World War II and its Impact on Cal Poly:
Enrollment and Learn by Doing

History 303 Research and Writing Seminar in History:
Cal Poly History Project

Presented to
The course instructor Professor Andrew Morris
California Polytechnic State University, San Luis Obispo

By
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Abstract:

This paper will argue that World War II had a positive impact on Cal Poly’s campus because of the establishment of the Naval Flight Preparatory School. Financial issues will be addressed as will the enrollment numbers before and after the war. Cal Poly’s learn by doing slogan will be discussed and how the Navy’s program solidified the idea. Student attitudes at the time will also be covered. With this paper I hope to add to the works done by previous scholars and to allow the reader to know more about the subject. With this information I hope to help others better understand this time in Cal Poly’s history.

Keywords: World War II, Enrollment, Learn by Doing, Student Life, Finances
**Introduction:**

World War II had a profound effect on the United States. The country’s workforce and economy were greatly impacted with the United States becoming a global superpower by the end of it all. One of the factors that often gets overlooked is the effect that World War II had on higher education. During wartime, colleges and universities were losing money because not as many students enrolled due to the war effort. In Cal Poly’s case, enrollment was on a slight rise after the Great Depression, however the war caused students to leave school. Numbers were growing but never by a lot. As the reader will come to read, numbers grew rapidly after the war but at this time higher education was facing a problem and many schools could have closed due to the lesser amounts of students enrolled leading to less funds to keep the school running.

As the war was going on higher education communities in the United States such as the American Council on Education (ACE) and the National Educational Association (NEA) held meetings to see how they could incorporate higher educational schools in a way that would help with the war effort. The committees pushed for the government to allow colleges and universities to help with defending the country in their own way. In V. R. Cardozier’s book, *Colleges and Universities in World War II*, he writes about the different programs that colleges undertook during World War II, the aftermath, and how it impacted the schools.¹ There was a pattern for schools to want to help with the War effort and Cal Poly was no different. Many colleges like Cal Poly transformed their schools into training camps to allow their students to help with the war effort. In my paper, I will argue that the programs introduced to Cal Poly to help with World War II

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had a positive impact for Cal Poly’s enrollment situation and allowed Cal Poly to reiterate their “Learn by Doing” ideology by accepting the programs and transforming their school to accommodate the Navy cadets.

Other scholars have written on this topic and have made their own arguments about the impact World War II had on Cal Poly. A 2014 paper written by a former Cal Poly student focused on the financial impact the war had on Cal Poly.\(^2\) This paper will touch upon that matter, but the focus of this paper will be how the war reinforced Cal Poly’s “Learn by Doing” slogan and how the enrollment was affected positively. A 1943 article written by Ralph W. Ogan covers how the wartime affected college students’ personal lives and their reactions and questions regarding World War II. His claim is that the war dramatically impacted their’ interests and motives. This article shines light upon how not everyone at these institutions were for the war. It also gives insight into the minds of the students at the time with a list of questions written by them.\(^3\) Fred B. Millet writes how the war allowed the faculty of colleges to have more freedom as they did not have to teach such big classes. At Cal Poly, some faculty members had to teach their class and learn to teach the cadets.

In my paper I am once again arguing that the impact that World War II had on Cal Poly was positive regarding the enrollment issues of the school and that the military programs introduced to Cal Poly fortified their learn by doing policy. This paper will also touch upon students’ attitudes towards the programs put in place because not everyone at Cal Poly was on board to accept these new programs.

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\(^2\) Tyler, Eelsing. 2014. *Cal Poly and World War II.* Student Paper

Background:

Before the Naval programs came to Cal Poly, the school was struggling financially. Due to the war, not as many students were enrolling and the other source of income, like horse racing, were shut down by the military. In a letter from James F. Merson, of the agricultural mechanics department, to Mr. C. A. Coggin, who was part of the H.C Shaw Implement Company, he exemplifies Cal Poly’s financial situation writing, “Funds for the operation of this college are obtained largely from a percentage of the pari-mutuel tax on horse racing and, as you know, the race tracks have been closed by the army because of the war emergency, thereby cutting off our chief source of income.” At this point in Cal Poly’s history, a lot of the money they made was from horse racing. This money was important to keep the school running because of how low the enrollment was. In 1943 the total number of students enrolled at Cal Poly was 587. The number was low because of the National Selective Service Act which allowed the United States government to conscript soldiers, thus leaving less young men to enroll at schools. As well as young men leaving to fight in the war, Cal Poly was not co-educational which meant that women could not attend; President McPhee was having trouble finding a way to keep the school running. In a letter to McPhee, Joel A. Burkman, the assistant Director of Education writes that, “In connection with activities of your school, I note that the department of finance is scrutinizing your expenditure

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4 James F. Merson. Letter to Mr. C. A. Coggin, 20 January 1942, Special Collections and University Archives, Kennedy Library, California Polytechnic State University, San Luis Obispo.
5 “Annual Report to the State Board of Education on the Progress of the California Polytechnic School” (January 1943), Julian McPhee manuscripts, Special Collections and University Archives, Kennedy Library, California Polytechnic State University, San Luis Obispo, Pg 4
proposals very closely, and that several of them are being returned without approval”. With very few students enrolling, no money coming from the horse racing, and denial of expenditure proposals, Cal Poly could have been shut down due to lack of funds.

Cal Poly had some programs in place to help with the war effort before the introduction of the Naval program. One of these was the Civil Pilot Training program, which allowed civilians to train to become part of the Air Force. Sixty-one students from Cal Poly completed the course in the first year it was offered and by the time it was shut down in 1942, 118 men had graduated from it. With Cal Poly being a prime place to hold these training programs due to their location on the coast with an airport nearby, a sense of pride came to the school knowing that they were able to help with the war effort. In an annual report for the school it was stated that “When many other higher educational institutions are frantically trying to adjust their curricula to continue their place in a world which has at least temporarily outgrown the purely academic program, the California Polytechnic school is fortunately providing the very type of training so valuable to the war effort…” Although the school was proud of what they had, the funds were still low and so with this in mind, McPhee went before the state legislature to request funds for the school. “The action of the legislature at this time and during the next several sessions was to provide the college with adequate funds for its wartime activities.” Although war training projects were going on at the school, the funds that

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6 Letter from Joel A. Burkmann to Julian McPhee, 6 January 1942, Special Collections and University Archives, Kennedy Library, California Polytechnic State University, San Luis Obispo.
8 "Annual Report to the State Board of Education on the Progress of the California Polytechnic School" (January 1943), Julian McPhee manuscripts, Special Collections and University Archives, Kennedy Library, California Polytechnic State University, San Luis Obispo.
9 Smith, 244.
the legislature gave for these programs was very little and with the low enrollment, the school was barely surviving. “In December, 1942, two months after a group of naval officers had inspected the San Luis Obispo campus facilities, came the announcement of the selection of the Polytechnic as one of seventeen United States Naval Flight Preparatory Schools.”\(^{10}\) This was not Cal Poly’s first war training program but it sure was the biggest.

The Naval Flight preparatory school did not come to Cal Poly by chance. “Because of its emphasis on technical and vocational training the Polytechnic was admirably suited to prepare workers for special wartime jobs.”\(^ {11}\) Cal Poly was the perfect place for the government to set up these programs with an airport and the ocean so close to the campus. In 1943 the establishment of the Naval Flight Preparatory School and the Naval Academic Refresher Program at Cal Poly, became complete. One may be wondering how Cal Poly was able to pay for these programs with their lack of funds. The Navy made a deal with Cal Poly that the “The school provides instruction, classroom, housing and dining hall facilities, for which it is reimbursed by the Navy through a special California Polytechnic Foundation Fund set up for the purpose of handling the financial matters of this program.”\(^ {12}\) The Navy would pay for the programs and in return Cal Poly would get exposure. Exposure meant that because Cal Poly transformed their school to accommodate these cadets, more people would know about the school. As time went on some of the Naval Flight Preparatory Schools shut down.

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\(^{10}\) Smith, 244-245.
\(^{11}\) Smith, 240.
and at one point, Cal Poly was the only Naval Flight Preparatory School west of the Rocky Mountains.\textsuperscript{13}

**Students’ Attitude:**

Ogan covers students concerns in his article as well with a list of questions that were collected from a total of 1400 hundred students from twenty colleges.\textsuperscript{14} The real concern for the students was that they were not able to do anything to help with the war effort. The feeling of wasting human resources and the wanting to act upon matters that may benefit the war effort annoyed the students. At Cal Poly, civilian students were still attending school but the focus was on training the cadets for the Navy. “While civilian classes were small during this period, all regular majors were continued.”\textsuperscript{15} The civilian students and the cadets were separated and this may have led to the civilian students feeling as if they were less important. It is true that Cal Poly’s student enrollment during World War II dropped to about 80 students.”\textsuperscript{16} With civilian students being the minority at the school, it only makes sense that they felt underrepresented and while the cadets that were in training had to respect their officers, the civilian students at the time had a different position towards them. A cartoon drawn by a student shows a Navy officer yelling at one of the cadets. The officer is demanding that the cadet joins him in a day of crammed education, a hearty breakfast of cow poly milk and cornbread, a two minute lunch break, and then training in life or death situations to strengthen the body and

\textsuperscript{13} Annual Report, (1943). Pg 12.
\textsuperscript{14} Ogan, 232
\textsuperscript{15} “Annual Report to the State Board of Education on the Progress of the California Polytechnic School” (January 1945), Julian McPhee manuscripts, Special Collections and University Archives, Kennedy Library, California Polytechnic State University, San Luis Obispo, California. Pg 4
\textsuperscript{16} Robert E. Kennedy, *Learn by Doing: Memoirs of a University President: A Personal Journey with the Seventh President of California Polytechnic State University* (San Luis Obispo: California Polytechnic State University, 2001), pg 84.
mind. Although the cartoon may be exaggerated, it shows that the average civilian student at Cal Poly during this time thought the program undermined the real reason as to why schools like Cal Poly existed.  

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17 A cartoon written by a student, N.D. 542.02, Special Collections and University Archives, Kennedy Library, California Polytechnic State University, San Luis Obispo, California.  
18 Cartoon by Student. N.D.
CADET WHEATLEY! YOU ARE CORDIALLY INVITED TO JOIN OUR EXHILARATING NAVAL ACTIVITIES OF THE DAY! FIRST A HEARTY BREAKFAST, FEATURING CORN BREAD AND GENUINE WHOLE COW POLY MILK! THEN A WHIRL OF A COLLEGE EDUCATION ALL CRAMMED IN A FEW HOURS GIVEN BY WORLD CLASS FAMOUS INSTRUCTORS... THEN A 2 MINUTE LUNCH BREAK... FOLLOWED BY LIFE AND DEATH PHYSICAL TRAINING TO STRENGTHEN OUR BODIES AND OUR CHARACTER TO GAIN CONFIDENCE ALL IN OUR WHOLESOME CAL POLY ENVIRONMENT... AND ALL FOR THE GOOD CAUSE OF CREATING VALIANT NAVY AIRMEN OUT OF STUPID CIVILIANS...
Learn by Doing During Wartime:

When the Naval Flight Preparatory School was established at Cal Poly, it was the sole focus of the school. As Smith writes, “Within a few weeks president McPhee terminated all other war training projects at the institution.”\(^{19}\) The decision to set up the program at Cal Poly was decided in December 1942 and the first group of aviation cadets arrived on January 7th with the maximum number of 600 to arrive by March 7th.\(^{20}\) The program came quickly to the school and it shows that McPhee wanted to waste no time in getting the cadets to the institution so that enrollment could increase. With increased enrollment it meant that the school was not losing money over anything that they were not using. McPhee was pleased with how things turned out and he stated in a letter that, “we can continue with our regular educational program for those students who wish to attend California Polytechnic. It will also make it possible for us to use all of our facilities and faculty for the duration of the war.”\(^{21}\)

It was clear that with the introduction of the Navy to Cal Poly, things were going to change and Cal Poly was going to transform into a Naval Academy. According to former president of Cal Poly Robert E. Kennedy, who was just a regular faculty member at the time writes, “The campus became a ship; walls were bulkheads, floors were decks, and toilets were heads.”\(^{22}\) The campus was transformed and buildings were renamed to accommodate the new cadets. The administration building was renamed to

\(^{19}\) Smith, 245.
\(^{20}\) Government Wire sent from Chief of Naval Personnel to Julian McPhee, 15 December, 1942, Special Collections and University Archives, Kennedy Library, California Polytechnic State University, San Luis Obispo, California.
\(^{21}\) Letter from Julian McPhee to Jerry Voorhis, 1942, Special Collections and University Archives, Kennedy Library, California Polytechnic State University, San Luis Obispo, California.
\(^{22}\) Kennedy, 83.
Saratoga Hall, the gym became the crews quarters, and the maintenance building became Carpenters Hall. Other buildings were renamed temporarily. Some names include the Dixie Messhall and Buffalo, Mariner and Dauntless hall. While the Navy contributed their own officers, some of the current faculty members at Cal Poly were trained to become “officers” as well. As was explained in one of the annual reports "37 instructors were teaching full-time in the Navy Flight Preparatory School program. Of these 37 instructors, 15 were on the California Polytechnic School regular teaching staff prior to the inception of the naval training program." While the school operated a learn by doing approach, the question remains, how authentic can it be? One might say that it is useless to have current faculty members turn into Navy officers and the cadets were not getting a real experience. Officials from the Navy even got frustrated with some of the “officers” because they were not carrying out punishment upon the cadets according to instruction. Although some of the “officers” were previous teachers the real learning came from the programs themselves. Before the Navy programs were put in place, aircraft maintenance was one of the ways the students learned by doing. “The classes operated eight hours per day, six days a week and the course was twelve weeks in length.” While the instructors may have had an influence on the experience as a whole, it really made no difference as to who they were. The cadets were getting trained as if they were at a real Naval academy.

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23 Campus Maps, N.D. 452.02. Special Collections and University Archives, Kennedy Library, California Polytechnic State University, San Luis Obispo, California.
24 Annual Report, 1943. Pg 12
25 Letter from Eugene A. Egan, 11 February, 1943, Special Collections and University Archives, Kennedy Library, California Polytechnic State University, San Luis Obispo, California.
26 Annual Report, 1943. Pg 11
“Learn by Doing” was a philosophy at Cal Poly before the arrival of the Naval programs, but the programs put in place solidified the “Learn by Doing” approach. As McPhee wrote in 1946, “A total of more than 3600 cadets were graduated from the California Polytechnic Naval Flight Preparatory School during the period of its operation”27 The cadets trained and were educated at Cal Poly and it could not have been done without the use of Cal Poly’s facilities. Learning in a classroom can only do so much and so the learn by doing approach allowed for cadets to become what was required for their real job. Before the arrival of the cadets students were learning by doing but the programs put in place showed the variety that Cal Poly had to offer. Not only this but before students were able to squeeze by with a degree and some training but the cadets had to really know what was required of them. This made the learn by doing approach a must.

How Enrollment was Affected:

When Cal Poly first became a school very few people attended. Written in an annual report from 1934 in regards to enrollment before the Smith-Hughes act of 1917, in a state with 40,000 young men between the ages of fourteen and twenty, only eight of them were enrolled in vocational agricultural courses at Cal Poly.28 As time went on students trickled into Cal Poly and by January of 1940, the enrollment rose to 737 students.29 When the United States joined the war, many college aged individuals

27 “Annual Report to the State Board of Education on the Progress of the California Polytechnic School” (January 1946), Julian McPhee manuscripts, Special Collections and University Archives, Kennedy Library, California Polytechnic State University, San Luis Obispo, California. Pg 2
28 “Annual Report to the State Board of Education on the Progress of the California Polytechnic School” (January 1934), Julian McPhee manuscripts, Special Collections and University Archives, Kennedy Library, California Polytechnic State University, San Luis Obispo, California. Pg 3
29 “Annual Report” (1941), 3.
wanted to help and so enrollment for colleges dropped. Cal Poly was no different and less students were enrolled leading to decreased funds. After the introduction of the Naval Flight Preparatory School however, enrollment began to rise due to the increased amount of cadets. It would continue to rise with the enrollment of regular students starting in spring of 1946. 655 people enrolled with 487 of them being freshmen. “This 1945-46 enrollment figure, although it does not represent the full year, is the largest number of regular, full-time students in history[at the time] of the San Luis Obispo campus alone.”\textsuperscript{30} The enrollment rose because of G. I. Bill which allowed for veterans to obtain higher education at the government's expense. Eighty percent of the students at Cal Poly at the time were veterans of World War II and were receiving or eligible to be receiving educational benefits.\textsuperscript{31} McPhee knew that the G.I. Bill would help out the school massively and so he “terminated all war time training programs and activities of the California Polytechnic and returned the institution exclusively to its normal functions”\textsuperscript{32} after the Naval Flight Preparatory School had been de-established.

When the war came to America, colleges were struggling and Cal Poly was no different. President McPhee needed a way to help out his small college and the Navy presented itself to him. He was able to strike a deal with the Navy that allowed for the school to be used to its fullest. When McPhee knew that the G. I. Bill would allow for veterans to come back, he realized that the school did not need to continue with the programs. The establishment of the Naval Flight Preparatory School at Cal Poly was just used by McPhee to get the school out of a depression caused by the war. With no

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\textsuperscript{30} “Annual Report” (1945), 2.
\textsuperscript{31} “Annual Report” (1946), 5.
\textsuperscript{32} Kennedy, 251.
war going on, things could return to normal and Cal Poly’s enrollment grew because of the G. I. Bill. Not only did the G. I. Bill help but as stated previously, Cal Poly was the only Naval Flight Preparatory School west of the Rocky Mountains. Veterans coming back from war would remember or at least hear about Cal Poly and with San Luis Obispo being such a perfect place to attend school, it is no wonder that Cal Poly’s enrollment rose significantly after the war. “This twelve month period saw the start of two important trends. Veterans comprised the majority of the student body, and enrollments increased rapidly.”\(^{33}\) Enrollment continued to increase and in the 1946-1947 school year enrollment more than doubled reaching 2044 enrolled students. By the 1949-1950 school year enrollment reached 2909 students.\(^{34}\) The enrollment continued to increase and so McPhee needed to hire more faculty members to keep up with the ever expanding college.

**Conclusion:**

Colleges all across the United States were greatly affected by the war. Colleges were struggling financially and Cal Poly was no different. With the termination of horse racing, Cal Poly lost their main source of income. Enrollment was low and the school kept losing college-aged students to the war. Cal Poly was in trouble and needed a way out. The way out was the Naval Flight Preparatory School introduced to Cal Poly in 1943. Although before the establishment of this program other military programs were in place at Cal Poly, none had the capacity and backing to completely overhaul the institution. McPhee allowed for this naval program to be set up at his school knowing that it would benefit them in the long run. The expenses were paid for by the Navy and

\(^{33}\) Kennedy, 251.

\(^{34}\) Kennedy, 252.
the school was able to use all of their facilities. The cadets at the prep school were taught as if they were at a real naval academy. The way the flight school was operated would influence Cal Poly to rethink their academic concepts and it reinforced the learn by doing slogan. Not only did the program solidify “Learn by Doing”, it also impacted enrollment positively. Enrollment was quite low for Cal Poly before the war but would be on the rise again after the war. The G. I. Bill helped with enrollment but because Cal Poly was the only Naval Flight Preparatory School west of the Rocky Mountains, veterans came back knowing about it.

World War II had a massive impact upon the United States but something that gets overlooked is the impact of the war on higher education. Small colleges like Cal Poly struggled and with the war came opportunities. One of the opportunities was the Naval Flight Preparatory School. Without this program and the money and enrollment that it brought with it, Cal Poly would have not survived and it would not exist today.
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