the staff at the school commenced to organize its offerings under two headings, "agri-

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[198] Biennial Report of the State Department of Education, 1931-1932, Part I, p. 143.

[199] Ibid.

cultural" and "trades and industries." Each of these areas included two levels of instruction: a training or lower division and a technical or semi-professional division.[200] Only men students who had successfully completed the tenth grade qualified for admission to the new program, which was to be limited in 1932-1933 to 125 students in agriculture and 225 in trades and industries.[201]

Meanwhile, students of previous years, wishing to continue under their former programs through the following spring semester, were permitted to do so. A total of thirty-three of these men - twelve in the junior college division and twenty-three in the four year department - were graduated in 1933.[202]

C. O. McCorkle was appointed head of the agricultural training program, consisting of work in the four general divisions of meat animals, dairying, poultry, and horticulture. The Trades and Industries Division, which included courses in aeronautics, electricity, surveying, and drafting, was under the direction of C. E. Knott.[203]

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[200] Bulletin of the California Polytechnic School, A Technical Institute for Agriculture and Industry, 1932, p. 3; Ben R. Crandall, "California Polytechnic School," Sierra Educational News (San Francisco) XXVIII (October, 1932), 11.

[201] Biennial Report of the State Department of Education, 1931-1932, Part I, p. 143.

[202] San Luis Obispo Daily Telegram, May 31, 1933, p. 1.

[203] El Rodeo, 1933, pp. (21-29; 33-39); San Luis Obispo Daily Telegram, August 26, 1932, p. 1.

The deletion of much of the former junior college work and all of the lower division academic-transfer courses plus an extension of agricultural offerings necessitated a considerable shift in personnel. Sixteen instructors left the Polytechnic[204] and six were added to the staff in 1932-1933. Those hired were Roy L. Jones, to assist in aeronautics, and five instructors in agriculture with the following assignments: Carl G. Beck, farm business management; A. H. Hollenberg, agricultural mechanics and farm machinery; Wilbur B. Howes, horticulture and landscaping; Vard M. Shepard and Harry Parker, both in meat animal husbandry.[205]

On the opening day of classes in September, 1932, for the first time in sixteen years there was an absence of uniforms on the campus, as the Board of Education had decided to eliminate military training at the school.[206] Enrollment figures were disappointing as only 104 students registered: 28 in agriculture and 76 in industry;[207] by the end of the year, 117 students were in attendance, the smallest group since 1923-1924.[208]

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[204]Ben R. Crandall to G. A. Merrill, June 1, 1932 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 1.

[205]California State Polytechnic Circular of Information 1937-1938, pp. 5-10.

[206]Biennial Report of the State Department of Education, 1931-1932, Part I, p. 144.

[207]San Luis Obispo Daily Telegram, September 3, 1932, p. 1.

[208]Records of Enrollments, 1.

The staff of the Polytechnic School received some encouragement in October, 1932, when the Superintendent of Public Instruction announced as obsolete that portion of the Suzzallo Report recommending the abolition of the Polytechnic. In an article published in California Schools Superintendent Kersey pointed out that since its reorganization, the Polytechnic was no longer "operated as a general educational institution of high school and junior college grade but rather as a technical institution offering only vocational education in certain specific fields of agriculture and industry."[209] Hence, that part of the Suzzallo Report recommending the termination of the Polytechnic as an educational institution was no longer applicable.

An outstanding event of the spring of 1933 was the first annual Poly Royal. Primarily a livestock show, this campus attraction was staged by the Polytechnic chapter of the Future Farmers of America. Of primary interest to spectators was "Blue Boy," Grand Champion Hampshire boar of the 1932 Iowa State Fair, presented by Will Rogers, Senior as a gift to the Polytechnic from the Fox Films Corporation.[210]

During the early part of 1933 President Crandall became quite concerned regarding the future of the institution. When the 1933-1935 budget was under consideration, Governor Rolph announced his belief that

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[209]Vierling Kersey, "An Appraisal of the Carnegie Foundation Survey of Higher Education in California," California Schools (Sacramento) III (October, 1932), 316.

[210]San Luis Obispo Daily Telegram, January 14, 1933, p. 1; February 25, 1933, p. 3; March 9, 1933, p. 1; March 27, 1933, p. 1; March 31, 1933, p. 1.

the Polytechnic should be closed, or perhaps converted to a state prison, and a Senate Fact-Finding Committee pointed out that shutting down the institution would save the taxpayers at least $312,000 in the next two years.[211] Senator Chris Jesperson, always a staunch ally of the school, rebuked the Governor, stating that the Polytechnic filled an important place in agricultural training in California.[212]

A few days after Governor Rolph signed into law the budget bill, which included a biennial appropriation of $159,500 for the California Polytechnic,[213] about 60 per cent less than the allotment for 1931-1933, Crandall resigned as president of the school. In departing for his new post as principal of Wasco Union High School,[214] Crandall regretted that "the vision of a great technical institute on the Pacific Coast must be abandoned," and extended his best wishes to his successor.[215]

Late in May, 1933, on the request of Superintendent of Schools Kersey, J. A. McPhee accepted the position of president of the Polytech-

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[211] Ibid., January 18, 1933, p. 1; January 25, 1933, p. 1.

[212] Ibid., January 26, 1933, p. 1; February 1, 1933, p. 1; May 18, 1933, p. 1.

[213] Statutes of California, 1933, p. 815; it included $150,000 for support and $9,500 for minor construction, improvements and equipment.

[214] San Luis Obispo Daily Telegram, May 17, 1933, p. 1.

[215] El Rodeo, 1933, p. (7).

nic, retaining his post as Chief of the Bureau of Agricultural Education.[216] Having completed arrangements for the moving of the Bureau offices from Sacramento to San Luis Obispo, the new school director took up residence with his family in the President's Home on the campus early in July.[217]

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[216] San Luis Obispo Daily Telegram, June 1, 1933, p. 1.

[217] Ibid., July 1, 1933, p. 1.

Chapter VII

THE ADMINISTRATION OF JULIAN A. McPHEE (1933-1951)[1]

Julian A. McPhee, son of Charles A. McPhee and Ellen (MacDonald) McPhee, was born in 1896 in San Francisco. Although he spent his boyhood and youth in this city, from an early age Mr. McPhee developed a keen interest in farming as the result of numerous visits to a Santa Clara County ranch owned by his father.

In the spring of 1917 Mr. McPhee received the degree of bachelor of science from the University of California and that autumn commenced his career in the field of education as an instructor in agriculture at El Dorado Union High School in Placerville, California. He left this position to enlist in the Navy, serving as an ensign in the San Francisco and San Diego areas in 1918-1919.[2] During this period in the service he married Miss Alma C. Doyle.

In January, 1920, having been honorably discharged from the Navy, Mr. McPhee took an assignment under the auspices of the University of California Extension Service as assistant farm adviser in Merced County. That summer he accepted the directorship of vocational agriculture at Gilroy Union High School, where he remained five years. In 1923 he became vice principal of the institution and the following year the

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[1]Mr. McPhee has continued to serve as president of the California Polytechnic to the time of this writing (1958). Since this account of the history of the institution covers the period from 1901 to 1951, it includes only the first seventeen years of the McPhee administration.

[2]He had taken naval officers' training at the University of California.

principal of Gilroy Evening High School. In the meantime, while performing the additional duties stemming from these administrative assignments, Mr. McPhee continued his regular work in vocational agriculture.[3]

The California Board for Vocational Education appointed Mr. McPhee as Assistant State Supervisor of Agricultural Education in August, 1925, an action highly approved by the vocational agriculture teachers throughout the state.[4] The following year he became State Supervisor of Vocational Agriculture. On July 1, 1927, the title of this last named position was changed to Chief of the Bureau of Agricultural Education,[5] the office held by Mr. McPhee when he agreed to serve as president of the California Polytechnic School in 1933.[6]

As chief executive of the institution President McPhee led an exceedingly busy life. His predecessors at San Luis Obispo had found administration of the school to be a full time assignment in itself, but during his first fifteen years as president of the Polytechnic, Mr. McPhee served the state in a dual capacity. From 1933 to 1945 he continued his duties as Chief of the Bureau of Agricultural Education, and from 1945 to 1948 he was State Director of Vocational Education.[7]

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[3]California State Polytechnic College Bulletin, 1957-1958, p. 273.

[4]"Report of the Resolutions Committee of the California Agricultural Teachers' Association," August 6, 1925 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo), 1.

[5]S. S. Sutherland, A History of Agricultural Education in the Secondary Schools of California 1901 to 1940 (SanLuis Obispo, 1940), 18; California State Polytechnic Circular of Information, 1937-38, p. 5.

[6]See pages 174-75.

[7]El Rodeo, 1949, p. 54; California State Polytechnic College Bulletin, 1950-1951, p. 7.

Meanwhile he had been an active member of many boards, commissions, and committees,[8] and in 1948 was elected president of the American Vocational Association.[9] Not until after January 1, 1949, following the unprecedented expansion of the Polytechnic in the years after World War II did Mr. McPhee devote his entire time to the college.

After moving to San Luis Obispo President McPhee had little time to enjoy his hobbies of farming and sports. Until the early 1940's he occasionally played the piano for student body assemblies or at faculty social events, and he and Mrs. McPhee often chaperoned campus dances, but gradually he ceased these practices.[10] He continued to attend home games of the football and basketball teams when he was in San Luis Obispo, but as the institution grew and his responsibilities increased, Mr. McPhee had few opportunities for recreation.

President McPhee's thinking in regard to the basic function of the Polytechnic was similar to that of Dr. Leroy Anderson, earliest director of the institution; the primary purpose of the Polytechnic was to provide vocational training for specific occupations,[11] to prepare for

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[8]Such as the Agricultural Committee of the State Chamber of Commerce, the California War Board of the United States Department of Agriculture, the State Board of Directors of the California Parent-Teachers' Association, the Educational Committee of the California Institute for Men, the California Bankers' Association Agricultural Advisory Committee, and the California Agriculture Teachers' Association.

[9]El Rodeo, 1948, p. 53; El Mustang, January 9, 1948, p. 1.

[10]El Rodeo, 1938, p. (60)

[11]Julian A. McPhee, Annual Report to the State Board of Education, January 1947 (Files of the President's Office, California State Polytechnic College, San Luis Obispo), 9-10; Polytechnic Californian, April 5, 1940, p. 1.

"actual job requirements."[12] In his first annual report to the State Board of Education (January, 1935) President McPhee wrote: "All instruction at the California Polytechnic School is of terminal character. The School is not preparatory for other institutions in any sense. The courses are designed to fit the graduate for ownership, or foremanship, or managership, in specified fields of agriculture and industry."[13] A few years later he described the objective of the Polytechnic as "training ... for employment which lies between the position of the executive ... and that of workman."[14]

Over the ensuing decade his views on the matter did not change. Time and again he emphasized that occupational training constituted the chief feature of the Polytechnic,[15] that its speciality was the production of employable graduates.[16]

On becoming president of the California Polytechnic, Mr. McPhee took control of an institution with which he was quite familiar.

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[12]Julian A. McPhee, "California State Polytechnic College: Pioneer in Occupational Education," The California State Colleges (Sacramento, 1955), 73.

[13]Julian A. McPhee, Report to the State Board of Education on the Progress of the California Polytechnic School San Luis Obispo, California - January, 1935 (Files of the President's Office, California State Polytechnic College, San Luis Obispo), 8.

[14]Julian A. McPhee, "The California Polytechnic School," California Journal of Secondary Education (San Francisco) XIV (March, 1939), 146.

[15]Julian A. McPhee, "California State Polytechnic College," California Schools (Sacramento) XXV (May, 1954), 188.

[16]Julian A. McPhee, "California Polytechnic School," California Journal of Secondary Education (San Francisco) XIX (December, 1944), 430

During the 1920's he had been on the campus many times in various capacities, and since 1931, when the State Board of Education placed the agricultural division of the school under the jurisdiction of the Bureau of Agricultural Education, Mr. McPhee, had been instrumental in strengthening the agricultural program of the institution.[17]

Mr. McPhee accepted his new assignment during the depths of the depression. He was fully aware of the precarious position of the Polytechnic, of the downward trend in enrollment, and of the diminishing appropriations granted the school. He realized that the future of the Polytechnic depended on the State Board of Education, a body which recently had abolished the junior college division and the Household Arts Department of the institution. Indeed in April of 1933 the Joint Committee on Problems in Higher Education, a committee of the State Board of Education, reported: "The committee believes that in view of the fact that the California Polytechnic School has been completely re-organized for the purpose of providing strictly technical institute types of educational opportunities in special fields, without duplication of offerings of other public schools, this experiment should be permitted to continue for another biennium.

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[17]See pages 166-169.

It is definitely recommended, however, that the institution be discontinued if after a reasonable time it fails to demonstrate its effectiveness."[18]

Despite these discouraging prospects Mr. McPhee agreed to take over the presidency. Under his vigorous leadership the institution moved steadily forward during the crucial years, 1933-1935.

As a number of shifts in the Polytechnic staff had taken place during the early 1930's, the faculty which assembled in the autumn of 1933 was quite different from that of five years earlier. A major change in the composition of the staff, necessitated by a severe budget cut, occurred at the close of the 1932-1933 academic year when a President's Council, composed of Dr. Crandall, Mr. McFarland, Mr. Knott, Mr. McCorkle, and Mr. McPhee, had the unpleasant task of releasing eighteen employees.[19]

Among those faculty members retained in the spring of 1933 were thirteen instructors hired since 1928; eleven of these were agriculture teachers: Carl G. Beck, George P. Couper, George M. Drumm, Alvin H. Hollenberg, Wilbur B. Howes, Richard L. Leach, C. O. McCorkle, Vernon H. Meacham, Harry Parker, Vard Shepard, and J. I. Thompson, and

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[18]"Minutes of the California State Board of Education," April 5, 1933, pp. 402-03.

[19]Julian A. McPhee to Corlyn Deatherage, May 29, 1933 (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo).

two were in aeronautics - Roy L. Jones and M. C. Martinson. In addition to these persons the 1933 faculty included ten teachers who had served the school since before 1926: Miss Margaret Chase, Captain J. C. Deuel, H. C. Figge, C. B. Knott, J. J. Hyer, L. E. McFarland, J. H. Perozzi, Merritt B. Smith, G. W. Wilder, and H. G. Warren.[20]

Two additions to the staff in September of 1933 were Miss Alice M. Daniel, registrar, and Howard R. O'Daniels, appointed by President McPhee as athletic coach and mathematics instructor.[21] The following year, Oscar F. Lucksinger left a position as principal and director of agriculture at Gonzales High School to join the Polytechnic faculty.[22]

By the time the autumn semester of 1933 began, the Polytechnic faculty had completed the general reorganization commenced the previous year. The school was now a technical institute offering training in vocational agriculture and in trades and industries.

The work at the Polytechnic, for the most part built around courses two years in length, was of comparable difficulty to that ordinarily undertaken in the twelfth grade and first two years of college.[23] Entrance requirements were not stringent; any boy who had reached his seventeenth birthday and who had completed two years of high school

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[20]California State Polytechnic Circular of Information, 1937-1938, pp. 5-10; El Rodeo, 1934, p. (32).

[21]San Luis Obispo Daily Telegram, August 18, 1933, p. 1.

[22]California State Polytechnic Circular of Information, 1937-1938, p. 5.

[23]Bulletin of the California Polytechnic School, A Technical Institute for Agriculture and Industry, School Year 1933-34, p. 5.

was eligible for acceptance. Even so, the great majority of students entering the Polytechnic after 1933 were high school graduates. In 1933-1934 the average age of those registering for classes was nineteen, and more than ninety per cent of the newcomers held high school diplomas.[24] From 1934 to 1941 the Polytechnic staff granted certificates of completion, rather than degrees or diplomas, to students successfully completing designated courses of study.[25]

Enrollment figures surged upward between 1933 and 1936. The number of students in attendance in 1933-1934 was 239, a gain of 105 per cent over the previous year; in 1934-1935 the enrollment increased to 251, and a year later it had reached 309.[26] At the close of the fall semester registration in 1934, 236 young men from 39 of the 58 California counties were studying at the Polytechnic. Of these students 123 were in agriculture courses, and 113 were majoring in industrial subjects.[27]

During 1933-1935 four departments handled all agricultural training at the Polytechnic. The Meat Animals Department, most popular in

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[24]McPhee, Report to the State Board of Education, 1935, p. 4.

[25]Bulletin of the California Polytechnic, 1933-34, p. 5; Biennial Report of the California State Department of Education, 1934 (Sacramento, 1936), 143.

[26]"Records of Enrollments" (Files of the Admissions Officer, California State Polytechnic College, San Luis Obispo), 1.

[27]McPhee, Report to the State Board of Education, 1935, pp. 4-6.

the institution at this time, offered work in the production, management, and marketing of beef cattle, swine, and sheep. The Dairy Department provided training in the production and marketing of milk or of dairy animals and in dairy manufacturing. The Poultry Department included instruction and field work in commercial egg production and in hatchery operation, and in the Horticulture Department one could specialize in deciduous fruits, truck crops, or landscape gardening.[28]

The Polytechnic staff set up two levels of instruction, designated as "lower" and "upper." A student entering the institution with little or no agricultural experience or training and not having finished high school entered the lower division, which was one year in length. Here he had the opportunity to acquire the necessary skills and knowledge to profit later from the upper division curriculum. He took courses in agricultural science, farm business management, agricultural mechanics, mathematics, and related subjects, but was not permitted to have a project.[29]

The great majority of students enrolling in agriculture went directly into the upper (two-year) course of study. Training in the

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[28]Biennial Report of the California State Department of Education, 1934, p. 142; Horticultural Department Supplement 1934 Bulletin, the California Polytechnic School, (1).

[29]Bulletin of the California Polytechnic, 1933-34, pp. 7-12.

first year of this level was so arranged that the student spent each morning Monday through Friday receiving classroom instruction; about half of this time was devoted to his major field, but in addition each student took such courses as agricultural mechanics, agricultural science, farm business management, farm salesmanship, and marketing. In agricultural mechanics the student acquired certain skills needed on the farm; the use of tools and the construction, repair, operation, and upkeep of farm machinery. Agricultural science included the study of types of soils, fertilizers, irrigation, plant physiology, and soil management. Taxes, leases, and cost accounting were taken up in farm business management.[30] In the afternoons the student worked on a project, actually conducting an agricultural enterprise in his major field of interest.

As they provided a means of earning while learning, projects were exceedingly popular at the Polytechnic.[31] For the convenience of students needing money to finance projects, the school administration permitted loans from a revolving fund, valued at $15,000 in 1934.[32]

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[30] Ibid., 13-14.

[31] McPhee, Report to the State Board of Education, 1935, p. 9.

[32] Ibid., 10; also commonly referred to as the "cooperative loan fund," it was originally established as the Junior Farm Center Loan Fund in 1924; see page 136.

Each student borrowing from this source signed a written contract, paid interest, and shared in any profits. The extent and success of the project system as operated in the agricultural division during 1933-1934 is illustrated by the following figures.[33]

Meat Animals Department

14 students raised and marketed 103 sheep valued at $800.60
33 students raised and marketed 516 swine valued at $6377.98
35 students raised and marketed or kept for foundation animals 102 head of beef cattle valued at $7357.91

Dairy Department

8 students raised animals valued at $1183.16

Poultry Department

200,000 commercial eggs were produced
35,000 hatching eggs were produced
2900 chicks were brooded and raised
4000 hatching eggs and 4000 baby chicks were provided for high school Smith-Hughes agricultural projects.

Horticulture Department

73,200 flowering plants were grown for campus landscaping
9 acres of field crops were grown, the produce going for meat animal consumption
80 acres of campus landscape was tended by students
27,400 plants and shrubs were grown by students for sale
8 acres of miscellaneous crops were produced.

Studies undertaken in the second year of the upper division in agriculture were more advanced and included training and experience in

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[33]Ibid., 9; a list of projects for the following year may be found in McPhee, Report to the State Board of Education, 1936, pp. 7-8.

management procedures. The student studying meat animals, for example, now worked with the school-owned herds of sheep, beef, and hogs, learning various types of record keeping procedures, obtaining practice in animals registration, making marketing studies, and preparing charts such as those pertaining to variations in meat and feed prices.[34] In this department the institution granted certificates of completion in nine different categories: Livestock Feeding, Commercial Cattle Production, General Range Management, Beef Cattle Herdsman, Market Feeding of Swine, Swine Herdsman, Fitting and Showing of Purebred Swine, Feed Lot Management of Sheep, Range and Purebred Herd Management.[35]

In the second year in the field of poultry the student acquired skills in the management of poultry plants and of hatcheries.[36] In dairying the emphasis was on "animal breeding and physiology, herd management and record keeping, and the handling and judging of dairy products."[37]

Many students continued the projects they had commenced the previous year or started new ones, there being considerable latitude permitted in this respect by the school staff. A number of students

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[34]Bulletin of the California Polytechnic, 1933-34, p. 7.

[35]Meat Animals Department Supplement 1934 Bulletin, the California Polytechnic School, (4).

[36]Poultry Department Supplement 1934 Bulletin, the California Polytechnic School, (4).

[37]Dairy Department Supplement 1934 Bulletin, the California Polytechnic School, (2).

raised livestock or poultry to take home as the foundation for enterprises of their own.[38] In 1934-1935 a handful of agriculture students, returning to the institution for a third year of study, widened the range of their skills by taking work in new fields. For some of these youths the school faculty succeeded in securing part time jobs in such commercial enterprises as local branches of the Harmony Valley and Golden State Creameries.[39]

The industrial program of the Polytechnic was little changed by the reorganization of 1932-1933; it continued to include instruction on the junior college level in the fields of aeronautics and electrical industries.

The Aeronautics Department offered training in three major areas: airplane engine work, airplane construction work, and aeronautical drafting. Every student in the department, regardless of his specialization, took work in machine shop and in welding.[40]

Courses in aeronautics were so arranged that a student who had completed the first year's curriculum could qualify as an airplane

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[38]Biennial Report of the California State Department of Education, 1934, p. 143.

[39]El Rodeo, 1934, p. (36); San Luis Obispo Daily Telegram, March 10, 1934, p. 1.

[40]Biennial Report of the California State Department of Education, 1934, p. 145.

mechanic's helper.[41] After two years the student ordinarily could pass the airplane mechanic's or airplane engine mechanic's license examination. Representatives of the United States Department of Commerce administered these tests annually at the school.[42] A third year of training was more advanced and provided the student the opportunity to obtain both licenses.

To receive a certificate of completion in aeronautics the student was required to have passed the government examination and to have obtained either the airplane mechanic's or the airplane engine mechanic's license, or to have demonstrated exceptional ability as an aeronautical draftsman.[43]

Project work in aeronautics was undertaken by the students as a group. In 1933-1934 students completely rebuilt or overhauled seven airplanes; these aircraft had been brought in by owners who paid for the repairs or were wrecked planes which the students bought, repaired, and sold. The value of such work during the year was estimated at $2000.[44]

The Electrical Industries Department prepared for such specific positions as electrical machinery repairman, power plant operator,

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[41] Aeronautics Department Supplement 1934 Bulletin, the California Polytechnic School, (2).

[42] Interview with C. E. Knott, August 5, 1957.

[43] Aeronautics Department Supplement 1934, p. (4).

[44] McPhee, Report to the State Board of Education, 1935, p. 9.

maintenance of electrical equipment in industrial plants, work with public service corporations, wiring, and contracting.[45] In two years the average high school graduate could expect to finish the required work in any one specialization and thus qualify for a certificate of completion. Student projects in this department included during 1934-1935 the operation of the school power plant, valued at $20 per week, as well as sixteen campus wiring jobs and electrical repairs worth $500.[46]

At the commencement exercises at the close of the first year of Mr. McPhee's presidency, the Polytechnic Administration granted 45 certificates of completion, 25 of these being in agricultural and 20 in industrial fields.[47]

During the first two years of the McPhee administration the campus was much improved. Enhancing its appearance was an extensive program of landscaping; students assisted with the installation of lawns, shrubs, and flowers around the dormitories and major buildings. Every structure on the campus received an exterior coat of paint.

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[45] Electrical Industries Department Supplement 1934 Bulletin, the California Polytechnic School, (4).

[46] McPhee, Report to the State Board of Education, 1935, p. 9.

[47] "The California Polytechnic School Twenty-eighth Annual Commencement Tuesday Evening, May Eighth, Nineteen Hundred Thirty-Four San Luis Obispo, California," n.p., n.d. (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo).

Workman applied gravel resurfacing to all roads, laid concrete walks connecting the dormitories with the principal classroom buildings, and constructed a much needed retaining wall behind the gymnasium. New construction included a dairy feed room and ten individual hog units.[48] These improvements were made possible through the expenditure of federal Civil Works Administration funds to the extent of $28,000 and the use of $9600 from the appropriation made to the institution by the 1933 legislature.[49]

The reorganization of the course of study in 1932-1933 brought little change to the basic pattern of co-curricular activities at the Polytechnic. One serious loss was the campus newspaper, the Polygram, which the students ceased to publish.

To President McPhee the extra-curricular program was an important means of teaching students to accept responsibility and to learn to get along with their fellows.[50] In his first few months at the institution he found a paucity of student leadership, a condition he attributed for the most part to the fact that most of the students

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[48]McPhee, Report to the State Board of Education, 1935, p. 14; Meat Animals Department Supplement 1934, p. (1).

[49]Julian A. McPhee to San Luis Obispo Civil Works Administration, December 4, 1933 (Files of the President's Office, California State Polytechnic College, San Luis Obispo).

[50]McPhee, Report to the State Board of Education, 1935, p. 15.

lacked the time for activities as virtually all of them were earning at least a part of their expenses in addition to carrying full academic loads. Mr. McPhee determined to improve this situation by encouraging more student participation and interest in the co-curricular events on campus.[51]

A key development in 1933-1935 was the adoption by the students of a new student body constitution.[52] This document, while similar in many respects to that which it replaced, included several innovations. The most significant of these pertained to the composition of the Student Affairs Council (SAC). Student membership in this body was to include the president, vice president, and the secretary-treasurer of the student body, two members at large from the Agricultural Division, two members at large from the Industrial Division, and one representative for each 25 members of the three recognized campus organizations: the Future Farmers of America, the Poly Phase Club, and the Aeronautics Club. Four faculty members, appointed by the president of the school, met with the SAC in an advisory capapcity.[53]

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[51]Julian A. McPhee, Report to the State Board of Education on the Progress of the California Polytechnic School San Luis Obispo, California January 7, 1937 (Files of the President's Office, California State Polytechnic College, San Luis Obispo), 21-22.

[52]El Rodeo, 1934, p. (22).

[53]Ibid., (7).

The newly accepted document placed all student body finances under the direct control of the chief accounting officer of the Polytechnic; moreover, both the SAC and the president of the school had to approve the expenditure of study body funds.[54]

The vice president of the student body was now ex-officio chairman of a new Cafeteria-Dormitory Committee, set up to hear complaints in regard to food or living quarters. This group was especially useful as it worked effectively with A. R. Noggle, recently appointed dining hall manager.[55]

General student interest in school affairs increased in 1933-1935 as the football team was singularly successful, and the SAC concerned itself with such practical problems as the lighting and fencing of the athletic field.[56]

In the early 1930's Polytechnic teams competed in the Central Coast Junior College Conference in football, basketball, baseball, and track. Captain Joseph Deuel, in addition to his duties as librarian, was director of athletics and handled the baseball and track squads, and Howard R. O'Daniels was responsible for football

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[54] Ibid., (22).

[55] Ibid., (32).

[56] Ibid., (7)

and basketball. Coach O'Daniels' record in football was spectacular - in 1933 his squad won all its games while holding every opponent scoreless, and in 1933 and 1934 the Polytechnic teams won the conference championship.[57] The record in football for 1933-1934-1935 was seventeen wins, four losses, and one tie.[58]

Meanwhile, the twenty four piece band, under the direction of Merritt B. Smith, performed for school assemblies, at rallies and games, and occasionally appeared in town parades.[59] Bi-monthly assemblies arranged by a student committee featured well known speakers or entertainment.[60] In 1934 Gammi Pi Delta, an agricultural honor society appeared on the campus. Organized with the purpose of recognizing outstanding leadership and scholarship in addition to achievement in projects, it limited its membership in any one year to ten per cent of the students in agriculture.[61]

The most important annual event at the Polytechnic continued to be Poly Royal, an agricultural show sponsored by the California Polytechnic chapter of the Future Farmers of America.[62] Each year

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[57] San Luis Obispo Daily Telegram, November 15, 1933, p. 4; November 4, 1934, p. 4; El Rodeo, 1935, p. (77).

[58] El Rodeo, 1936, p. (75).

[59] El Rodeo, 1934, p. (37).

[60] Your Vocational Opportunity The School and the Product, n.p., n.d. (Attached to McPhee, Report to the State Board of Education, 1936), 20.

[61] El Rodeo, 1935, p. (56)

[62] "Poly Royal Program Second Annual Agricultural Show March 17, 1934" (Manuscripts Division, California State Polytechnic College Library, San Luis Obispo).

thousands of persons visited this open house to which the public was invited.[63]

In both 1934 and 1935 featured attractions of the day were livestock exhibits, judging contests, a noon barbecue with entertainment from the band, and baseball competition. Starting in 1934 with the selection of Miss Jane Horton of San Luis Obispo, the Polytechnic students chose a queen to reign over the activities of the day as "Miss Poly Royal."[64]

The local chapter of the Future Farmers of America was important not only in connection with Poly Royal, but as the largest and most influential campus organization of the mid-1930's.[65] Its members - more than one hundred strong - held annual outings at Morro Bay, sponsored "Fun Nights" featuring boxing and wrestling bouts in the gymnasium, and published the Bulldozer.[66]

A highly successful placement service constituted one of the chief attractions of the Polytechnic during 1933-1935.[67] The key

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[63]San Luis Obispo Daily Telegram, March 17, 1934, p. 1; March 29, 1935, p. 1.

[64]El Rodeo, 1934, pp. (34-35); ibid., 1935, pp. (20-21).

[65]Bulletin of the California Polytechnic, 1933-34, p. 5; El Rodeo, 1935, p. (59).

[66]El Rodeo, 1934, p. (57).

[67]San Luis Obispo Daily Telegram, November 3, 1938, p. 3C.

men in this function were J. I. Thompson and C. E. Knott, appointed by President McPhee respectively as agricultural coordinator and industrial coordinator.[68] These two staff members, carrying on this assignment in addition to their regular duties, talked with prospective employers regarding placement opportunities for Polytechnic graduates, and on the basis of shifting conditions in agriculture and industry recommended changes in the training offered at the school.[69]

Mr. Thompson not only kept in close contact with various livestock associations and dairy and poultry products companies throughout the state, but visited the 130 California high schools offering instruction in vocational agriculture. He gave advice on problems arising from various Smith-Hughes projects in these institutions and interviewed students who might continue their education at the Polytechnic.[70] Mr. Knott traveled during Thursday, Friday, and Saturday of each week, showing motion pictures of the Polytechnic industrial program at various high schools, meeting employers in the electrical and aeronautical fields, and familiarizing himself with new trends and employment possibilities in these industries.[71]

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[68] McPhee, Report to the State Board of Education, 1935, p. 12.

[69] California Schools (Sacramento) IV (October, 1933), 318.

[70] El Rodeo, 1934, p. (38).

[71] Ibid., (19).

Considering the general unemployment of the mid-1930's and the keen competition for jobs, the record of the Polytechnic administration in placing a high proportion of the school graduates was highly gratifying. The success resulted from the practical training offered by the institution and the able work of its coordinators.

Six months after their graduation in the spring of 1935, twenty-five of the thirty-two graduates in agriculture were gainfully employed; three were continuing their education at four-year colleges or universities; two had returned to the Polytechnic for additional training; one was "at home," and the whereabouts of one was unknown.[72] Of the eight electrical industries students finishing at the school in 1935, five held electrical jobs, and three were employed in service stations; of the three graduates in aeronautics, the Consolidated Aircraft Company in San Diego had hired two, and one had returned to the Polytechnic for further study.[73]

Under the guidance of President McPhee the Polytechnic during 1933-1935 was of great value to the state in various respects in addition to its activities as a technical institute in agriculture and industry. The shift of the offices of the Bureau of Agricultural Education to San Luis Obispo in the summer of 1933 resulted in a close relationship between this agency and the Polytechnic. Mr. McPhee, as

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[72]McPhee, Report to the State Board of Education, 1936, pp. 10-11.

[73]Ibid., 11-12.

Chief of the Bureau, president of the California Polytechnic, and state adviser to the California Future Farmers of America, centralized in San Luis Obispo the work in vocational agriculture carried on throughout the state.

The facilities of the institution came to be increasingly in demand for meetings of such groups as dairy and livestock associations. For the summers of 1934 and 1935 Mr. McPhee scheduled at the Polytechnic the training courses and annual conventions of the vocational agriculture teachers of the state;[74] during each of these years some 500 to 600 members of the Future Farmers of America from more than seventy California high schools convened at the Polytechnic for their state-wide public speaking competition and judging contests in livestock, dairy cattle, dairy products, poultry, trees, agricultural mechanics, and agronomy.[75] The teacher-training program for vocational agriculture cadets continued with eight candidates at the Polytechnic in 1934 and ten in 1935.[76]

Faculty members of the agricultural departments at the Polytechnic carried on important duties in addition to their regularly assigned work with students and projects on the home campus. On call

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[74]San Luis Obispo Daily Telegram, June 8, 1933, p. 1; McPhee Report to the State Board of Education, 1935, p. 13; ibid., 1936, p. 13; ibid., 1937, pp. 18-19.

[75]El Rodeo, 1934, p. (33); ibid., 1935, p. (59); San Luis Obispo, Daily Telegram, May 7, 1935, p. 1; May 8, 1935, p. 1.

[76]El Rodeo, 1934, p. (41); ibid., 1935, p. (60).

as advisers to the 7000 boys and girls and to the 200 high school teachers in vocational agriculture throughout the state, each month Polytechnic instructors answered dozens of letters requesting information on better agricultural practices.[77] The heads of the departments of meat animals, horticulture, dairying, and poultry frequently contributed articles to the California Future Farmer.[78] Under the direction of George Couper, publicity director for both the Bureau of Agricultural Education and for the California Polytechnic, beginning in October, 1934, thirty-two agricultural lessons of fifteen minutes each were broadcast over three National Broadcasting Company radio stations.[79] These included timely suggestions provided by members of the Polytechnic staff on such matters as project operation, disease control, feeding, and marketing.[80] For 1935-1936 Mr. Couper developed more than fifty separate programs, including a series of thirty-five lessons available to every California high school each Tuesday morning for fifteen minutes.[81]

The Polytechnic foundation stock not only was available for the use of students at San Luis Obispo, but provided a source of high

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[77]McPhee, Report to the State Board of Education, 1935, pp. 12-13.

[78]El Rodeo, 1934, p. (38).

[79]San Luis Obispo Daily Telegram, September 29, 1934, p. 1.

[80]Sutherland, A. History of Agricultural Education, 44; McPhee, Report to the State Board of Education, 1936, p. 13; ibid., 1937, p. 20.

[81]San Luis Obispo Daily Telegram, October 4, 1935, p. 6.

grade swine, sheep, dairy cattle, hatching eggs, and baby chicks for high school boys engaged in Smith-Hughes project work.[82] Since 1931 the quality of the school owned animals and birds had been considerably improved; by 1934 the beef cattle herd consisted of 60 purebred Herefords and 25 Shorthorns. The holdings in swine, built around Duroc Jerseys and Poland Chinas, included a breeding herd of 40 sows. Among outstanding gifts of swine made to the institution in the early 1930's was the entire Poland China sow herd of the famous Stralock Farm near Davis, California. On the campus at this time were 60 purebred sheep: Hampshires, Southdowns, and Rambouillets.[83]

The foundation dairy herd was made up of approximately 100 purebred Jerseys, Guernseys, and Holsteins, mostly two to three years old.[84] A valuable addition was Perfection Rosemary Segis, one of the outstanding Holstein show cows on the Pacific Coast, purchased by instructor George Drumm for the Polytechnic in 1934.[85] The poultry flocks, consisting of about 3000 birds, were the result of careful breeding and selection for low mortality and high quality.[86]

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[82] McPhee, Report to the State Board of Education, 1935, p. 13.

[83] Meat Animals Department Supplement 1934, p. (1); San Luis Obispo Daily Telegram, September 5, 1934, p. 1.

[84] Dairy Department Supplement 1934, p. (3)

[85] El Rodeo, 1935, p. (38).

[86] Poultry Department Supplement 1934, p. (2).

That Mr. McPhee's first two years as president of the California Polytechnic were highly successful was readily recognized by the State Board of Education. At a meeting of that body in October, 1936, Superintendent of Public Instruction Vierling Kersey praised Mr. McPhee's accomplishments in San Luis Obispo. Pointing out that since Mr. McPhee had taken over the direction of the school, it had "made marked progress in enrollment, physical appearance, type of student attracted, and general prestige,"[87] Mr. Kersey recommended, and the Board gave its unanimous approval, that the administration of the institution be continued without change, that the school establish curricula "leading to specific employment in the technical fields generally covered by agriculture and chemistry: as for example, vocational forestry, vocational chemistry, highway minor construction and maintenance, farm and industrial accounting, and management, agricultural engineering and kindred courses,"[88] and that the Polytechnic administration be encouraged "to make employment surveys and to establish technical courses meeting the needs of agriculture and industry in terms of these surveys."[89]

The accomplishments of 1933-1935 were only a beginning. Under President McPhee's leadership the Polytechnic was to continue its

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[87]"Minutes of the State Board of Education," October 25-29, 1936, p. 684.

[88]Ibid.

[89]Ibid.

improvement and expansion until temporarily interrupted by World War II.[90]

The period 1935-1942 was one of considerable advancement in the history of the California Polytechnic. During this phase of President McPhee's administration the institution became a four year college having the right to grant bachelor of science degrees, and its physical holdings increased in size and value with an additional campus at San Dimas in Los Angeles County. The staff further expanded the "learn by doing" project system. A program of landscaping, together with the completion of dozens of new buildings and the renovation or removal of old structures greatly improved the San Luis Obispo campus. More than doubled in size, the student body stepped up its interest and participation in such co-curricular activities as athletics, music, publications, clubs, and self-government.

Beset by increasing problems and responsibilities stemming from the unprecedented expansion during the last half of the 1930's Mr. McPhee organized an administrative staff at the Polytechnic. During the mid-1930's, as President McPhee's principal aid, Oscar F. Lucksinger[91] handled many of the lesser problems arising in connection

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[90]California Schools (Sacramento) XIX (August, 1948), 254.

[91]California State Polytechnic Circular of Information 1936-1937, p. 5.

with the school,[92] and C. E. Knott, in addition to his other assignments, was head of the Industrial Division.[93]

Mr. McPhee, who had personally overseen the activities of the Polytechnic Agricultural Division since 1931, appointed Walter C. Patchett as Director of Agricultural Training in 1937.[94] The following year President McPhee established an Administrative Council composed of Dean of Instruction Lucksinger as chairman, Dean of Industrial Education Knott, and Dean of Agricultural Education Patchett.[95] For four years - until the end of the spring term of 1942[96] - this group, meeting every Monday night from September through May, drew up recommendations for action by President McPhee on numerous questions regarding the operation of the Polytechnic.[97]

Freed of minor administrative problems, President McPhee turned his attention to such larger issues facing the Polytechnic as its relations with the legislature, the State Board of Education, and

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[92]See McPhee-Lucksinger Correspondence, 1934-1936 (Files of the President's Office, California State Polytechnic College, San Luis Obispo).

[93]California State Polytechnic Circular of Information, 1937-1938, p. 5.

[94]El Rodeo, 1938, p. (10); in addition to continuing his duties as agricultural coordinator for the Polytechnic, J. I. Thompson served the Bureau of Agricultural Education as technical advisor and livestock specialist.

[95]El Rodeo, 1939, p. (8).

[96]San Luis Obispo Telegram-Tribune, September 4, 1942, p. 3.

[97]Polytechnic Californian, February 9, 1940, p. 1; El Mustang, September 12, 1941, p. 1; El Rodeo, 1941, p. 13; ibid., 1942, p. 11.

the public, the expansion of the institution to a four year college, the acquisition of the San Dimas campus, and the perennial problems of budgets and finances.

An important feature of the first decade of President McPhee's administration was the upgrading of the Polytechnic from a two-year to a four-year college. This started in the spring of 1936 when the school staff commenced to revise the curricula.[98] In each major subject field the faculty set up a third year of work and instituted three programs of study, designated respectively as degree-transfer, technical certificate (a three-year program), and vocational certificate (a two-year program). At the same time the work of the Polytechnic was brought more closely into line with that of the California state colleges and of the University of California.[99] Formerly, for example, chemistry had been considered simply as a part of such courses as Dairy I or Poultry I; now it carried the classification of Physical Science 10, 11, and 12, with each of these separate courses bearing a weight of five units.[100]

These developments resulted from both employment and student pressures. Placement requirements were shifting upward as increas-

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[98]San Luis Obispo Daily Telegram, May 22, 1936, p. 1.

[99]McPhee, Report to the State Board of Education, 1937, pp. 6-8.

[100]California State Polytechnic Circular of Information, 1937-1938, pp. 134-35.

ingly employers wanted men with more than two years of college training. By adding a third year of work, the Polytechnic complied at least in part with the demands for older and better trained individuals. Even so, for many positions only college graduates were acceptable; for these employment possibilities, a Polytechnic student could qualify only if he continued his education at some degree-conferring institution. The change in course designations and the allotment of unit values facilitated the transfer of those Polytechnic students desirous of earning degrees.[101]

The institution of the degree-transfer program in the autumn of 1936 did not affect the great majority of Polytechnic students. Of the 316 men signing into classes that September, only 67 entered the degree-transfer classification.[102] The basic function of the institution continued to be training directly for employment.[103]

An additional change in 1936-1937 was the provision of three new majors: air conditioning, agricultural inspection, and agricultural mechanics.[104] At the same time President McPhee added eight members to the staff. One of these, Dr. A. M. McCapes, a veterinarian,

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[101] Ibid., 1936-37, p. 15.

[102] McPhee, Report to the State Board of Education, 1937, p. 7.

[103] California State Polytechnic Circular of Information, 1936-37, p. 15.

[104] McPhee, Report to the State Board of Education, 1937, p. 8.

taught courses in animal science and farm sanitation, in addition to caring for the valuable campus stock.[105] Over the next two decades three of the newcomers made particularly valuable contributions to the Polytechnic: Harold P. Davidson in music, James F. Merson in agricultural mechanics, and Harold O. Wilson, originally in the Meat Animals Department and later as an administrator.

In 1937 the State Board of Education recognized the California Polytechnic as a three-year technical college with two years of lower division and one year of upper division work.[106] The Polytechnic administration now attempted to reach understandings with the California state colleges and with the University of California as to the status of Polytechnic students transferring to any of these institutions.

It was agreed that a Polytechnic student continuing his education at one of the California state colleges with the objective of completing the requirements for a bachelor's degree would receive credit for some of the work he had completed at the Polytechnic,[107] and that a transfer from the San Luis Obispo institution to the

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[105] Julian A. McPhee, Annual Report to the State Board of Education on the Progress of the California Polytechnic School San Luis Obispo, California January, 1938 (Files of the President's Office, California State Polytechnic College, San Luis Obispo), 28-29.

[106] California Polytechnic School Bulletin, May 1, 1938 p. 15.

[107] California State Polytechnic Circular of Information, 1937-1938, p. 3.

University of California would receive up to eighty semester units of credit for work he had finished at the Polytechnic.[108]

Unfortunately, the arrangements with these California institutions of higher learning did not work out satisfactorily.[109] Officials of the state colleges discounted for graduation purposes a number of Polytechnic courses by interpreting strictly a regulation of the California Department of Education. The clause in question permitted any state college to refuse to grant transfer credit for any work it considered of less value than the "standards and requirements" of its own "basic course pattern."[110]

Graduation from the University of California without considerable loss of time was extremely difficult for the average transfer from the California Polytechnic because he usually lacked the University requirements in foreign languages and/or mathematics.[111]

In the late 1930's transfer to Oregon State College, Iowa State College of Agriculture, Utah State Agricultural College, or some other of the typical agricultural and mechanical colleges outside of

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[108]Julian A. McPhee to Walter P. Dexter, January 22, 1938 (Files of the President's Office, California State Polytechnic College, San Luis Obispo), 4-5.

[109]McPhee, Annual Report to the State Board of Education, 1938, pp. 32-34.

[110]Department of Education Bulletin, April 15, 1937, p.12.

[111]Julian A. McPhee to Alice M. Dougherty, March 6, 1938 (Files of the President's Office, California State Polytechnic College, San Luis Obispo), 3.

California was the best course of action for the Polytechnic student wishing to earn a degree. At these institutions he usually received full credit for all work he had taken at the Polytechnic.[112]

During the late 1930's it became increasingly apparent that transfer to some other California institution was not a suitable method for a Polytechnic student to secure a bachelor of science degree. To President McPhee the chief stumbling blocks to this procedure were first, the dissimilarity between the pattern of California Polytechnic studies and those of the other California collegiate institutions; and second, the fact that a student who had studied at the Polytechnic wished to be known as an alumnus of that institution, not of some college he later attended.[113]

Meanwhile, parents, students, and employers were urging the Polytechnic administration to devise some procedure so that Polytechnic students could be granted degrees.[114] President McPhee was particularly concerned from the standpoint of occupational opportunities—that lack of the degree was excluding Polytechnic students from a number of employment possibilities.[115] To him, there was an

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[112]Julian A. McPhee, Annual Report to the State Board of Education on the Progress of the California Polytechnic School San Luis Obispo, California January, 1940, pp. 4; 39; California Schools (Sacramento) XI (May, 1940), 174.

[113]McPhee, Annual Report to the State Board of Education, 1940, p. 3.

[114]Ibid., 40.

[115]McPhee to Dougherty, March 6, 1938, p. 3.

obvious solution: the Polytechnic, itself, should offer a fourth year of classes and confer upon its graduates the bachelor's degree.

Early in 1938 President McPhee drew up resolutions that the California Polytechnic be permitted in the near future to add a fourth year of course work in its major fields and commencing with the spring of 1941 that it grant the bachelor of science degree.[116] These proposals he forwarded to Superintendent of Public Instruction Walter F. Dexter[117] with the urgent request that they be brought before the State Board of Education at its next regular meeting.[118] Dr. Dexter complied, presenting the McPhee suggestions to the Board in January, 1938. The immediate action of this group was disappointing as the resolutions were placed in the hands of a committee for study and further recommendation.[119]

To encourage favorable consideration by the committee, President McPhee wrote a letter to Miss Alice M. Dougherty, its chairman, pointing out various reasons for his recent proposals: during the preceding decade thirty per cent or more of the fields formerly opened to Polytechnic graduates now required holders of the bachelor's degree - hence the suggested change would increase employment possibil-

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[116]McPhee to Dexter, January 22, 1938

[117]Dexter was appointed successor of Kersey in February, 1937. See "Minutes of the State Board of Education," February 27, 1937, p. 717.

[118]McPhee to Dexter, January 22, 1938

[119]"Minutes of the State Board of Education," January 24-25, 1938, p. 820.

ities for a number of Polytechnic students and would keep training at the institution in line with industrial progress; most Polytechnic students would not be affected by the upgraded program but would continue in the three-year curricula; establishment of the longer program would require little additional subject matter and in no way would affect the project system.[120]

During 1938-1939 the committee took no positive action regarding its assignment.[121] In the autumn of 1939, Superintendent Dexter, who was highly sympathetic with Mr. McPhee regarding this matter,[122] appointed Dr. J. Herschel Coffin of Whittier College, Curriculum Coordinator of the State Colleges, to make a thorough study of the California Polytechnic and to recommend whether or not the institution should be permitted to grant the bachelor's degree.[123] Dr. Coffin's analysis of the Polytechnic was highly complimentary, with the exception of his estimate of the adequacy of its library; he reported President McPhee's requests to be fully justified.[124]

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[120]McPhee to Dougherty, March 6, 1938.

[121]"Minutes of the State Board of Education," July 1-2, 1938, p. 972; December 9, 1939, p. 1030

[122]El Mustang, January 5, 1940, p. 1; January 19, 1940, p. 1; San Luis Obispo Telegram Tribune, January 16, 1940, p. 1.

[123]Julian A. McPhee to Walter F. Dexter, November 20, 1939 (Files of the President's Office, California State Polytechnic College, San Luis Obispo).

[124]J. Herschel Coffin to Walter F. Dexter, November 28, 1939 (Files of the President's Office, California State Polytechnic College, San Luis Obispo).

In November, 1939, Mr. McPhee urged Superintendent Dexter once again to place before the State Board of Education a resolution that the Polytechnic be permitted to confer the baccalaureate degree. The Polytechnic president emphasized that because they did not hold degrees, Polytechnic students were denied employment in many federal and state civil service positions, particularly in agriculture, in the Army Air Corps, in teaching, in not a few industrial concerns, and often in livestock associations.[125]

The matter of the Polytechnic degree was an item on the agenda of the January, 1940, meeting of the State Board. On this occasion, after Superintendent Dexter, Senator Chris Jesperson, and President McPhee had spoken in favor of the McPhee resolution, Dr. Luther Nichols, Comptroller of the University of California suggested with success that the final decision of the Board be delayed until further studies were completed.[126]

In April 1940, President McPhee finally won his long campaign for the State Board of Education gave its official sanction to the establishment at the California Polytechnic of fourth year courses and permitted the college, commencing with the graduation exercises

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[125]McPhee to Dexter, November 20, 1939, pp. 2-3.

[126]"Minutes of the State Board of Education," January 12-13, 1940, p. 1047. El Mustang, January 19, 1940, p. 1.

in the spring of 1942, to grant bachelor of science degrees to its graduates.[127]

By the opening of the fall term in 1940 the Polytechnic staff had added fourth year courses in the twelve departments in which students would be permitted to earn degrees: Meat Animal Production, Crops Production, Ornamental Horticulture, Poultry Production, Dairy Production, Dairy Manufacturing, Agricultural Inspection, Aeronautical Industries, Air Conditioning Industries, Electrical Industries, Mechanical Industries, and Architectural Drafting.[128] In the eight agricultural specializations the recently added work included such subjects as comparative government, contemporary political problems, state and local government, family relations, organic chemistry, and advanced physics.[129] Among the courses in the fourth year of work in the industrial fields were economics, labor relations, contemporary political problems, family relations, and public speaking.[130]

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[127]San Luis Obispo Telegram-Tribune, April 6, 1940; California Schools (Sacramento) IX (May, 1940), 174.

[128]Julian A. McPhee, Annual Report to the State Board of Education on the Progress of the California Polytechnic School San Luis Obispo, California January, 1942, pp. 15-16.

[129]California State Polytechnic Circular of Information and Announcement of Courses 1941-1942 San Luis Obispo and San Dimas, California, pp. 61-102.

[130]Ibid., 130-164.

The Polytechnic system of training, calling for emphasis in technical work in the first two years and postponement of contact with the natural and social sciences until the last two years, was known as the upside-down program.[131] Over a four-year period it provided the student with virtually the same course content as that offered by the typical agricultural and mechanical college - but in different order. The student who could attend the Polytechnic for only a year or two benefited from the upside-down scheme in that when he had to leave the institution, he had acquired some definite skills enabling him to earn a living. Moreover, it was found that the natural and social sciences were of much more interest to the student after he had acquired a foundation of skills and knowledge in his major subject.[132]

For the degree, technical, and vocational levels of achievement the Polytechnic staff set up the requisite of successful completion of the following number of quarter units: for the bachelor of science degree -200 units; for the technical certificate - 150 units; for the vocational certificate - 100 units.[133] An additional hurdle for seniors in the degree program was the preparation of a 500 word thesis.[134]

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[131]McPhee, Annual Report to the State Board of Education, 1941, p. 6.

[132]McPhee, Annual Report to the State Board of Education, 1942, pp. 5-6; 16.

[133]Circular of Information, 1941-1942, pp. 57-58.

[134]El Mustang, October 10, 1941, p. 1.

For the first time in the history of the California Polytechnic its graduates were granted baccalaureate degrees during the 1942 commencement proceedings. At these ceremonies twenty-six men who had specialized in agriculture, including twelve in meat animal production, and three individuals who had majored in industrial fields received bachelor of science degrees.[135] During the exercises college authorities also distributed thirteen technical and twelve vocational certificates.[136] In 1943 nineteen graduates received bachelor of science degrees.[137]

The latter half of the 1930's was a time of increasing enrollments. The student body grew from 379 in 1936-1937 to 493 in 1937-1938, 651 in 1938-1939, and 780 in 1939-1940.[138] In 1940-1941 there were 762 students in attendance and the following year 711. The impact of World War II began to be seriously felt in 1942-1943 when only 570 men enrolled for classes.[139]

During the first decade of the McPhee administration the Polytechnic project system widened and expanded. This training method

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[135] El Rodeo, 1942, pp. 44-54.

[136] El Mustang, May 22, 1942, p. 1.

[137] San Luis Obispo Telegram-Tribune, May 26, 1943, p. 1.

[138] "Records of Enrollments," 1.

[139] Ibid.

had both educational and commercial value as it provided students with experience in ownership and management, and at the same time permitted them to earn at least a part of their expenses. Every Polytechnic student was expected to participate in an individual or joint project.[140]

To President McPhee this phase of the school program during the period 1935-1942 was its "most important single function."[141] In his official report for 1941 the executive noted: "The ability of students to conduct commercially-productive projects during their college training program, is the most significant feature of the California Polytechnic School educational offering. No other college in the United States has the facilities for, or the philosophy of 'learning by doing' as practiced at San Luis Obispo and San Dimas."[142]

During these years the project loan fund was available to students needing cash to finance their projects.[143] When a student marketed his product or received payment for services rendered, he returned to the fund the amount he had borrowed plus interest in

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[140]McPhee, Annual Report to the State Board of Education, 1942, p. 20.

[141]Ibid., 1938, p. 12.

[142]Ibid., 1941, p. 16.

[143]California State Polytechnic Circular of Information, 1937-1938, pp. 20-21; ibid., 1941-1942, p. 27.

addition to one-third of his gross profit.[144] Valued at $28,000 in 1938, the project loan fund had reached an estimated worth of $72,000 in 1943.[145]

The most popular and profitable projects during the late 1930's and early 1940's were those in meat animals, dairy products, and poultry. The meat animals course of study, attracting a larger enrollment than any other department during this time, was especially lucrative in so far as projects were concerned.[146] Each year between 1938 and 1942 hundreds of Polytechnic students marketed thousands of dollars worth of beef steers, sheep, and hogs.[147] The profit to students accruing from sales in meat animals projects during 1939 was $3300,[148] and the following year exceeded $4600. Additional returns came in as prize money from the showing of outstanding animals at such meetings as the California State Fair and Great

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[144]McPhee, Annual Report to the State Board of Education, 1941 p. 24.

[145]Julian A. McPhee, Annual Report to the State Board of Education on the Progress of the California Polytechnic School San Luis Obispo, California January, 1944 (Files of the President's Office, California State Polytechnic College, San Luis Obispo), 5.

[146]El Mustang, October 13, 1939, p. 1; September 12, 1941, p. 1; Polytechnic Californian, April 5, 1940, p. 5.

[147]El Mustang, April 24, 1942, p. 4.

[148]McPhee, Annual Report to the State Board of Education, 1939, p. 13.

Western Livestock Show.[149] From this source during 1938 Polytechnic students netted an additional $1950.[150]

Commencing in 1937, and during each year until 1944, the entire Polytechnic dairy herd, consisting of over one hundred purebred animals, was leased from the state as a cooperative project by students majoring in dairying.[151] The average total monthly return to these students in 1938 was $200.[152] During 1940 the dairy students in this joint venture produced $15,500 worth of milk and cream, most of which went to the college dining halls, and sold young animals with a total value of $4200.[153]

Dairy animals shown at various fairs often brought prize money as well as favorable publicity to the institution.[154] An outstanding example was Sir Bess Gettie, a Holstein bull, one of seven Polytechnic animals exhibited in 1939 at the National Dairy Show on Treasure Island in San Francisco Bay; Sir Bess took third prize in his class in national competition.[155]

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[149] El Mustang, December 5, 1941, p. 1; December 12, 1941, p. 1; San Luis Obispo Daily Telegram, April 7, 1939, p. 3; McPhee, Annual Report to the State Board of Education, 1940, p. 16.

[150] McPhee, Annual Report to the State Board of Education, 1939, p. 13.

[151] Ibid., 1938, 14.

[152] Ibid., 1939, 14.

[153] Ibid., 1941, 17.

[154] San Luis Obispo Daily Telegram, September 22, 1938, p. 1; San Luis Obispo Telegram-Tribune, October 20, 1942, p. 7; El Mustang, September 15, 1939, p. 1.

[155] El Mustang, October 20, 1939, p. 1; November 3, 1939, p. 1.

Another valuable phase of project work in dairying was the raising of young stock by students who planned to use these animals as the foundation for their own future herds.[156]

Between 1937 and 1943 ordinarily from twenty-five to fifty students engaged in poultry projects, which netted them total annual profits ranging from $1200 to $2000.[157] Through these projects hundreds of thousands of eggs, thousands of chicks, and hundreds of turkeys were produced each year.[158] The Polytechnic poultry projects were of considerable value to the statewide Smith-Hughes program as California high school students annually purchased thousands of chicks and eggs from this source.[159]

Projects of horticulture students usually centered around campus landscaping - installing lawns and setting out plants, shrubs, and trees.[160] As a group project the horticulture majors in 1939 rebuilt and restocked the school nursery.[161]

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[156] Ibid., January 5, 1940, p. 3; October 24, 1941, p. 1.

[157] McPhee, Annual Report to the State Board of Education, 1939, p. 15; ibid., 1940, p. 18; ibid., 1942, p. 23.

[158] Ibid., 1941, p. 18; Polytechnic Californian, February 9, 1940, p. 1; October 18, 1940, p. 4; El Mustang, January 5, 1940, p. 4; January 23, 1942, p. 1.

[159] During 1940 a total of 41,000 eggs and chicks was sold; see McPhee, Annual Report to the State Board of Education, 1941, p. 18.

[160] Polytechnic Californian, March 8, 1940, p. 4; McPhee, Annual Report to the State Board of Education, 1939, p. 17; ibid., 1938, p. 16; ibid., 1940, p. 20.

[161] McPhee, Annual Report to the State Board of Education, 1940, p. 20.

Leases by the college authorities in 1941 of several hundred acres of nearby land increased facilities for student project. Of the Bello Ranch, located less than half a mile from the campus, an area of 550 acres was made available as pasturage for the Meat Animals Department, and allocated for the dairy unit was a 115 acre parcel of the Garcia place, adjoining the campus to the northeast.[162]

The industrial field did not lend itself as readily to projects as did the agricultural. Projects in aeronautics usually consisted of rebuilding and/or repairing and overhauling planes or aircraft motors.[163] Those in the electrical industries field included student operation of the school power plant, wiring jobs, and repairing electrical equipment.[164] Through installation of campus refrigeration and heating units the students in air conditioning carried on their projects.[165]

In the mid-1930's the financial situation of the institution brightened considerably and remained excellent until 1942. During

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[162] El Mustang, October 31, 1941, p. 4.

[163] McPhee, Annual Report to the State Board of Education, 1938, p. 16; ibid., 1939, p. 18; ibid., 1940, p. 22; San Luis Obispo Telegram-Tribune, September 21, 1939, p. 1.

[164] McPhee, Report to the State Board of Education, 1937, p. 12; ibid., 1938, p. 17; ibid., 1939, p. 19; ibid., 1941, p. 18.

[165] Ibid., 1937, p. 12; ibid., 1938, p. 17; ibid., 1939, p. 18; ibid., 1940, p. 22; ibid., 1944, p. 5.

the spring of 1935 the legislature made a biennial appropriation of $208,600 for the institution, an increase of about 35 per cent over the allotment voted two years earlier.[166]

More important than this action was the enactment of legislation which resulted in the provision of ample funds for the school until World War II. The 1933 legislature legalized pari-mutuel wagering at horse racing tracks and established the California Horse Racing Board, giving this body supervision over the Fair and Exposition Fund, a sum made up from fees, commissions, and other moneys received by the Board.[167] A part of the Fair and Exposition Fund, according to the law, was to be used in training for "vocational education in agriculture, animal husbandry, and kindred subject."[168]

Legislation in 1935 specifically allocated a certain portion of the Fund to the California Polytechnic School; of that part of the Fund reckoned as the share of the state - after certain deductions were made for the State Fair and for certain district and county fairs - the Polytechnic was to receive one-third of the remaining, or so-called second balance.[169] An amendment in 1937 reduced to one-fourth the portion of the second balance to be allotted to the Polytechnic.[170]

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[166] Statutes of California, 1935, pp. 1195-96.

[167] Ibid., 1933, pp. 2047-52.

[168] Ibid., 2053

[169] Ibid., 1935, p. 1588.

[170] Ibid., 1937, p. 2293.

These laws were highly beneficial to the school. The following chart shows in round figures the increasing value of the allotments received by the Polytechnic from the Fair and Exposition Fund during the three biennial periods commencing with July 1, 1935.[171]

Biennium	Polytechnic Share of Fair and Exposition Fund	Total Expenditure	Per Cent of Total Polytechnic Expenditure Coming From Fair and Exposition Fund
1935-1937	$49,000	$593,500	8%
1937-1939	$580,000	$1,092,000	55%
1939-1941	$1,050,000	$1,110,000	94%

During some of these years the Polytechnic administration returned to the state general fund unused portions of the allotment from the race track fund.[172]

In 1937 President McPhee completed plans for a permanent building program on the campus.[173] In line with his recommendations the physical plant underwent extensive improvement and expansion between 1937 and 1942. During the first two years of this period, at the cost of approximately $100,000, five major farm units were built and equipped. These included a modern swine unit, a beef feeding barn,

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[171]Compiled from State of California Budget for the Biennium July 1, 1937 to June 30, 1939 (Sacramento, 1939), 237; ibid., 1939-1941, p. 241; ibid., 1941-1943, p. 268.

[172]San Luis Obispo Telegram-Tribune, January 19, 1942, p. 1.

[173]McPhee, Report to the State Board of Education, 1937, pp. 23-26.

and a new bull barn, the former bull barn was renovated and put to use as a veterinary hospital.[174]

At the same time workmen completed a row of classrooms. Containing 15,000 square feet of floor space these wooden structures were earmarked for the use of classes in air conditioning, physics, chemistry, biological sciences, music, landscaping, and for the library collection.[175] In 1938 a storeroom building, combining a receiving department and storage area with carpentry and repair shops went into use.[176]

As these new structures were finished, students landscaped the areas around them installing lawns, plants, shrubs, and trees.[177]

Of importance to the athletic program was the construction of an $88,000 natatorium, forming a wing of Crandall Gymnasium, and officially opened in May, 1938.[178] About four months later two new tennis courts were completed.[179] The athletic field was graded and fenced, provided with wooden stands capable of seating 4000 spectators, and equipped with a public address system and eight batteries of lights.[180]

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[174] Ibid., 1939, p. 10; El Mustang, November 4, 1938, p. 1; San Luis Obispo Daily Telegram, November 3, 1938, p. C3.

[175] El Mustang, November 4, 1938, p. 4; San Luis Obispo Daily Telegram, May 10, 1938, p. 1.

[176] McPhee, Annual Report to the State Board of Education, 1939, p. 10.

[177] Ibid., 10-11; El Mustang, November 4, 1938, p. 3.

[178] San Luis Obispo Daily Telegram, May 9, 1938, p. 2.

[179] Ibid., November 3, 1938, p. 3.

[180] Ibid., August 22, 1938, p. 3; June 8, 1938, p. 1; September 8, 1938, p. 3; El Mustang, November 4, 1938, p. 3; September 15, 1939, p. 1; McPhee, Report to the State Board of Education, 1938, p. 10.

Included among other improvements and additions at the Polytechnic at this time were a bus, three wells and an additional pump, new firefighting apparatus, and a garage for storing state automobiles. An erosion project, designed to check further loss of topsoil, was carried out over one hundred acres of the campus; workmen straightened the road under the Southern Pacific Railroad tracks and built a new bridge across Stenner Creek.[181]

During the autumn of 1938 construction started on a new air conditioning structure, a sheep unit, and six cottage-type dormitories, each capable of housing twelve students.[182] With the dormitories ready for occupancy a year later there were accommodations on campus for 375 men.[183]

In 1939 eight small poultry houses and a storage area for the landscaping department made their appearance.[184] The calendar year

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[181]McPhee, Report to the State Board of Education, 1938, pp. 10-11.

[182]Ibid., 1940, p. 13; San Luis Obispo Daily Telegram, August 25, 1938, p. 1; January 19, 1939, p. A1.

[183]San Luis Obispo Telegram-Tribune, August 11, 1939, p. 1.

[184]McPhee, Annual Report to the State Board of Education, 1940, p. 14.

1940 saw the completion of the Air Conditioning Building,[185] the main sheep unit, including barns and project sheds capable of housing 500 animals,[186] a poultry sales structure, as well as barns and paddocks for the Thoroughbred horse breeding program.[187] The campus now included more than thirty major buildings.[188]

In 1940 Anderson Hall and the Administration Building, both more than three decades old, were razed.[189] On their site workmen completed in the summer of 1942 a three-storied $300,000 structure[190] which housed the offices of the Bureau of Agricultural Education and of the Polytechnic School administration and included classrooms, the library, the print shop, and the student store.[191]

In the early 1940's having an appropriation of $14,000 for this purpose, officials of the State Division of Highways,[192] directed

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[185] Polytechnic Californian, June 7, 1940, p. 4.

[186] San Luis Obispo Telegram-Tribune, December 29, 1939, p. 4.

[187] Ibid., September 25, 1940, p. 3; Polytechnic Californian, September 20, 1940, p. 1; El Rodeo, 1941, p. 103.

[188] El Rodeo, 1940, p. 13.

[189] Polytechnic Californian, May 2, 1940, p. 2.

[190] This was called the Administration Building; with its clock tower it was the outstanding structure on the campus.

[191] El Mustang, October 31, 1941, p. 4; California State Polytechnic Circular of Information, 1942-1943, p. 20.

[192] A statute of 1935 placed upon the Division of Highways the responsibility for the construction and upkeep of roads within the Polytechnic campus; see Statutes of California, 1935, p. 259.

the resurfacing of all Polytechnic streets and the construction of needed parking areas and of several new roads on campus and farm.[193]

An important addition to the California Polytechnic was the gift of a 150 acre educational plant located between Covina and San Dimas in Los Angeles County.

Charles B. Voorhis, a Pasadena philanthropist, established in the 1920's the Voorhis School, an institution he operated for almost a decade as a home and training center for needy boys.[194] Having decided in the mid-1930's to give up this work, Mr. Voorhis sought to donate his school to an educational institution having as its objective the provision of "opportunities of a practical nature for worthy youths."[195] Concluding that the California Polytechnic was best qualified in this respect, he offered to deed to the state of California the $1,500,000 institution on the condition that it would be operated permanently as a unit of the Polytechnic. In 1938 the State Board of Education officially accepted the donation and designated the plant as the "Voorhis Unit of the California Polytechnic School."[196]

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[193]Polytechnic Californian, April 26, 1940, p. 4.

[194]McPhee, Annual Report to the State Board of Education, 1939, p. 3.

[195]San Luis Obispo Daily Telegram, September 3, 1938, p. 1; June 6, 1939, p. 3.

[196]"Minutes of the State Board of Education," October 14-15, 1938, p. 979.

With the exception of a gymnasium the Voorhis Unit was completely equipped for educational purposes. It included an administration building, classrooms, a library, a non-sectarian chapel, four dormitories, faculty homes, shop facilities, an infirmary, a swimming pool, tennis courts, paved roads, greenhouses, and thrity-five acres of citrus, avocado, and walnut trees.[197]

During the autumn of 1938 the Polytechnic Administration transferred all work in citrus and deciduous fruits and in agricultural inspection from the home campus to the Voorhis Unit; five staff members from San Luis Obispo moved to San Dimas to instruct the eighty students in attendance there.[198] By the following year the enrollment at the Voorhis Unit had increased to 110, its faculty to eight instructors, and a major in landscaping had been added to its curricula.[199] Vernon H. Meacham, appointed by President McPhee as director of the Voorhis Unit, served in this capacity until 1943 when the San Dimas branch was closed for the duration of World War II.[200]

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[197] California Schools (Sacramento) IX (October, 1938), 216.

[198] McPhee, Annual Report to the State Board of Education, 1939, p. 3.

[199] El Mustang, September 15, 1939, p. 1; Bulletin of the California Polytechnic School, 1939, p. 15; Polytechnic Californian, April 5, 1940, p. 3.

[200] Bulletin of the California Polytechnic School, 1940-41, p. 5; McPhee, Annual Report to the State Board of Education, 1944, p. 22.

In athletic competition the Voorhis Unit fielded teams in basketball and baseball, both coached by Meacham.[201] The students issued a newspaper,[202] had their own clubs, and organized Poly Vue Day, a counterpart of the Poly Royal festivities at San Luis Obispo.[203]

In 1940 the cafeteria and several greenhouses at San Dimas were renovated. At this branch of the Polytechnic the majority of students were primarily interested in the field of agricultural inspection.[204]

During the late 1930's and early 1940's co-curricular activities at the Polytechnic continued to widen and to include an ever increasing number of students. For example, at San Luis Obispo, of the thirty campus organizations of 1942, twelve had been formed prior to 1937, but eighteen were comparatively new, having been established within the preceding five years. The recently organized groups were the following:[205] Press Club; Rodeo Club; Ski Club; Boots and Spurs, open to students majoring in animal husbandry; Los Lecheros, for

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[201] El Rodeo, 1939, pp. (101-119).

[202] At first named the Bronc's Cheer and later changed to Poly Views during 1941-1942. See El Rodeo, 1942, p. (144).

[203] Polytechnic Californian, April 5, 1940, p. 4; El Rodeo, 1942, pp. 139; 146-151.

[204] Polytechnic Californian, April 5, 1940, p. 3; El Rodeo, 1941, p. (133).

[205] California State Polytechnic Circular of Information, 1937-1938, p. 32; ibid., 1942-1943, p. 34; El Rodeo, 1939, p. (59); ibid., 1941, p. (128); El Mustang, February 24, 1939, p. 3.

students specializing in dairying; Mustang Masquers, a drama group; California Young Farmers, which replaced the campus chapter of the Future Farmers of America in 1942 to distinguish the California Polytechnic group from high school chapters of the Future Farmers;[206] Golden Key, an honor society open to all students with high scholastic standing; Alpha Gamma Epsilon, a service fraternity for air conditioning students, basing its membership on scholarship, leadership, and personality; Sigma Phi Kappa,[207] organized by instructor Wilbur Howes, a service fraternity for those interested in the boy scout movement; and clubs for the residents of each of the eight new dormitories.

The twelve organizations of long standing were the Aeronautics Club, the Crops Club, the Air Conditioning Club, the Block "P" Association, Gamma Pi Delta, the Horticulture Club, the Poly Phase Club, the Poultry Club, Chase Dormitory Club, Deuel Dormitory Club, Jesperson Dormitory Club, and Heron Dormitory Club.[208]

Activities in the field of music expanded considerably following the arrival at the Polytechnic of Harold P. Davidson in September of

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[206] El Rodeo, 1942, p. 117.

[207] El Mustang, December 1, 1939, p. 1; El Rodeo, 1940, p. 55.

[208] California State Polytechnic Circular of Information, 1942-1943, p. 34.

1936.[209] That autumn the school band increased to twice its size of previous years. Clad in smart new uniforms its members provided spectators with a new type of entertainment by performing marching maneuvers during the half time periods of football games.[210] During the year Davidson organized the "Collegians," a dance orchestra, which made its first public appearance at the 1936 Christmas Formal and performed for the Block "P" dance the following spring.[211]

To advertise the Polytechnic and to increase interest in the glee club, Davidson arranged annual trips for this organization. In 1938 the glee club made its first tour, entertaining assemblies at fourteen California high schools between Taft and Gustine.[212] To meet expenses of the trip the glee club members presented a program of songs, skits, and stunts to a San Luis Obispo audience.[213] In the next few years glee club activities grew;[214] in addition to giving two home concerts annually, each spring its members appeared before thousands of persons in various high school audiences.[215]

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[209]McPhee, Report to the State Board of Education, 1937, p. 22.

[210]El Rodeo, 1937, p. (51).

[211]Ibid., (52;86).

[212]Ibid., 1938, p. (40).

[213]San Luis Obispo Daily Telegram, May 4, 1938, p. 8.

[214]El Mustang, January 19, 1940, p. 3.

[215]San Luis Obispo Telegram-Tribune, May 15, 1939, p. 8.

All phases of the Polytechnic music program flourished under Davidson's leadership. By 1941 the glee club included more than sixty students, and nine different vocal and instrumental groups provided entertainment at various campus events.[216]

During the years 1935-1941 the exploits of the football team overshadowed the Polytechnic athletic program. Under the coaching of Howard O'Daniels, whose squads suffered only one losing season (1939)[217] in the nine year span 1933-1941, the football squads brought considerable publicity to the California Polytechnic.

From 1932 to 1937 the Polytechnic was a member of the Central California Coast Conference, wherein its chief competition came from Salinas Junior College and Santa Maria Junior College.[218] Teams from the San Luis Obispo institution found strong competition in this league in basketball, baseball, and track, but such was not the case with football. After the football eleven won its fourth consecutive conference championship in 1936,[219] Polytechnic officials decided to terminate the affiliation of the school with the Central California Coast Conference; commencing with the autumn of 1937 Polytechnic teams competed independently.[220]

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[216] El Rodeo, 1941, p. 50.

[217] El Mustang, December 8, 1939, p. 4.

[218] See page 160

[219] El Rodeo, 1937, p. (89).

[220] California State Polytechnic Circular, 1938, p. (33).

With each succeeding year the football team met stronger opponents. Gradually its schedule came to include such four-year institutions as Arizona State and St. Mary's of Texas in addition to the California state colleges at Arcata, Chico, and San Francisco.[221]

Starting in 1936 with a game at Flagstaff, Arizona, the football squads enjoyed trips beyond the boundaries of California.[222] In 1937 the team defeated Idaho (Southern) in a close contest at Pocatello.[223]

The 1938 season was particularly successful as the squad won seven of its nine games although the majority of its contests were with four year colleges.[224] Both 1940 and 1941 were winning years notwithstanding the increasingly stiffer schedules.[225]

Competition in basketball, baseball, and track continued throughout this period. During the concluding two years of Polytechnic membership in the Central California Coast Conference the track team was quite successful, placing third in the annual meet of 1936[226]

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[221] El Rodeo, 1938, pp. (81-85).

[222] Ibid., 1937, p. (95).

[223] Ibid., 1938, p. (83).

[224] Ibid., 1939, p. (117).

[225] Ibid., 1941, p. 104; ibid., 1942, p. 93.

[226] Ibid., 1936, p. (87).

and second in 1937.[227] A feature of the 1939 Poly Royal festivities was the Polytechnic Relays, a night track event in which Polytechnic athletes defeated opposing teams from Santa Maria and San Luis Obispo Junior Colleges.[228]

Completion of the indoor plunge was a great asset to the Polytechnic swimming team. The squad met several junior colleges in the campus pool during the spring of 1939,[229] and the following year San Francisco State College provided the Polytechnic swimmers with their first full-fledged collegiate competition.[230]

Additional athletic activity took place in tennis under the sponsorship of George Drumm,[231] in fencing, coached by Dr. Woodford Bowls,[232] and in boxing.[233] A rodeo team from the Polytechnic won the intercollegiate rodeo at Victorville in 1940.[234]

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[227] Ibid., 1937, p. (101).

[228] San Luis Obispo Daily Telegram, March 24, 1939, p. 7; March 25, 1939, p. 5.

[229] Ibid., March 10, 1939, p. 1; May 2, 1939, p. 4.

[230] El Rodeo, 1940, p. 129.

[231] Ibid., 1936, p. (81).

[232] El Mustang, September 15, 1939, p. 4; El Rodeo, 1940, p. (129).

[233] El Rodeo, 1935, p. (89); ibid., 1936, p. (81).

[234] Ibid., 1940, p. 91.

By the early 1940's the Polytechnic sports program included competition in football, basketball, baseball, track, boxing, tennis, swimming, fencing, and rodeo.[235]

Students at the Polytechnic continued to produce their annual, El Rodeo, during the 1930's, but from the spring of 1932 until the autumn of 1938 they had no campus newspaper.[236] This deficiency was corrected largely through the efforts of student body president Harry Wineroth. During his first few months in office Wineroth persuaded Tom McGrath to accept the post of editor, and with the issue of November 4, 1938, El Mustang made its appearance.[237] For the balance of the academic year the paper was published twice a month; then commencing with the autumn of 1939 it appeared as a weekly between September and May until it was temporarily discontinued in 1942.[238]

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[235]San Luis Obispo Daily Telegram, March 7, 1939, p. 5; May 8, 1939, p. 5; El Rodeo, 1937, p. (103); ibid., 1938, pp. (94-100); ibid., 1940, p. 123.

[236]El Mustang, November 4, 1938, p. 1.

[237]San Luis Obispo Daily Telegram, November 15, 1938, p. 8. McGrath resigned and was followed by a second editor who was replaced during the spring of 1939.

[238]In February of 1940 the students changed the name of the paper to the Polytechnic Californian; then in January, 1941, at the urging of faculty adviser Robert Kennedy, they returned to the title, El Mustang.

As student body president, Wineroth succeeded in reaching a settlement regarding various misunderstandings which had arisen between the local San Luis Obispo High School boys and the Polytechnic students; moreover, through his persuasion the Polytechnic students erected a large concrete "P" - forty by thirty-five feet - on the hill to the east of the main campus buildings.[239]

In the late 1930's student body expenditures increased considerably. For the academic year 1939-1940 the SAC[240] apportioned a $5,000 budget as follows:[241]

Athletics	$2000
El Rodeo	750
El Mustang	500
Poly Royal	500
Band and Music	350
General Fund	750
Reserve	150

In addition to continuing its function of scheduling assemblies, rallies, and dances during this period,[242] the SAC selected an official school ring and established the precedent of sending the student body president to annual meetings of the Pacific Student Presidents' Association.[243] Occasionally it approved special

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[239] El Rodeo, 1939, p. (79).

[240] Student Affairs Council; see page 16.

[241] El Mustang, October 6, 1939, p. 1.

[242] Ibid., September 22, 1939, p. 1; El Rodeo, 1940, p. 30.

[243] El Rodeo, 1937, p. (37); ibid., 1938, p. (15).

appropriations. In 1940 the SAC granted funds for new band uniforms and the following year helped to finance a rodeo team trip to Tucson, Arizona.[244]

In 1940, on being presented by the SAC with a list of recommended revisions to the student body constitution,[245] the students accepted twenty-seven of the proposed changes, additions, and amendments, including one which permitted the employment of a graduate manager.[246] The following year John Carricaburu[247] accepted an appointment as graduate manager of the student body, relieving the SAC of many of the financial duties it had formerly performed.[248]

The campus store, long used by the students as a convenient meeting place for informal discussions and relaxation, increased in popularity following its complete renovation in 1937.[249] Added attractions, installed while Coach Howard O'Daniels was manager of the "Co-op,"[250] included a soda fountain, a coca cola dispensing machine, and a Heinz Bean Kettle.[251]

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[244] Ibid., 1940, pp. 30-31; ibid., 1941, p. 37.

[245] El Mustang, January 12, 1940, p. 1.

[246] Polytechnic Californian, June 7, 1940, p. 2.

[247] Carricaburu had served as student body president in 1939-1940. See El Rodeo, 1940, p. (29).

[248] El Mustang, September 5, 1941, p. 1.

[249] El Rodeo, 1937, p. (27).

[250] El Mustang, January 13, 1939, p. 1.

[251] Polytechnic Californian, February 16, 1940, p. 3.

During the late 1930's the Poly Royal celebrations underwent expansion. Although these affairs continued to emphasize the agricultural aspects of the institution, departments in the industrial division gradually took a more active part in them. In 1937 the electrical industries students prepared a display of the most recent electrical devices used on the modern farm, and those majoring in air conditioning showed heating, ventilating, and refrigeration equipment.[252] All twelve Polytechnic departments participated in the 1939 open house which featured modern dairy methods and a landscaping exhibit.[253] The following year the Poly Royal executive committee began the practice of awarding a silver cup each spring to the industrial division department producing the most attractive display.[254]

By 1940 the annual Poly Royal celebrations were two days in length. They included exhibits of student projects ranging from poultry to electrical gadgets, a rodeo,[255] a barbecue, band music, contests such as goat milking and ladies' nail driving, exhibitions of horsemanship and tractor driving, and a formal dance as the

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[252] El Rodeo, 1937, p. (87).

[253] San Luis Obispo Daily Telegram, March 20, 1939, p. 3.

[254] El Mustang, February 2, 1940, p. 1.

[255] The Boots and Spurs Club sponsored the rodeos; see El Mustang, January 12, 1940, p. 3.

closing event.[256] As many as 8000 persons attended these open houses.[257]

A Thoroughbred Horse Breeding Project, jointly sponsored by the California Breeders' Association and the California Polytechnic, was established on the San Luis Obispo campus in late 1940.[258] The Polytechnic administration agreed to provide the physical facilities, to act as a centralizing agency within the state for stud books and other Thoroughbred information, and to train young men to raise and handle these horses. As its part of the program the Breeders' Association furnished mares and arranged to breed them to outstanding stallions from year to year.[259] An original donation of four mares in foal reached San Luis Obispo in December, 1940, and a fifth animal was delivered to the campus a month later.[260] Among these Thoroughbreds was "Bon Eva," a gift from Bing Crosby.[261]

Following the construction of new barns and the provision of proper paddocks and pastures for the Thoroughbreds, a special

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[256] Polytechnic Californian, April 5, 1940, supplement, pp. 1-4.

[257] San Luis Obispo Telegram-Tribune, April 25, 1940, p. 11.

[258] El Rodeo, 1941, p. 103.

[259] McPhee, Annual Report to the State Board of Education, 1941, p. 23.

[260] San Luis Obispo Telegram-Tribune, January 29, 1941, p. 5.

[261] Ibid., December 9, 1940, p. 1.

ceremony took place on the college grounds on December 8, 1940. On this occasion President McPhee pointed out that the Polytechnic was cooperating in this program for three reasons: students would be provided with training in horse breeding, stimulus would be furnished to the breeding of Thoroughbreds, and the college had obligations to horse racing, as from the wagering on this sport it received considerable financial assistance.[262]

Under the supervision of Lyman Bennion, instructor in animal husbandry, the Thoroughbred project moved forward successfully.[263] Three colts, foaled in the spring of 1941,[264] were sold during the summer of 1942 with the proceeds of the sale reverting to the Polytechnic for the upkeep of the Thoroughbred program.[265]

The project was of particular value to the college as it provided animal husbandry students with the opportunity "to work with Thoroughbreds, study feeding methods, watch the progress of foals and become generally acquainted with the skills and practices in Thoroughbred horse production."[266]

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[262] Ibid.

[263] McPhee, Annual Report to the State Board of Education, 1941, p. 23; ibid., 1942, p. 31; ibid., 1944, p. 16.

[264] San Luis Obispo Telegram-Tribune, March 10, 1941, p. 8.

[265] McPhee, Annual Report to the State Board of Education, 1944, p. 16; San Luis Obispo Telegram-Tribune, July 11, 1942, p. 6; July 15, 1942, p. 3.

[266] McPhee, Annual Report to the State Board of Education, 1944, p. 16.

The first several years of World War II had only moderate effect upon the Polytechnic. From 1939 to the end of 1942 normal operation of the institution continued while the administration and staff of the school cooperated with several federal agencies in carrying on special programs designed to bolster national defense. Starting with January of 1943 came a distinct change. From then until early 1946 the primary activity of the Polytechnic lay in training several thousand naval aviation cadets.

The earliest preparedness project established at the institution was set up in the autumn of 1939 in response to a request from the Civil Aeronautics Authority.[267] A part of the nation-wide Civil Pilot Training Program, the San Luis Obispo course comprised 72 hours of ground school under the direct supervision of Polytechnic Aeronautics Department instructors and 35 hours of flight training given by licensed pilots at the San Luis Obispo County Airport.[268] Sixty-one Polytechnic students completed this course the first year it was available,[269] and by early 1942, when the Civil Aeronautics Authority

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[267]San Luis Obispo Telegram-Tribune, September 20, 1939, p. 1; July 20, 1940, p. 1; El Mustang, September 22, 1939, p. 1; September 29, 1939, p. 1.

[268]McPhee, Annual Report to the State Board of Education, 1941, p. 9.

[269]El Mustang, January 19, 1940, p. 1; Polytechnic Californian, September 20, 1940, p. 2; October 4, 1940, p. 1; San Luis Obispo Telegram-Tribune, March 22, 1940, p. 1.

discontinued the San Luis Obispo program,[270] 118 men had been graduated from it.[271] By January of 1942, 32 of these trainees had enlisted in the Army Air Corps, 14 in the Naval Air Corps, and one each in the Royal Air Force and Canadian Royal Air Force.[272]

Because of its emphasis on technical and vocational training the Polytechnic was admirably suited to prepare workers for special war time jobs.[273] In this respect the contribution of the college was of far greater consequence than its production of aircraft pilots.[274] Between October of 1940 and February of 1943, in addition to carrying on the regular program of the institution, the Polytechnic administration and staff provided emergency training for approximately 3500 men and women.[275]

During the autumn of 1940 two special activities, the National Youth Authority Resident Project and the Adult National Defense

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[270]The Polytechnic program was discontinued because the college was located in the combat zone; see El Mustang, February 6, 1942, p. 1.

[271]McPhee, Annual Report to the State Board of Education, 1942, p. 7.

[272]Ibid.

[273]Ibid., 1941, p. 9.

[274]El Rodeo, 1942, p. 40.

[275]McPhee, Annual Report to the State Board of Education, 1942, p. 11.

Training Program, commenced on the San Luis Obispo campus.[276] The first of these undertakings stemmed from an agreement reached by college representatives with the National Youth Authority to the effect that the school would cooperate in preparing skilled workers in welding, machine shop, aircraft and sheet metal occupations.[277]

Shortly after workmen completed the first unit[278] of the Polytechnic National Youth Authority Resident Center structures in October of 1940, 116 National Youth Authority men moved into quarters on the campus and started training.[279] The following spring, after additional dormitories were finished, the Polytechnic National Youth Authority project was at peak operation with 240 trainees in residence.[280] For these youths the original plan called for a six months' course, but after American entry into the war, their training period was reduced to ninety days.[281] At the Polytechnic, the National Youth Authority recruits, ranging in age from seventeen to

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[276] Ibid., 1941, p. 10.

[277] San Luis Obispo Telegram-Tribune, July 5, 1940, p. 1; July 12, 1940, p. 1; July 18, 1940, p. 1.

[278] Included a dining hall, recreation room, infirmary, and dormitories.

[279] Polytechnic Californian, October 18, 1940, p. 1.

[280] El Rodeo, 1942, p. (40); San Luis Obispo Telegram-Tribune, March 13, 1941, p. 3.

[281] McPhee, Annual Report to the State Board of Education, 1942, p. 6.

twenty-five, spent four hours a day in shops or classes and four additional hours in project work.[282]

Meanwhile the Adult National Defense Training Program, set up to provide training "in machine shop, welding and aircraft sheet metal for men out of school, WPA workers and men recommended by the California State Department of Employment"[283] was also under way. A trainee in this category received daily instruction from 4:00 P.M. to 10:30 P.M. over a period of twelve weeks.[284]

To handle the increased load at the school, President McPhee added six staff members and scheduled shop operation twenty-four hours a day.[285] The pressure on regular facilities was eased somewhat after the National Youth Authority financed the construction of a prefabricated machine shop and of an aircraft sheet metal shop.[286]

The National Youth Authority Resident Project and the Adult National Defense Training Program reached their height in San Luis

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[282]Polytechnic Californian, September 20, 1940, p. 1; November 1, 1940, p. 1; El Mustang, September 26, 1941, p. 1.

[283]McPhee, Annual Report to the State Board of Education, 1942, p. 6.

[284]San Luis Obispo Telegram-Tribune, December 3, 1940, p. 1.

[285]McPhee, Annual Report to the State Board of Education, 1942, p. 10.

[286]San Luis Obispo Telegram-Tribune, March 13, 1941, p. 3.

Obispo during the last six months of 1941 when under their auspices 1265 persons received defense training on the Polytechnic campus.[287]

In 1942 the Polytechnic staff provided two additional projects tied in with the war effort. Trainees in these programs were required to complete courses running forty-eight hours a week for three months.[288]

For men and women preparing to work in United States Air Depots classes began during March in radio repair, aircraft sheet metal, aircraft maintenance, and aircraft engines. A total of eighty persons were graduated from these courses.[289]

By completing a special radio training program offered during the last six months of 1942, 120 men qualified as United States Signal Corps radio repairmen.[290]

Operation from 1939 to 1942 of the various special defense projects described above did not materially affect the normal functioning of the Polytechnic. For almost a year after the United States declared war the college underwent only gradual changes.

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[287]McPhee, Annual Report to the State Board of Education, 1942, p. 4.

[288]San Luis Obispo Telegram-Tribune, January 27, 1942, p. 1; June 11, 1942, p. 12; November 5, 1942, p. 1; December 18, 1942, p. 1.

[289]McPhee, Annual Report to the State Board of Education, 1944, p. 11.

[290]San Luis Obispo Telegram-Tribune, August 14, 1943, p. 6.

Registration figures began to decline in the autumn of 1942,[291] and the number of regular students dropped twenty per cent to 570 for the academic year 1942-1943.[292]

Because the United States War Department banned horse racing in California, early in 1942 the Polytechnic lost what had been its sole source of financial support since 1937.[293] A few days after this decision of the military authorities became public, President McPhee appeared before the state legislature with the request for funds to carry the Polytechnic through the ensuing eighteen months.[294] The action of the legislature at this time and during the next several sessions was to provide the college with adequate funds for its war time activities. It allotted the institution $344,000 for 1942-1943,[295] and for the biennium ending June 30, 1945, the Polytechnic was granted $485,871.[296]

In December, 1942, two months after a group of naval officers had inspected the San Luis Obispo campus facilities,[297] came the

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[291] Ibid., September 4, 1942, p. 8.

[292] "Records of Enrollments," 1.

[293] San Luis Obispo Telegram-Tribune, January 8, 1942, p. 1; February 5, 1943, p. 5.

[294] Ibid., January 13, 1942, p. 1.

[295] Statutes of California, 1941-1942, 1943, pp. 11-12; 113.

[296] Ibid., 284.

[297] San Luis Obispo Telegram-Tribune, October 21, 1942, p. 1.

announcement of the selection of the Polytechnic as one of seventeen United States Naval Flight Preparatory Schools.[298] Within a few weeks President McPhee terminated all other war training projects at the institution.[299] From January of 1943 to the end of 1945 two naval preparatory programs took precedence over all activities at the Polytechnic.

This new phase of wartime service at San Luis Obispo started when a battalion of 200 cadets "came aboard" on January 6, 1943, to commence their ninety days' instructional period at the Polytechnic.[300] With the arrival of a second battalion in February and a third in March, the pre-flight school reached a complement of 600 trainees.[301] During the year eleven battalions comprising 2200 cadets received training in the Polytechnic Flight Preparatory Program.[302]

On November 29, 1943, navy officials designated the Polytechnic as a "Fleet School." Henceforth cadets assigned to it would be

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[298] Ibid., December 17, 1942, p. 1.

[299] California State Polytechnic College Circular of Information, 1944-1945, p. 8.

[300] San Luis Obispo Telegram-Tribune, January 7, 1943, p. 1; McPhee, Annual Report to the State Board of Education, 1944, p. 12.

[301] San Luis Obispo Telegram-Tribune, February 5, 1943, p. 6; March 5, 1943, p. 6.

[302] McPhee, Annual Report to the State Board of Education, 1944, p. 12.

drawn from Navy and Marine Corps enlisted personnel, its battalion strength was increased to 280, and its total complement to 840 men.[303] Thus organized the Polytechnic Pre-Flight school continued until November of 1944 when this phase of naval training was terminated throughout the United States.[304] All told, approximately 3600 naval aviation cadets were graduated from the California Polytechnic Naval Flight Preparatory School.[305]

From the summer of 1944 to January, 1946, the Polytechnic administration and staff provided training for more than 1100 men under a second naval plan, the Naval Academic Refresher Unit Program.[306] This project and the earlier established Naval Flight Preparatory School operated concurrently on the San Luis Obispo campus from July to November of 1944.[307]

On the basis of their performance on entrance examinations, trainees in the academic refresher plan were placed in eight, sixteen, or twenty-four week courses in history, physics, English, mathematics, and physical education. During the summer of 1945

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[303] Ibid., 1946, p. 1.

[304] San Luis Obispo Telegram-Tribune, October 6, 1944, p. 1.

[305] McPhee, Annual Report to the State Board of Education, 1946, p. 2.

[306] Ibid., January, 1947, p. 1.

[307] California State Polytechnic College Circular of Information, 1944-1945, p. 8.

with an enrollment exceeding 500, the California Polytechnic Naval Academic Refresher Unit was the largest of eight such schools in the country.[308] On the average, from 250 to 300 men were in this program at San Luis Obispo.[309] They retained their regular service ratings and were permitted to participate in all regular college activities.[310]

Installation and operation of the naval training programs, while maintaining the regular Polytechnic curricula and activities, presented President McPhee with administrative and instructional problems. In 1942 he promoted C. O. McCorkle to the position of assistant to the President;[311] the following year he expanded his administrative staff by appointing Donald S. Nelson as comptroller, Eugene A. Egan as registrar, and C. Paul Winner as acting recorder.[312] C. E. Knott continued as head of the Industrial Division, Oscar F. Lucksinger was chairman of the Division of Related Subjects, and James F. Merson was farm superintendent.[313]

For the naval projects regular faculty members were well qualified to teach the requisite mathematics, history, physics, communications, and English; during December of 1942, to prepare for new

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[308] San Luis Obispo Telegram-Tribune, August 11, 1945, p. 1.

[309] Ibid., March 13, 1945, p. 1; August 11, 1945, p. 1.

[310] Ibid., July 28, 1944, p. 1; August 5, 1944, p. 1.

[311] Ibid., September 4, 1942, p. 3.

[312] California State Polytechnic Circular of Information, 1944-1945, p. 6.

[313] Ibid., 14-16.

teaching assignments eight instructors took naval refresher courses in navigation.[314] By the summer of 1943 eleven staff members had left the Polytechnic for the armed services or war production jobs.[315] To balance this loss and to provide a sufficient instructional corps for the Naval Flight Preparatory trainees, President McPhee added nineteen new instructors to the staff;[316] by 1944 the Polytechnic faculty had been increased to forty-six persons.[317]

In addition to the civilian teachers, twenty-five commissioned naval officers were stationed on campus to handle drill, physical education, ship and aircraft recognition, and disciplinary problems in connection with the pre-flight programs.[318]

The establishment of the naval training programs made it possible for President McPhee to retain most of the regular Polytechnic staff[319] and for the college to continue to offer that part of

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[314] San Luis Obispo Telegram-Tribune, December 26, 1942, p. 5; January 4, 1943, p. 1.

[315] Ibid., May 20, 1942, p. 5; June 11, 1942, p. 9; August 14, 1943, p. 1; Mustang Roundup, October, 1942, p. 10.

[316] Mustang Roundup, July, 1943, p. 13; San Luis Obispo Telegram-Tribune, August 14, 1943, p. 6.

[317] San Luis Obispo Telegram-Tribune, August 14, 1943, pp. 1; 6; McPhee, Annual Report to the State Board of Education, 1944, p. 12.

[318] McPhee, Annual Report to the State Board of Education, 1944, p. 13.

[319] San Luis Obispo Telegram-Tribune, December 18, 1945, p. 1.

the curricula for which there was demand at the San Luis Obispo campus.[320] The faculty provided instruction between six and ten o'clock in the evening for civilian students, who were for the most part men rejected by the armed services because of physical defects or youths less than eighteen years of age.[321] Classes and laboratories for non-military persons were quite small as the Polytechnic civilian enrollment fell to 80 in 1943-1944 and was only 128 the following year.[322] The institution granted nine bachelor of science degrees in 1944 and three in 1945.[323]

Co-curricular activities for Polytechnic students fell off considerably during the war years. In the field of publications the Mustang Roundup, a monthly pictorial magazine, replaced both El Mustang and El Rodeo from October of 1942 until the autumn of 1945.[324] Polytechnic athletes engaged in little interschool competition in 1943-1944; during these two years the institution did not

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[320]Mustang Roundup, September, 1943, p. 5; San Luis Obispo Telegram-Tribune, December 18, 1945, p. 1; McPhee, Annual Report to the State Board of Education, 1946, p. 4.

[321]San Luis Obispo Telegram-Tribune, January 4, 1943, p. 5; Mustang Roundup, September, 1943, p. 5.

[322]"Records of Enrollments," 1.

[323]Mustang Roundup, June, 1944, p. 8; San Luis Obispo Telegram-Tribune, June 1, 1945, p. 1.

[324]El Mustang, October 26, 1945, p. 2; El Rodeo, 1946, p. 46.

field football teams,[325] and only in basketball, a sport in which the Naval Academic Refresher Unit trainees took part, was there considerable activity.[326]

The annual Poly Royal celebrations were reduced in scope but continued to include departmental displays, the barbecue, and the coronation ball; new attractions in 1943 and 1944 were war bond auctions and performance of mass calisthenics by the naval trainees.[327]

During 1942-1945 the college swine, sheep, poultry, dairy and beef cattle, and the Thoroughbred horse units were maintained.[328] Polytechnic students continued to show outstanding animals at various California fairs; at the 1944 Great Western Livestock Show in Los Angeles a Polytechnic steer, Poly Jock, was named grand champion.[329]

From mid-1943 for three years the Polytechnic served as state headquarters for the Food Production War Training Program which

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[325]Mustang Roundup, October, 1943, p. 2; September, 1944, p. 5; December, 1944, p. 16.

[326]Ibid., April 10, 1943, p. 7; February, 1944, p. 22; December, 1944, p. 16; March, 1945, p. 9; San Luis Obispo Telegram-Tribune, December 23, 1943, p. 5.

[327]Mustang Roundup, April 10, 1943, p. 6; April 17-18, 1943, p. 1; May 8, 1943, p. 9; March 1945, p. 3; San Luis Obispo Telegram-Tribune, April 10, 1943, p. 1; April 29, 1944, p. 1.

[328]McPhee, Annual Report to the State Board of Education, 1946, p. 4; Mustang Roundup, March 20, 1943, p. 6; November, 1945, p. 4.

[329]San Luis Obispo Telegram-Tribune, December 5, 1944, p. 1.

provided instruction to more than 120,000 California farmers and their families in the production, preservation, and conservation of food. President McPhee was state director of this project.[330]

Because of the navy programs at the Polytechnic the vocational agriculture teachers of the state broke a long standing tradition by holding their 1943 meeting at Bakersfield and that of 1944 in Los Angeles. However, in the summer of 1945 this group once again returned to the San Luis Obispo campus for its annual convention.[331]

Within a year after May of 1945, when the European phase of World War II ended, President McPhee terminated all war time training programs and activities of the California Polytechnic and returned the institution exclusively to its normal functions.

This twelve month period saw the start of two important trends. Veterans comprised the majority of the student body,[332] and enrollments increased rapidly, reaching 819 for the year.[333] Of those in attendance the great majority were in programs leading to bachelor of science degrees; about sixty per cent were majoring in agriculture

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[330]McPhee, Annual Report to the State Board of Education, 1944, p. 13; ibid., January 1947, p. 2.

[331]San Luis Obispo Telegram-Tribune, June 19, 1945, p. 1.

[332]Ibid., September 14, 1945, p. 1; March 11, 1946, p. 1.

[333]"Records of Enrollments," 1.

and approximately forty per cent had registered for work in the Industrial Division.[334] Commencing with the summer of 1945 the Polytechnic administration included a summer quarter in the school calendar, largely for the benefit of the many veterans who desired to complete their graduation requirements as soon as possible.[335]

Overall growth and development characterized the history of the California Polytechnic during the period 1946-1950. Enrollment for the San Luis Obispo campus more than doubled in one year to reach 2044 in 1946-1947, increased to 2229 in 1947-1948, and 2909 in 1949-1950.[336] On the re-opening of the Voorhis Unit in September of 1946, 238 men registered there for classes;[337] attendance at the San Dimas campus for each of the ensuing four years was as follows: 1947-1948 (380); 1948-1949 (408); 1949-1950 (439).[338]

To keep pace with this fourfold increase in students, President McPhee employed an additional 155 faculty members between 1946 and

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[334]McPhee, Annual Report to the State Board of Education, 1946, pp. 8-9.

[335]San Luis Obispo Telegram-Tribune, June 1, 1945, p. 1; June 8, 1945, p. 1.

[336]Records of Enrollments, 1.

[337]McPhee, Annual Report to the State Board of Education, 1947, p. 51.

[338]Ibid., 1; ibid., 1949, p. 3; ibid., 1950-1951, p. 9.

1950, bringing the total staff at both campuses to 206 persons.[339] As the college grew, President McPhee increased his administrative staff; by 1947 it included the following:[340]

C. O. McCorkle,	Dean of Instruction and Assistant to the President
Eugene A. Egan,	Dean of Student Welfare
Donald S. Nelson,	Comptroller
Vard Shepard,	Assistant Dean in Charge of the Agricultural Division
C. E. Knott,	Head of the Engineering and Industrial Division
Hubert H. Semans,	Assistant Dean in Charge of the Science and Humanities Division
C. Paul Winner,	Assistant Dean in Charge of Admissions, Guidance, and Placement
Vernon H. Meacham,	Acting Registrar

During the five years following World War II the institution received adequate financial appropriations to carry on its program of expansion. In 1945 the California legislature once again allocated to the Polytechnic twenty-five per cent of the second balance of the Fair and Exposition Fund;[341] from this source largely, and in part from state general funds, the college received millions of dollars during the next half decade.[342] Its budget for the fiscal year 1949-1950 was approximately three million dollars.[343]

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[339] Ibid., 1947, p. 16; ibid., 1948, p. 11; ibid., 1949, p. 7; ibid., 1950-1951, p. 11.

[340] Bulletin of the California State Polytechnic College, 1947-1948, p. 6.

[341] Statutes of California, 1945, p. 2359.

[342] San Luis Obispo Telegram-Tribune, August 9, 1949, p. 1; State of California Budget for the Fiscal Year July 1, 1949, to June 30, 1950 (Sacramento, 1949), 235; State of California Budget for the Fiscal Year July 1, 1950, to June 30, 1951 (Sacramento, 1950), 265; 826.

[343] State of California Budget for the Fiscal Year July 1, 1951 to June 30, 1952 (Sacramento, 1951), 49-50; 909.

On the San Luis Obispo campus considerable curricular expansion took place during 1946-1950. The administration widened the offerings in both the Agricultural and Engineering Divisions and organized a third major classification, the Science and Humanities Division.

The addition of the departments of Agricultural Engineering,[344] Soil Science,[345] Architectural Engineering,[346] Printing,[347] and Maintenance Engineering[348] raised the number of departments in the Agricultural and Engineering Divisions to twenty.[349] A list of these subject areas follows with the number of students enrolled in each during the fall quarter of 1950:[350] Agricultural Engineering (182);

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[344]Set up in 1946; see McPhee, Annual Report to the State Board of Education, 1947, p. 17.

[345]Established in 1949; see El Mustang, November 4, 1949, p. 8.

[346]Organized in 1946; see McPhee, Annual Report to the State Board of Education, 1946, p. 17.

[347]Started in 1947; see El Rodeo, 1947, p. 30; McPhee, Annual Report to the State Board of Education, 1947, p. 54.

[348]Set up in 1948; see McPhee, Annual Report to the State Board of Education, 1949, p. 16.

[349]California State Polytechnic College Bulletin, 1951-1952, p. 79.

[350]McPhee, Annual Report to the State Board of Education, 1950-1951, p. 6.

Agricultural Inspection (36); Animal Husbandry (540); Crops Production (94); Truck Crops Production (39); Dairy Husbandry (128); Dairy Manufacturing (27); Fruit Production (25); Ornamental Horticulture (96); Poultry Husbandry (82); Soil Science (57); Citrus Fruit Production (16); Aeronautical Engineering (148); Architectural Engineering (195); Air Conditioning and Refrigeration Engineering (145); Electrical Engineering (133); Electronic and Radio Engineering (189); Maintenance Engineering (19); Mechanical Engineering (271); Printing (46).

Although degree, technical (three-year), and vocational (two-year) curricula were available in each of these areas of study,[351] the trend in the late 1940's was such that an increasing proportion of those enrolled in the college entered programs leading to the bachelor of science degree. In the fall quarter of 1950 the 1337 students in the Agricultural Division were classified as follows: degree - 950, technical - 254, vocational - 133; of the 1146 men enrolled in engineering, 911 sought degrees and 235 were in technical programs.[352]

A significant change taking place on the San Luis Obispo campus in 1947 was the creation of the Science and Humanities Division,

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[351] California State Polytechnic College Bulletin 1951-1952, pp. 79; 127.

[352] McPhee, Annual Report to the State Board of Education, 1950-1951, p. 8; there were also 237 enrolled in the Science and Humanities Division; all of these were in degree programs.

which included the Departments of Education, English, Health and Physical Education, Life Science (designated later as Biological Science), Mathematics, Music, Physical Science, and Social Science. The administration and staff of the college established each of these, with the exception of the Departments of Education, English, and Music, as major fields of study in which students could be granted bachelor of science degrees.[353] In 1950 Agricultural Journalism was added as a department of this division.[354]

Enrollments in the Science and Humanities Division grew rather rapidly. In 1948, 147 students, comprising six per cent of those attending the Polytechnic, were in this classification,[355] and in 1949 its first two graduates, received their degrees.[356] By 1950 there were in this division 237 men, about one-ninth of the Polytechnic student body, including 94 registered in physical education, 39 in social science, 37 in biological science, and 30 in mathematics.[357]

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[353]Ibid., 1947, p. 14; ibid., 1948, p. 14; ibid., 1950-1951 p. 193; El Rodeo, 1947, p. 14; Bulletin of the California State Polytechnic College, 1947-1948, p. 193.

[354]California State Polytechnic College Bulletin, 1950-1951, p. 194. Students could earn degrees by majoring in this department.

[355]McPhee, Annual Report to the State Board of Education, 1948, p. 2.

[356]Crispin Wood and Russell Gates; see San Luis Obispo Telegram-Tribune, June 3, 1949, p. 1.

[357]McPhee, Annual Report to the State Board of Education, 1950-1951, p. 6.

The administration of the Polytechnic considerably widened the college facilities for the preparation of secondary school teachers in 1946-1950. This development followed the passing in 1945 of two legislative enactments; one of these provided that "the California Polytechnic School shall be governed by laws governing and regulating the State colleges insofar as such laws are applicable to the school;"[358] and the second permitted state colleges to offer a fifth year of instruction.[359]

The following year the Polytechnic administration strengthened the teacher training program by establishing a Department of Education and adding to the staff Dr. Neil M. Daniels and Dr. Festus C. Snow to teach courses in professional and general education.[360] In 1947 the State Board of Education approved the college "to prepare teachers for the Special Secondary Credential in Vocational Agriculture, the Special Secondary Limited Credential in Agriculture, and Special Secondary Credentials in Health and Physical Education."[361] During the course of the year five candidates completed all requirements for special credentials in agriculture.[362]

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[358] Statutes of California, 1945, p. 2423.

[359] Ibid., 1384.

[360] McPhee, Annual Report to the State Board of Education, 1947, p. 16.

[361] Ibid., 1948, p. 29.

[362] Ibid.

The State Board of Education in 1948 authorized the Polytechnic administration "to recommend graduates for the general secondary credential in any of the following majors: social studies, mathematics, physical science and general science, life science and general science, agriculture, and physical education. On October 1, 1949, the college was approved to grant the degree of Master of Arts with concentrations in agriculture, biological science, mathematics, health and physical education, physical science and social science."[363]

These various developments led to an expanded program in teacher education. In this field the preparation of agricultural teachers continued to be emphasized at the Polytechnic, and from mid-1946 to the end of 1950 the college trained 89 men in this category.[364] Gradually teacher training in other subject areas became more popular; for example, between July 1, 1949, and June 30, 1950, the Polytechnic issued five general secondary credentials and seventeen special secondary credentials in physical education.[365]

Meantime in 1947 a legislative enactment officially changed the name of the institution from "California Polytechnic School" to

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[363] Ibid., 1950-1951, p. 4.

[364] Ibid., 29.

[365] California Schools (Sacramento) XXI (October, 1950), 351.

"California State Polytechnic College;"[366] the following year the Northwest Association of Secondary and Higher Schools granted the Polytechnic full, unrestricted accreditation as a four-year college.[367]

During the half decade after World War II a serious lack of housing existed at the California Polytechnic. In 1946 the total number of campus accommodations - all for single men - was 742.[368] By 1950 the administration of the institution had provided additional quarters on the college premises for 105 unmarried and 313 married students.[369]

The greatly increased enrollment in the autumn of 1946 led to emergency measures. William Troutner, supervisor of resident students, set up 200 cots on the main floor of the gymnasium and made temporary arrangements for 200 men to sleep in the San Luis Obispo United Service Organization Building.[370] The Polytechnic administration solved the housing shortage by obtaining permission from Army authorities to use the former hospital units and nurses'

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[366] Statutes of California, 1947, p. 642; the bill was introduced by Senator Chris Jesperson; see San Luis Obispo Telegram-Tribune, May 2, 1947, p. 1.

[367] McPhee, Annual Report to the State Board of Education, 1948, p. 67; El Mustang, December 17, 1948, p. 1.

[368] Bulletin of the California State Polytechnic College, 1947-1948, p. 37.

[369] California State Polytechnic College Bulletin, 1950-1951, p. 43.

[370] San Luis Obispo Telegram-Tribune, September 12, 1946, p. 1; September 14, 1946, p. 1.

quarters at Camp San Luis Obispo as college dormitories.[371] Within a few weeks several hundred students moved to the camp.[372]

During the next four years, at one time or another, more than 2000 men enrolled at the Polytechnic lived in this military installation located about five miles from the main college buildings.[373] In 1949-1950 some 900 students had quarters at the camp.[374] Certainly one of the most pressing needs on the San Luis Obispo campus in 1950 was the provision of additional residence halls.

Meantime in 1946-1947 the school administration secured housing for 313 married veteran students and their families. Through negotiations with the National Housing Agency President McPhee obtained for the college 75 one and two-bedroom structures and fifty trailers located near the military base at Oxnard, California,[375] and 188 surplus trailers[376] from San Miguel.[377] As soon as these units were

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[371]McPhee, Annual Report to the State Board of Education, January, 1947, p. 36.

[372]San Luis Obispo Telegram-Tribune, September 19, 1946, p. 1; October 14, 1946, p. 1.

[373]El Rodeo, 1948, pp. 88-89; ibid., 1949, p. 195; San Luis Obispo Telegram-Tribune, September 4, 1948, p. 1; McPhee, Annual Report to the State Board of Education, 1947, p. 21; ibid., 1949, p. 18.

[374]El Mustang, September 22, 1950, p. 1.

[375]McPhee, Annual Report to the State Board of Education, January, 1947, p. 36; El Mustang, January 21, 1946, p. 1; San Luis Obispo Telegram-Tribune, November 30, 1945, p. 1; January 24, 1946, p. 1; February 2, 1946, p. 1; February 28, 1946, p. 1.

[376]El Mustang, October 2, 1947, p. 3; San Luis Obispo Telegram-Tribune, September 2, 1947, p. 1; September 14, 1947, p. 1; McPhee, Annual Report to the State Board of Education, 1947, p. 21.

[377]Located near Camp Roberts, California.

delivered to the campus, renovated, and installed, married students and their families moved into them.[378]

New instructors also faced the housing shortage; to assist them the college administration in 1946 set up on the campus five four-apartment units to accommodate twenty faculty families.[379]

The completion of several buildings during 1946-1950 greatly improved the San Luis Obispo campus. Most important of these structures was the $700,000 Walter F. Dexter Memorial Library, dedicated in October of 1948,[380] and officially opened eleven months later.[381] Other additions were a central feed processing and storage plant,[382] an aeronautics hangar and shop,[383] a farm machinery and agricultural engineering building,[384] and a dairy feed barn.[385]

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[378] El Mustang, April 8, 1946, p. 1; McPhee, Annual Report to the State Board of Education, 1947, pp. 21-22.

[379] McPhee, Annual Report to the State Board of Education, January 1947, p. 36

[380] San Luis Obispo Telegram-Tribune, October 14, 1948, p. 1; Green and Gold (San Luis Obispo) I (October, 1949), 3.

[381] San Luis Obispo Telegram-Tribune, September 12, 1949, p. 1.

[382] El Mustang, August 13, 1948, p. 1.

[383] McPhee, Annual Report to the State Board of Education, 1947, p. 32.

[384] El Mustang, August 21, 1946, p. 1.

[385] Bulletin of the California State Polytechnic College, 1947-1948, p. 39.

In this same period the athletic plant underwent considerable expansion. Readied for use were a regulation baseball diamond, a quarter mile track, a practice football field, and a field house containing locker and shower rooms.[386] Renovation of the main floor of Crandall Gymnasium included the installation of collapsible bleachers which raised to 1200 the number of seats for spectators.[387] Along the east side of the football field workmen erected a steel grandstand, building beneath it locker rooms and faculty offices. This addition plus the extension of the wooden stands on the opposite side of the gridiron increased to 5200 the seating capacity of the stadium.[388]

These various permanent improvements were made in conformance with a long range campus development program set up in general form during November of 1945 by representatives of the State Department of Education, the State Division of Architecture, and of the Polytechnic.[389] During 1948-1950 a faculty committee was revamping

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[386]San Luis Obispo Telegram-Tribune, April 26, 1947, p. 5; July 22, 1947, p. 9; El Mustang, November 7, 1946, p. 1.

[387]San Luis Obispo Telegram-Tribune, September 2, 1948, p. 1; California State Polytechnic College Bulletin, 1949-1950, p. 38.

[388]El Mustang, September 18, 1947, p. 1; McPhee, Annual Report to the State Board of Education, 1948, p. 20; San Luis Obispo Telegram-Tribune, June 8, 1948, p. 1.

[389]El Mustang, November 9, 1945, p. 2; San Luis Obispo Telegram-Tribune, November 7, 1945, p. 1; McPhee, Annual Report to the State Board of Education, January, 1947, pp. 34-35.

overall building plans to meet the needs of an expected future San Luis Obispo student body of 3600.[390]

Meanwhile the overcrowding of facilities led Polytechnic authorities to purchase through the War Assets Administration forty steel barrack-type structures.[391] Converted for temporary use as classrooms or instructors' offices, most of these units were installed near the Administration Building;[392] about a dozen were dispersed over the grounds and pressed into service as laboratories, shops, or for storage.[393]

In 1946 the Polytechnic administration established on the campus a twelve-bed infirmary; one full time nurse and two student assistants provided patients with twenty-four hour service, and a physician was on call at all times.[394] By 1950 two nurses were in

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[390]McPhee, Annual Report to the State Board of Education 1948, p. 20; ibid., 1950-1951, p. 33; San Luis Obispo County Telegram-Tribune, November 2, 1950, p. 1.

[391]Biennial Report of the California State Board of Education, 1945-1946, p. 118; McPhee, Annual Report to the State Board of Education, January, 1947, p. 32.

[392]San Luis Obispo Telegram-Tribune, June 18, 1946, p. 1.

[393]Bulletin of the California State Polytechnic College, 1947-1948, p. 39. McPhee, Annual Report to the State Board of Education, 1947, p. 17.

[394]California State Polytechnic College Circular of Information, 1947-1948, p. 38.

attendance, a doctor was on duty in the infirmary several hours daily, and sixteen beds were available for the sick.[395]

An additional service set up in 1947 was the Counseling Center.[396] Personnel in this office administered entrance placement tests, provided the students with personal and/or vocational counseling, and maintained an occupational library.[397]

The donation in the late 1940's by the W. K. Kellogg Foundation of Battle Creek, Michigan, of the Kellogg Horse Ranch to the Polytechnic increased the holdings of the college by 812 acres valued at four million dollars.[398] Located near Pomona in Southern California, this property in 1949 was designated the Kellogg Unit of the California State Polytechnic College.[399] During the spring of 1950 Polytechnic officials, in compliance with a provision of the transfer of the Ranch, scheduled twenty-four horse shows at the

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[395]California State Polytechnic College Bulletin, 1950-1951, p. 43.

[396]El Mustang, September 12, 1947, p. 7.

[397]McPhee, Annual Report to the State Board of Education, 1948, pp. 27-28; ibid., 1949, p. 21; California State Polytechnic College Bulletin, 1950-1951, p. 50.

[398]San Luis Obispo Telegram-Tribune, July 1, 1949, p. 1; Poly Views, January 18, 1950, p. 1; the California legislature approved the transfer of the property to the Polytechnic; see Statutes of California, 1949, pp. 3405-06.

[399]San Luis Obispo Telegram-Tribune, February 27, 1950, p. 1; Green and Gold (San Luis Obispo) III (October, 1950), 5.

Kellogg Unit.[400] Plans in 1950 called for joint operation in the future of the two southern campuses, located about one mile apart, as the Kellogg-Voorhis Unit of the Polytechnic.[401]

In 1948, 1949, and 1950 the California Association for Health and Physical Education selected and used the San Luis Obispo campus facilities for its annual summer workshops.[402] From 150 to 200 coaches and physical education instructors attended these two week sessions each August.[403]

In the first five years after World War II the project system of instruction, with its emphasis on earning while learning and learning by doing,[404] continued to be an important phase in the training of many Polytechnic students.[405] During these years a

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[400]Poly Views, January 18, 1950, p. 1; San Luis Obispo Telegram-Tribune, February 15, 1950, p. 1; California Schools (Sacramento) XXI (April, 1950), 101.

[401]San Luis Obispo Telegram-Tribune, February 27, 1950, p. 10; McPhee, Annual Report to the State Board of Education, 1950-1951, p. 33; California State Polytechnic College Bulletin, 1950-1951, p. 33.

[402]Green and Gold (San Luis Obispo) I (July, 1949), 12; McPhee, Annual Report to the State Board of Education, 1950-1951, p. 30.

[403]San Luis Obispo Telegram-Tribune, August 27, 1948, p. 1; McPhee, Annual Report to the State Board of Education, 1949, p. 24; El Mustang, July 29, 1949, p. 1; August 11, 1950, p. 1.

[404]McPhee, Annual Report to the State Board of Education, 1949, p. 8.

[405]Ibid., 1948, p. 66; Bulletin of the California State Polytechnic College, 1947-1948, p. 1; El Mustang, January 7, 1949, p. 5.

student, or group of students, needing cash for project investment could borrow from the $90,000 project revolving fund.[406] On completion of the project the borrower, after paying all costs, interest at five per cent, and the amount of the loan, returned one-third of the profit to the fund, and retained two-thirds for himself.[407]

Each year between 1946-1950 the average net profit accruing to some 150 animal husbandry students participating in beef, swine, and sheep projects was $1300 to $1500.[408] From 35 to 50 dairy majors earned from $1000 to $1500 a month doing part time practical work in the college dairy unit.[409] An additional 15 to 20 students owned about 50 cows which they handled as their own projects.[410] Ordinarily 80 to 90 poultry students managed individual projects netting them

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[406]McPhee, Annual Report to the State Board of Education, January, 1947, p. 19; California State Polytechnic College Bulletin, 1950-1951, p. 17.

[407]McPhee, Annual Report to the State Board of Education, 1950-1951, p. 17.

[408]Ibid., January 1947, p. 39; ibid., 1947, p. 37; ibid., 1950-1951, p. 21.

[409]Ibid., January, 1947, p. 42; ibid., 1948, p. 40; ibid., 1950-1951, p. 22.

[410]Taylor, Frank J., "Take A Cow to College," Country Gentleman (Philadelphia) CXVII (May, 1947), 22-23; McPhee, Annual Report to the State Board of Education, 1947, p. 40.

from $10 to $15 each per month; also the Poultry Department offered part time work to dozens of students.[411] Approximately one hundred ornamental horticulture majors received between $4000 and $5000 a year in wages for operating and maintaining the college nursery and grounds, and usually two to three dozen individuals had projects in plants and flowers.[412] Students in the Crops Department sold fruit and vegetables, grown on the campus, in a produce store.[413]

In the Engineering Division, air conditioning and refrigeration majors installed, repaired, and maintained all heating, ventilating, and refrigeration systems on the campus.[414] Those studying electrical engineering did the maintenance, repair, and extension of electrical work at the Polytechnic.[415] Mechanical engineering majors assisted with the operation of the power plant,[416] electronics and radio majors operated a small radio repair and service shop,[417] and

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[411]McPhee, Annual Report to the State Board of Education, January, 1947, pp. 44-45; ibid., 1947, pp. 44-45; ibid., 1948, p. 43.

[412]Ibid., 1947, pp. 42-43; ibid., 1950-1951, p. 24.

[413]Ibid., January, 1947, p. 41; ibid., 1950-1951, p. 21.

[414]Ibid., 1948, pp. 49-50; ibid., 1949, p. 8.

[415]Ibid., January, 1947, p. 48; ibid., 1948, p. 47.

[416]Ibid., 1947, pp. 50-51.

[417]Ibid., 50; ibid., 1948, p. 50.

as projects students in printing did special jobs for various campus organizations.[418]

Actually during 1946-1950 a smaller proportion of the Polytechnic student body carried projects than had done so in the 1930's. This was due in part to lack of space and of adequate facilities,[419] but also in some measure to the fact that only 49 per cent of those enrolled in 1948-1950 were in agriculture[420] - the area in which projects had always been most adaptable and most important. The increasing popularity of the Engineering Division and the growth of the Science and Humanities departments contributed to the trend toward a lessening in project participation by Polytechnic students.

As an important part of the project system in meat animals, in the years following the war, Polytechnic students won numerous awards and prizes at such livestock shows as the Grand National Livestock Exposition at San Francisco and the Great Western Livestock Exposition at Los Angeles.[421]

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[418] Ibid., 1947, p. 54; ibid., 1948, p. 52.

[419] Ibid., January, 1947, pp. 19-21.

[420] Ibid., 1949, p. 6; ibid., 1950-1951, p. 8.

[421] El Mustang, December 5, 1946, p. 1; November 6, 1947, p. 7; San Luis Obispo Telegram-Tribune, December 1, 1947, p. 1; November 29, 1949, p. 1.

The addition of an outstanding stallion, Zuncho, strengthened the Polytechnic Thoroughbred breeding program during the mid-1940's.[422] During this period yearling colts bred at the Polytechnic brought an average of one thousand dollars each at the annual July sales.[423]

In 1948, largely at the behest of the California Thoroughbred Breeders' Association and of the Horse and Mule Association of America, the Polytechnic administration added to the college offerings a twelve-week course in horseshoeing.[424]

In this period 1946-1950 co-curricular activities were popular on the San Luis Obispo campus. During these years the students produced the campus newspaper, El Mustang,[425] the yearbook, El Rodeo,[426] and the Frosh Handbook, a publication containing pertinent and useful information for newcomers entering the institution.[427]

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[422]El Mustang, February 25, 1946, p. 1; December 17, 1948, p. 2.

[423]San Luis Obispo Telegram-Tribune, July 19, 1946, p. 1; El Mustang, July 29, 1949, p. 3.

[424]McPhee, Annual Report to the State Board of Education, 1948, California State Polytechnic College Bulletin, 1950-1951, p. 78.

[425]Resumption of the weekly paper started October 26, 1945, after a lapse of 40 months.

[426]The 1946 issue was the first since that of 1942; for plans on the production of this number see El Mustang, December 17, 1945, p. 1.

[427]El Rodeo, 1947, p. 18; El Rodeo, 1948, p. 95.

On the suggestion of student body president Leon Garoian, a committee rewrote the student body constitution during the winter of 1946-1947.[428] The revised document, which the students voted to accept in May of 1947,[429] contained a major change in the composition of the Student Affairs Council (SAC). This body henceforth was to include three faculty advisers and sixteen students who represented the three major divisions of the college,[430] the four classes, the Inter-Club Council, and the following boards: publications, music, athletics, and Poly Royal.[431]

Among actions taken by the SAC during the next several years were a reorganization of the requirements for athletic awards, purchase of a public address system for the football field, and sponsorship of a carnival at each Poly Royal.[432] The SAC set admission rates for college athletic events and social functions and established the price of the student body membership card and of El Rodeo.[433] As the student body activities budget mounted from $15,000 in 1946-1947 to $35,000 in 1948-1949, the general financial

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[428] El Rodeo, 1947, p. 18.

[429] El Mustang, May 29, 1947, p. 1.

[430] Agriculture, Engineering, and Science and Humanities.

[431] El Rodeo, 1949, p. 86.

[432] El Rodeo, 1948, p. 84; ibid., 1949, p. 86; ibid., 1950, pp. 70-71.

[433] California State Polytechnic College Bulletin, 1950-1951, p. 51.

responsibilities of the SAC increased.[434] In October of 1948 the SAC employed L. D. Starkey as graduate manager; during the ensuing two years Starkey assisted with various student body problems, especially with those of a financial nature.[435]

In the post war period Harold P. Davidson revived the marching band, the "Collegians," and the glee club and encouraged the formation of various vocal and instrumental combinations.[436] Once again, under Davidson's direction, the Polytechnic musicians gave performances at a number of high schools and scheduled the annual home concerts for the entertainment of the Polytechnic staff and student body and the people of San Luis Obispo.[437] In 1950, 43 glee club members and 15 of the Collegians participated in the spring tour.[438]

During these same years Poly Royal festivities continued to be exceedingly popular. Directed by Carl G. Beck, adviser to every

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[434] El Mustang, October 16, 1946, p. 1; September 25, 1947, p. 1; October 15, 1948, p. 1.

[435] Ibid., October 15, 1948, p. 1; November 17, 1950, p. 1; El Rodeo, 1949, p. 204.

[436] El Mustang, October 2, 1946, p. 1; April 17, 1947, p. 1; El Rodeo, 1948, pp. 96-97; ibid., 1950, pp. 90-91; San Luis Obispo Telegram-Tribune, April 17, 1949, p. 7; March 21, 1949, p. 1; March 31, 1949, p. 1; March 31, 1950, p. 1.

[437] McPhee, Annual Report to the State Board of Education, 1949, p. 19.

[438] El Mustang, February 17, 1950, p. 1.

Poly Royal committee since 1933,[439] these annual open houses featured departmental displays, exhibits of student projects, athletic events, and a rodeo.[440] Each spring the "country fair on a college campus" drew thousands of visitors;[441] in 1950 an estimated 15,000 guests attended the two-day affair, consuming more than three tons of beef at the Saturday noon barbecue, and swarming over the Polytechnic grounds.[442]

In 1945-1946 Polytechnic students reorganized a number of clubs which had been strong in pre-war days. Some of these, such as the Poultry Club, Young Farmers, and Block "P" were exceedingly active during the next few years.[443] However, a number of new groups including the Rally Committee,[444] Mustang Flyers Club,[445] Poly Penguins,[446]

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[439] El Rodeo, 1949, p. 86.

[440] El Mustang, May 3, 1946, p. 1; May 6, 1949, p. 2; San Luis Obispo Telegram-Tribune, May 2, 1947, p. 1; April 15, 1949, p. 5; California State Polytechnic College Bulletin, 1950-1951, p. 51.

[441] San Luis Obispo Telegram-Tribune, May 4, 1946, p. 1; May 1, 1948, p. 1; April 30, 1949, p. 1.

[442] El Mustang, May 5, 1950, p. 1; San Luis Obispo Telegram-Tribune, April 28, 1950, p. 1; May 1, 1950, p. 1.

[443] El Rodeo, 1946, p. 8; El Mustang, October 2, 1946, p. 4; San Luis Obispo Telegram-Tribune, February 6, 1947, p. 1.

[444] Set up to "stimulate and preserve college spirit;" see El Rodeo, 1947, p. 20; ibid., 1948, p. 89; ibid., 1950, pp. 74-75.

[445] El Rodeo, 1947, p. 98; ibid., 1948, pp. 144-45.

[446] El Rodeo, 1948, p. 162.

Architecture Club,[447] and Kane O'Hawaii[448] became popular between 1946 and 1950. Student chapters of the Institute of Radio Engineers,[449] the Society of Automotive Engineers,[450] and the Institute of Aeronautical Sciences[451] were established on the campus between 1948 and 1950. During the same period the SAC gave official recognition to the International Relations Club, Rifle Club, Natural History Club, Soils Club, Mathematics Club, and Latin American Club.[452]

During the last half of the 1940's the Polytechnic athletic program underwent considerable expansion. In the spring of 1946, with the understanding that its teams would commence league play with the start of the next basketball season, the Polytechnic became a member of the California Collegiate Athletic Association (CCAA) which included the College of the Pacific, San Jose State College, Fresno State College, San Diego State College, and Santa Barbara College.[453] Polytechnic teams had varied success in CCAA

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[447] Ibid., 1950, p. 112.

[448] Hawaiian students' organization; see El Rodeo, 1950, p. 149.

[449] El Rodeo, 1948, p. 133.

[450] El Mustang, November 10, 1949, p. 6.

[451] El Rodeo, 1950, p. 147.

[452] El Mustang, April 16, 1948, p. 6; El Rodeo, 1950, pp. 136-148.

[453] El Mustang, February 11, 1946, p. 2; May 3, 1946, p. 3.

competition in 1947-1950. Except for Coach Robert Mott's baseball squad, which won eight league games to finish in second place in conference standings,[454] 1947 was disastrous for Polytechnic squads. The basketball players were victorious in only one CCAA game,[455] the football team, having by far its poorest season under Coach O'Daniels, lost nine games, including all league contests,[456] and in the spring CCAA meets Polytechnic athletes failed to place in track, swimming, tennis, or golf.[457]

In June of 1948 President McPhee announced the appointment of Charles Pavelko, former assistant to O'Daniels,[458] as head football coach, and of Robert Mott as director of athletics and of physical education activities.[459]

During the ensuing two years under Mott's guidance well rounded programs in both intercollegiate athletics and in intramural sports

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[454] El Rodeo, 1948, p. 219.

[455] San Luis Obispo Telegram-Tribune, March 3, 1947, p. 7.

[456] El Rodeo, 1948, p. 207.

[457] San Luis Obispo Telegram-Tribune, May 12, 1947, p. 7.

[458] Ibid., September 23, 1946, p. 5.

[459] Ibid., June 21, 1948, p. 1. In this capacity Mott replaced Dr. Carl Voltmer who had come to the college in September, 1946; Voltmer submitted his resignation in February, 1948; see San Luis Obispo Telegram-Tribune, February 9, 1948, p. 1. Mott continued as baseball coach.

developed at the Polytechnic.[460] Although in both football and basketball the Polytechnic remained in last place in league standings, its teams in track, boxing, wrestling, swimming, gymnastics, tennis and golf had moderate success; the record in baseball was excellent. During 1948, 1949, and 1950 the baseball squads had impressive winning seasons and were in close contention for league championships.[461] In CCAA competition the swimmers and tennis players took third places in 1948 and 1949 and were second in the 1950 standings.[462] The boxers in 1949[463] and the gymnasts the following year placed second in the league.[464] Other high points of this period included the defeat of Fresno State College by the track team in 1950,[465] the victory of the wrestlers over San Jose State College in 1949,[466] and the third place won by the golfers in the 1950 CCAA championships.[467] Moreover, in 1949 the Polytechnic

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[460]San Luis Obispo Telegram-Tribune, June 9, 1948, p. 5; March 1, 1950, p. 10.

[461]Ibid., May 24, 1948, p. 9; May 8, 1950, p. 5; May 19, 1950, p. 7.

[462]Ibid., May 10, 1948, p. 7; May 9, 1949, pp. 9-10; April 25, 1950, p. 10; May 1, 1950, p. 7.

[463]El Mustang, March 18, 1949, p. 3.

[464]San Luis Obispo Telegram-Tribune, March 13, 1950, p. 4.

[465]Ibid., April 7, 1950, p. 9.

[466]Green and Gold (San Luis Obispo) III (July, 1950), 9.

[467]San Luis Obispo Telegram-Tribune, May 3, 1950, p. 1.

became a member of the National Collegiate Athletic Association.[468]

Meanwhile in each of the 1948 and 1949 seasons the football squad won only one league contest,[469] and included in the 1949 record was an 88-0 loss to the College of the Pacific.[470] Early in February of 1950 Coach Pavelko resigned, describing the Polytechnic football situation as "impossible."[471] A month later President McPhee named as director of athletics and football coach LeRoy B. Hughes, football, basketball, and swimming coach at Menlo Junior College since 1938.[472]

By the autumn of 1950 several changes had taken place in the composition of the CCAA; both the College of the Pacific and San Jose State College, the two members which had won most of the championships, had withdrawn from the conference,[473] and George Pepperdine College of Los Angeles had entered the league.[474] Even so, in 1950

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[468] El Mustang, January 7, 1949, p. 5.

[469] El Mustang, October 15, 1948, p. 4; El Rodeo, 1949, p. 213; ibid., 1950, p. 189.

[470] El Mustang, December 9, 1949, p. 6.

[471] San Luis Obispo Telegram-Tribune, February 7, 1950, p. 10.

[472] Ibid., March 7, 1950, p. 1.

[473] Ibid., December 19, 1949, p. 4.

[474] Ibid., September 18, 1950, p. 10.

the football team failed to win a CCAA game and completed its season with a record of three wins and seven losses.[475]

During the post war years the Polytechnic rodeo team was highly successful. After taking second place in both 1946[476] and 1948[477] in the spring intercollegiate rodeos at Tucson, Arizona, it won this competition at Tempe in 1949 and 1950.[478] Participating in the first National Intercollegiate Rodeo, held in the San Francisco Cow Palace in 1949, the Polytechnic riders were a close second to Sull Ross College of Texas.[479]

After having been closed for three years, the Voorhis Unit of the California Polytechnic was re-opened for instructional purposes in September of 1946.[480] During the ensuing four years, under the guidance of Dean Harold O. Wilson, this branch of the college underwent considerable expansion.

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[475] El Rodeo, 1951, p. 173.

[476] El Mustang, March 25, 1946, p. 1.

[477] San Luis Obispo Telegram-Tribune, March 18, 1948, p. 13.

[478] Ibid., March 15, 1949, p. 9; El Rodeo, 1950, p. 225.

[479] El Mustang, April 14, 1949, p. 1.

[480] McPhee, Annual Report to the State Board of Education, January, 1947, p. 52.

The increase in student body from 238 in 1946-1947[481] to 439 in 1949-1950[482] paralleled faculty growth in the same period from eleven to twenty-five.[483] In 1946 the three majors of Agricultural Inspection, Citrus Fruit Production, and Ornamental Horticulture were available to students at San Dimas;[484] in 1948 the faculty added General Crops as a fourth area of specialization.[485]

By 1950 the Voorhis Unit was a three-year college. In addition to such related subjects as English, journalism, public speaking, health and physical education, biology, mathematics, history, political science, and economics, its curricula included courses leading to the three-year technical and two-year vocational certificates, and all required lower division degree requirements in its four major fields.[486] A Voorhis Unit student desiring to earn a bachelor of

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[481] El Mustang, March 27, 1947, p. 2.

[482] McPhee, Annual Report to the State Board of Education, 1949, p. 3; San Luis Obispo Telegram-Tribune, January 3, 1949, p. 1.

[483] Poly Views, September 28, 1949, pp. 1-2; McPhee, Annual Report to the State Board of Education, 1950-1951, p. 11.

[484] Bulletin of the California State Polytechnic College, 1947-1948, p. 237.

[485] Madre Tierra, 1948, pp. 44-45; McPhee, Annual Report to the State Board of Education, 1949, p. 23.

[486] Bulletin of the California State Polytechnic College, 1947-1948, pp. 238-249; California State Polytechnic College Bulletin, 1948-1949, pp. 256-263.

science degree from the California Polytechnic found it necessary to take at least his senior year work at the San Luis Obispo campus.[487]

Additions to the San Dimas plant in 1946-1950 included a new classroom building,[488] a large lath house,[489] a green house,[490] twenty prefabricated Dallas huts capable of housing 126 single men,[491] and five structures including accommodations for 44 veterans and their families.[492]

The extracurricular activities program tended to follow the general pattern established at San Luis Obispo. In student government, a Student Affairs Council was exceedingly active in taking up numerous campus problems at its bi-monthly meetings.[493]

Starting in 1947 the students published both a weekly newspaper, Poly Views, and an annual, the Madre Tierra.[494] Student organizations

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[487]Poly Views, February 22, 1950, p. 1; California State Polytechnic College Bulletin, 1950-1951, pp. 238-255; McPhee, Annual Report to the State Board of Education, 1951-1952, p. 36.

[488]Bulletin of the California State Polytechnic College, 1947-1948, p. 232.

[489]McPhee, Annual Report to the State Board of Education, 1948, p. 57.

[490]Poly Views, February 15, 1950, p. 1.

[491]Madre Tierra, 1948, p. 53; California State Polytechnic College Bulletin, 1948-1949, p. 236.

[492]California State Polytechnic College Bulletin, 1950-1951, p. 233.

[493]Poly Views, January 21, 1948, p. 2; February 11, 1948, p. 2; January 26, 1949, p. 2; October 12, 1949, p. 1; Madre Tierra, 1948, pp. 30-31.

[494]Madre Tierra, 1947, pp. (54); (57).

included Caldimas,[495] Los Robles,[496] the Agricultural Inspection Club,[497] Los Rancheros,[498] the Block "P" Association,[499] and the Young Farmers.[500] In the field of music students participated in glee club, band, and orchestra.[501] Poly Vue, a one-day open house at the San Dimas campus, was an annual event featuring exhibits, athletic events, a barbecue, and a ball.[502] In 1949 and 1950 the San Dimas student body entered floats in the Pasadena Rose Bowl Parade.[503]

The Voorhis Unit was not a member of an athletic conference; competing independently, its teams met for the most part those of various junior colleges and the smaller four-year institutions in

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[495]For students in citrus; see Madre Tierra, 1947, pp. (60-61); Poly Views, November 5, 1947, p. 1.

[496]The Ornamental Horticulture Club; see Madre Tierra, 1947, pp. (62-63).

[497]Madre Tierra, 1947, pp. (58-59).

[498]For students in Crops; see Madre Tierra, 1948, pp. 44-45.

[499]Poly Views, February 25, 1948, p. 1.

[500]Ibid., April 1, 1949, p. 2; Madre Tierra, 1949, p. (60).

[501]Poly Views, November 3, 1948, p. 1; March 3, 1949, p. 1.

[502]Madre Tierra, 1947, pp. (66-67); ibid., 1948, pp. 81-83; ibid., 1950, p. 88; Poly Views, April 21, 1948, p. 1; May 3, 1950, p. 1; El Mustang, April 28, 1950, p. 1.

[503]Madre Tierra, 1949, p. (95); ibid., 1950, p. 85.

Southern California.[504] In 1946-1947 the Voorhis Unit fielded athletic squads in basketball and baseball,[505] and during the following year added football, track, and tennis.[506] In addition to these five intercollegiate sports, the San Dimas staff maintained an intramural athletic program during the late 1940's and in 1950.[507]

In September of 1950, classes commenced at the California Polytechnic for the forty-eight consecutive year. A total of 3159 students, representing 54 of the 58 California counties, 42 of the 48 states, and 19 foreign countries, registered for work with the 206 faculty members at the two campuses.[508] Available to the 3113 undergraduates were twelve fields in agriculture, eight in engineering, and seven in the Science and Humanities Division offering curricula leading to the degree of bachelor of science, and in all twenty

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[504] California State Polytechnic College Bulletin, 1950-1951, p. 234 Madre Tierra, 1950, p. 107.

[505] Madre Tierra, 1947, pp. (80-84).

[506] Ibid., 1948, pp. 64-72.

[507] Poly Views, December 10, 1947, p. 4; May 19, 1948, p. 3; October 27, 1948, p. 3; December 8, 1948, p. 1; February 16, 1949, p. 1; February 22, 1950, p. 3.

[508] McPhee, Annual Report to the State Board of Education, 1950-1951, pp. 6-11.

agricultural and engineering fields were two and three-year programs in which students could earn technical or vocational certificates.[509]

During the autumn, in compliance with recommendations of the State Department of Education and the State Division of Finance that the organizational structure of all state colleges follow the same pattern, President McPhee made several shifts in the Polytechnic administrative set up.[510] Harold O. Wilson left the position of Dean of the Voorhis Unit to become executive dean at San Luis Obispo with the responsibility for the operation and development of both California State Polytechnic College campuses.[511] Other members of President McPhee's staff of 1950-1951 with their official titles were the following:[512]

C. O. McCorkle,	Dean of Instruction
Donald S. Nelson,	Business Manager
J. Cordner Gibson,	Dean, Kellogg-Voorhis Unit
Vernon H. Meacham,	Acting Dean of Students
Vard Shepard,	Dean, Agricultural Division
C. E. Knott,	Acting Dean of Engineering Division
Hubert H. Semens,	Acting Dean of Science and Humanities Division
C. Paul Winner,	Admissions Officer
Leo F. Philbin,	Registrar.

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[509] California State Polytechnic College Bulletin, 1950-1951, pp. 79; 127. The policy of continuing the technical and vocational programs was in accordance with the recommendations of the Strayer Report; see Report of a Survey of the Needs of California in Higher Education (Sacramento) Committee for the Survey of the Needs of California in Higher Education (Geoege D. Strayer, Chairman), March 1, 1948, pp. 24-25.

[510] McPhee, Annual Report to the State Board of Education, 1950-1951, pp. 17-18.

[511] Green and Gold (San Luis Obispo) III (October, 1950), 5.

[512] California State Polytechnic College Bulletin, 1950-1951, p. 6.

As 1950 drew to a close, Mr. McPhee had been closely connected with the Polytechnic for two decades and had served as its president for seventeen years. During this period his influence upon the institution was incalculable. Without doubt, had it not been for his actions, the legislature - following the recommendations embodied in the Suzzallo Report and those of Governor James J. Rolph - would have abolished the school in the early 1930's. In 1931-1932 Mr. McPhee expanded agricultural activities at the Polytechnic, added specialists to the staff, set up a training program for cadet teachers in vocational agriculture at San Luis Obispo, and placed the Polytechnic project system under careful faculty supervision.

During the next several years, despite meager appropriations from the legislature, President McPhee strengthened the institution by correlating its functions with those of the Bureau of Agricultural Education. He transferred the bureau offices to San Luis Obispo, established the state headquarters of the California Future Farmers on the campus, and scheduled annual meetings of the vocational agriculture teachers of the state at the Polytechnic. Under his leadership the curricula underwent reorganization, the project system was widened and strengthened, and emphasis on occupational training was stressed to the utmost.

In the late 1930's through Mr. McPhee's efforts the utility and appearance of the campus were much improved by the construction of new buildings, the renovation of existing structures, and the

addition of much landscaping. The acquisition of the Voorhis School brought the college a new branch in the Los Angeles area.

By 1940 President McPhee succeeded in his long struggle to secure for the Polytechnic the right to grant the bachelor of science degree. Although the institution became a four-year college, it continued to emphasize practical education. To insure fullest employment opportunities for Polytechnic graduates, President McPhee developed the upside-down system of education.

In the entire history of the institution the greatest increase in students and faculty took place during the latter half of the 1940's. In these years the college staff created the Science and Humanities Division, broadened curricular offerings in agriculture and engineering, and widened the teacher training program. Again the Polytechnic received a valuable accretion as it was granted the Kellogg Ranch at Pomona; total holdings of the institution now exceeded 4600 acres.[513]

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[513] McPhee, Annual Report to the State Board of Education, 1950-1951, p. 5.

In reviewing the progress of the Polytechnic since the early 1930's, President McPhee must have felt deep satisfaction. During the period of his administration the institution expanded and improved in every way; its future was assured. Clearly, Julian A. McPhee was most responsible for the California State Polytechnic College of 1950.

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