

Hanging by a Liberal Root: A Study of Cal Poly General Education from 1975 to 2001

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

Presented to

course instructor Professor Andrew Morris

California Polytechnic State University, San Luis Obispo

A Course Taken in Partial Fulfillment of My Minor in History

by

Kevin Hegyi

March 2017

Introduction

California Polytechnic State University, San Luis Obispo has striven to maintain its distinction as a “Polytechnic” institution with its title emphasizing the adherence to technical education.¹ With this emphasis, the opposing educational category—liberal—has been presented as something of a side dish, functioning only as a supplement to the technical.² Education then differs through two attitudes pertaining to what it should entail: the “careerist”—a group who aimed to create “valuable career skills”, and the “generalist”—a group that aimed to “broaden and deepen the character...”³ At Cal Poly, it is arguable that since it was conceived as a “polytechnic” institution or an institution that, according to founder Myron Angel, “educated the hands as well as the head”, it encompassed a stronger “careerist” attitude rather than that of “generalist”.⁴

Eighty-nine years following this technical conception, President of Cal Poly Warren J. Baker pointed out the lifeline that is the liberal arts in a Polytechnic university setting. He noted that Cal Poly, San Luis Obispo was still a “university”—one where “the arts, humanities, and sciences play in the intellectual development of all our students”, linking the liberal arts to the overall educational approach of the university regardless of the fact that it stressed professional majors.⁵ As technically oriented as Cal Poly appeared, a liberal aspect was key in developing the college as a defined university.

¹ H. Eors Revesz. “Academic Senate taking the P our of CP.” *Mustang Daily*, 10 March 1997, 4. <http://bit.ly/2lmc6Gc>, accessed Jan 29, 2017.

² John Hampsey, email message to Kevin Hegyi, 5 February 2017.

³ Norman Jones, “The Continuous Death and Resurrection of the Liberal Arts.” *Liberal Education 101*, no. 4 (Fall 2015): 9-24.

⁴ Myron Angel, *History of the California Polytechnic School at San Luis Obispo*, California (San Luis Obispo: Tribune Print 1907), 39.

⁵ Warren J. Baker. “*Outlook: Views from the Administration*,” Feb. 1996. Box 430, 145.02, Department of Special Collections and University Archives, Robert E. Kennedy Library, Accessed 6 February 2017.

In this paper, I will observe how the liberal arts manifested themselves through Cal Poly's general education program and subsequently how the program shifted from a haphazardly arranged course curriculum to something that involved not only structure, but also cohesive discipline. I will further observe how the general education program faced a dire situation in the 1970s and how it evolved into something much more structured and applicable by the turn of the century. This was accomplished by completely renovating the general education requirements to suit the idea of a broadened education that placed greater emphasis on the liberal arts. With the result of this newly created curriculum, I will argue that Cal Poly's idea of a "comprehensive Polytechnic University" is unique in the sense that it attempts to heighten general education to the point of equal value with that of the technical, thus fusing two different approaches of education into one.⁶

Historiography

The word "liberal" derives from the Latin root *liberālis* meaning, "of or relating to a free man, worthy or typical of a free man" stressing the notion that a "liberal" being has the ability to exercise unfettered exploration of different fields of thought and studies.⁷ The definition predominantly adheres to the categories of "studies, education, arts and professions" emphasizing the capability a "liberal" being has of finding something ultimately suitable for their life as a result of this involved exploration. It can be inferred here that since these humans have the societal and cultural freedom to explore various avenues of thought and potential passions, then they will do just that, creating an involved, comprehensive individual.

⁶ "University Learning Objectives." California Polytechnic University, San Luis Obispo. <http://www.catalog.calpoly.edu/universitylearningobjectives>, accessed 14 February 2017

⁷ "liberal, adj.1". *OED Online*. December 2016. Oxford University Press. <http://www.oed.com/viewdictionaryentry/Entry/11125>, accessed 7 February 2017.

From the Roman period to the Middle Ages, the liberal arts were classified into seven areas of study consisting of literature, dialect, rhetoric, arithmetic, geometry, astrology, and music.⁸ This conglomerate of fields thus emphasized the creation of a comprehensive person.⁹ In opposition, the modern world began to see these studies as losing relevance as they were deemed too “classical” and therefore, outdated. While the 18th century primarily associated itself with the study of the classics, the University of Pennsylvania expanded with an addition of classes that were seemingly more “practical” for everyday life. These classes still contained a certain degree of specificity but nonetheless began to venture out from the strict adherence to classical ideas and languages that ancient education revolved around.¹⁰

In the 19th century, the term “useful knowledge” caused a proliferation of colleges specifying in practical studies and thereby deviated from the Greek liberal core.¹¹ It seemed that at this point, knowledge gained at a university became increasingly more narrow and ultimately, more focused on readying the individual for a specific goal in life after university learning ended. This thereby stressed a teleological outlook, prizing the end result of a technical job over the deontological as the journey of acquiring knowledge did not yield immediate visible results. The advocates of the liberally educated then became under fire and increasingly questioned as this evolving technical aspect in education became more prominent.

In response, theologian John Henry Cardinal Newman attempted to assert the vitality of the liberal arts in, “The Idea of a University”. He stated that there are “two methods of Education; the end of the one is to be philosophical, of the other to be mechanical; the one rises towards general ideas, the other is exhausted upon what is particular and external”, creating a

⁸ Seven Liberal Arts, *Funk and Wagnalls New World Encyclopedia* (Chicago: World Book Inc, 2016)

⁹ Saul Sack, “What Was It? What Is It?” *History of Education Quarterly* 2, no. 4 (Dec. 1962): 210.

¹⁰ Sack, 212-213.

¹¹ Robert Gieger, *The American College in the Nineteenth Century*. (Nashville: Vanderbilt University Press, 2000), 154

visible distinction between the two. Newman viewed a liberal education as something that “gives a man a clear conscious view of his own opinions and judgments, a truth in developing them, eloquence in expressing them, and a force in urging them”.¹² Since the liberally minded are people who have achieved the status of “harmonious individuals”, they will then contribute on a universal level whereas the mechanical seems to dwell too much in specifics.¹³ Dealing with things on a particular level arguably only fosters growth in a specific lens and therefore, departs from a universal understanding of many concepts. For this paper, Newman’s argument can thereby serve as the basis to what the liberal arts has to offer; in a situation where a school has the tendency to dwell in particulars, the broad must be present.

As the conflict between the universal and particular manifested itself in Newman’s discussion, President of the Carnegie Foundation for the Advancement of Teaching, Ernest L. Boyer, attempted in 1987 to “close the gap” in regards to the specialized (particular) and general (universal) notions of education. While conducting a study of over 29 different universities in an attempt to generate an idea of what the experience of university education entails, Boyer concluded that college education had 2 overarching goals: “to help students become independent, productive, self-reliant human beings” as well as “helping students go beyond their private interests and place their own lives in larger context”—two things very similar to Newman’s assertion on what liberal education should accomplish.¹⁴ When discussing these concepts, it is important to note that Boyer is discussing what *general* education should accomplish and here, it is apparent that liberal education manifests itself primarily throughout general education curriculum. Therefore, it is inferred that general education can reach beyond the major-specific

¹² John Henry Cardinal Newman, “The Idea of a University,” in *The Norton Anthology of English Literature*, edited by Stephen Greenblatt, 1035-1042. New York: Norton & Company, 2006.

¹³ Sack, 210.

¹⁴ Ernest L. Boyer, “College: The Undergraduate Experience”. (Boyer Archives, Harvard Colloquium on the Undergraduate Experience in America, November 12 1986), 11-17. <http://bit.ly/2murVIm>, accessed 4 March 2017.

thinking academic majors entail. For major-specific thinking enabled the students to exist in something of a solipsistic nature as the mindsets towards their majors consumed their fields of thought and therefore the world becomes an extension of their major—a limited part rather than the whole itself.

At California State Polytechnic University, this tendency to dwell within the specific areas of study seemingly had the greatest amount of traction based upon its “Polytechnic” title. But, as President Baker discussed the aims of general education, it was apparent that a “broad” foundational knowledge in congruence with major-specific areas was desired.¹⁵ This liberal arts core, separate of the non-liberal arts majors, resided directly in the general education courses that offered a “world of ideas”, demanding the catholic side of education as a key component. He furthers this statement by discussing how, “this freedom—and this enrichment—are as central to the university experience as gaining specialized knowledge in a particular discipline” addressing the liberal arts as a vital counterpart to specifics.¹⁶ From a school that rested so heavily on specific, technical education, it seemed that incorporating something that involved non-specifics would be readily foreign.

The “Steamtable” of General Education

Students in the 1960s offered a realistic proposition regarding the status of their general education classes. “How can you stand up there and talk about Plato’s *Symposium* when people are dying in Vietnam?” was a confirmed Cal Poly student response referencing the lack of

¹⁵ “The Chancellor Comments,” *California State Polytechnic College Report* April 1970. <http://bit.ly/2kAH7ls>, accessed 29 January 2017.

¹⁶ Warren J. Baker, *Outlook: Views from the Administration*, March 1995. Box 430, 145.02, Department of Special Collections and University Archives, Robert E. Kennedy Library, accessed 6 February 2017.

relevance in the courses offered.¹⁷ According to Michael Wenzl, Chairman of the General Education and Breadth Committee of the Academic Senate in 1979, this need for “relevance” created a multitude of courses attempting to encompass a broad range of topics to compensate for the relevance the students demanded. Unfortunately, this resulted in overcompensation, creating a situation where “general education became too general” as it attempted to depart from a more traditional core—one that would consist of studying Plato’s *Symposium*. As a result, there was little coherency in courses taken and general education became increasingly distant from formulating a comprehensive education of subjects outside of a concentrated major.¹⁸

In 1975, California State University Chancellor Dumke described this dilemma as a “cafeteria-style general education program where a student picks and chooses from a steamtable of introductory courses.”¹⁹ With an undisciplined assault on choosing courses, it is inferred here that the body of knowledge nominated as general education did not have a withstanding reputation as something to, in accordance with the metaphor, provide complete nourishment for the educational experience of the student.²⁰ If students were spreading themselves out too thin with the hopes of becoming more “relevant”, then the foundation of knowledge idealized became weak and therefore, unbeneficial. Also, it is important to note that in order for these classes to remain “relevant” they, by definition would also have to keep up with the time and subsequently, change.²¹ If they constantly changed, nothing became standardized and the students in those courses were potentially exposed to issues presented before their time, thus losing direct

¹⁷ Jill Hendrickson, “Proposed general ed changes may add to required courses.” *Mustang Daily*, 5 October 1979, 1. <http://bit.ly/2mdTZRc>, accessed 4 March 2017.

¹⁸ McConahey, Meg, “Baker Backs GE proposal by teachers.” *Mustang Daily*, 8 Nov. 1979, 1. <http://bit.ly/2mQXcJl>, accessed 29 January 2017.

¹⁹ “The Chancellor Comments,” *Cal Poly Report*, October 1975. <http://bit.ly/2ksfrUU>, accessed 29 January 2017.

²⁰ McConahey, 1.

²¹ Jill Hendrickson, “Proposed general ed changes may add to required courses.” *Mustang Daily*, 5 October 1979, 1. <http://bit.ly/2mdTZRc>, accessed 4 March 2017.

relevance to their current state. As this was originally observed as an optimistic application of general education curriculum, it actually drew people away from the initial reasoning behind general education. In hopes of rectifying this problematic situation, something had to be done regarding the vast state of general education.

The Comeback: 1975-1984

The aspirations of relevance were met with the decline of applicability and therefore, general education itself began to lose momentum. In order to regain momentum, in 1975 Chancellor Glenn S. Dumke reestablished what it meant to acquire a B.A. degree and subsequently encouraged curriculum review throughout the CSU system. His idea of what constituted a B.A. degree incorporated a very broad foundation and emphasized that in earning a B.A. degree, one also gained the “perspective of history and social sciences, the appreciation of the humanities and the arts, the problem solving abilities of science and mathematics, the communication skills of English and hopefully a second language.”²² By decreasing ignorance on the part of the student, the student then began to understand various fields in relation to their own.²³ As well as a growth in perspective, this specific notation of which subjects encompassed the degree created a more structured and standardized way of approaching that growth.

Dumke then continued with saying how this broad understanding of multiple fields of study was imperative in understanding society. The aim was then to understand the “values and wisdoms of the society in which he lives”—connoting this idea that once a student graduates with this broadened knowledge, they will be able to be a functioning member of society and

²²“The Chancellor Comments,” *Cal Poly Report*, October 1975. <http://bit.ly/2ksfrUU>, accessed 29 January 2017.

²³ Taylor R. Durham, “Buisness and the Liberal Arts: Managing the Constructive Tensions” *New Directions for Teaching and Learning* 40, (Winter 1989): 31-38.

therefore will be of great assistance to the world.²⁴ Using the idea of a liberal education in John Henry Cardinal Newman's "Idea of a University", more "good" would be imparted to the world since more people would have a more universal understanding and as a result, the world would become something of an ongoing conversation with increasingly more participants.²⁵

Dumke then took these theoretical propositions and proposed a solution that directly addressed the reinvigoration of the general education curriculum. He initiated the creation of a "task force" that increased the unit requirement for general education from 60 units to 72 units (20 percent) across the CSU system with the goal that general education should go from "orphan status to full partnership with academic majors on the campuses." This "partnership attempted to get general education out of its state as an "anachronism" or a "hopeless ideal" and reestablish itself as the key liberal arts component of university curriculum.²⁶ At Cal Poly, these implications proved to be more difficult to implement due to the technical reputation it cherished.

Baker and General Education Reform

This general education reformation initiated by Chancellor Dumke conveniently aligned itself with the goals of Cal Poly President Warren J. Baker as he assumed his role as President of Cal Poly in 1979. Warren J. Baker already had the goal of reforming general education and therefore, this request only perpetuated the notion that some change had to occur.²⁷ While Dumke's task force concluded that there was to be an increase in general education classes from

²⁴ Ibid

²⁵ John Henry Cardinal Newman, "The Idea of a University," in *The Norton Anthology of English Literature*, edited by Stephen Greenblatt, 1035-1042. (New York: Norton & Company, 2006), 1035.

²⁶ "Cal Poly Report," *California State Polytechnic College Report*, 10 May 1979. <http://bit.ly/2mL0gno>, accessed 29 January 2017.

²⁷ Nancy Stringer, "Baker happy with his progress at Poly." *Mustang Daily*, 2 Feb 1984, 1. <http://bit.ly/2mR1HDN>, accessed 30 January 2017.

60-72 units, it also required that upper division general education courses were to be taken during the junior and senior years to ensure that the “get out of the way” ideology did not remain.²⁸ By requiring additional classes geared towards the creation of a more involved individual, the apparent logic was that students would therefore spend more time with the classes over the course of their Bachelor’s Degree and thereby build up a greater foundation of these liberal ideals.

While Baker recognized the notion that some sort of general education policy had to be implemented, he also recognized the fault in the Chancellor’s idea about expanding the course offerings. Baker refuted Dumke’s quantitative approach of making the students take more general education classes with a qualitative approach where the solution addressed the needs to increase the “quality” in the courses presently offered rather than adding more.²⁹ While Dumke’s logic is understood—the more classes students took the more committed and more exposed they would be—it is inferred that his plan relied on the assumption that as more classes were mandatory on paper, students would absorb more information due to the increased workload.

As well as the issue of quality, Baker’s attitude towards the technical foundation of Cal Poly acted as a source of vigor in his counter argument to the CSU proposition. In opposition to this proposition, Baker strongly believed in a sense of “autonomy” at Cal Poly in regards to general education.³⁰ The reasoning behind this stemmed from Cal Poly’s long technical and agricultural roots as Baker believed that as a byproduct of having these roots, Cal Poly was inherently distanced from other universities, especially in the CSU system. Therefore, since a technical

²⁸ “Cal Poly Report,” *California State Polytechnic College Report*, 10 May 1979. <http://bit.ly/2lmguf7>, accessed 29 January 2017.

²⁹ Rye Graham, “Baker against unit increase.” *Mustang Daily*, 5 October 1979, 1. <http://bit.ly/2mdTZRc>, accessed 29 January 2017

³⁰ Meg McConahey, “Baker Backs GE proposal by teachers.” *Mustang Daily*, 8 Nov. 1979, 1. <http://bit.ly/2mQXcJl>, accessed 29 January 2017.

education was always stressed, to deviate from this by emphasizing general education would have been considered a deviation from Cal Poly's legacy. Concretizing this logic, Baker stated, "the school [Cal Poly] was founded on agriculture, it needs to be nurtured and enhanced."³¹ These ideas hearken back to President Baker's predecessor, President Kennedy and his emphasis on the "equally long held reputation as a unique "polytechnic college", a reputation that made the campus specifically relevant to the needs of a technological society".³² With this tension established, there needed to be some reconciliation to create a successful and applicable general education program while not disrupting the technical foundation.

As it has been seen that Baker was against the 12-unit increase from 60-72 units of General Education, the 1981-1983 Course Catalog shows that it was still implemented.³³ Even though there is the implementation of these courses, the Academic Senate of Cal Poly allowed there to be a resolution as to what constituted these 12 units in regards to adding them to General Education. The proposed plan to revise the general education curriculum would come in 4 phases consisting of "establishing desired outcomes, identifying the knowledge and skills seen as necessary to achieve these desired outcomes, identifying the courses, and to determine the process of plan for administration of the general education and breadth requirements."³⁴ The first phase of this plan incorporated 543 faculty from every field of study on campus in determining the outcomes of someone with a B.A. degree.³⁵ Here, this is an instance of faculty from all over

³¹ Rye Graham, "Baker against unit increase," *Mustang Daily*, 5 October 1979, 1. <http://bit.ly/2mdTZRc>, accessed 30 January 2017.

³² Robert 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 University, 2001, 306.

³³ Academic Affairs, "The 1981-1983 Cal Poly Catalog." Course Catalogs. 1981-1983. Course Catalogs. Digital Commons @ Cal Poly, San Luis Obispo. <http://bit.ly/2m3athL>. Accessed 17 February 2017.

³⁴ Nancy Lewis, "Academic Senate OK's GE procedure resolution." *Mustang Daily*, 28 May, 1981, 1, accessed 4 March 2017.

³⁵ _____, "General Education Election: 543 faculty take part," *Mustang Daily*, 30 October, 1981, 1. <http://bit.ly/2n0sj27>, accessed 4 March 2017.

the campus shedding their bias towards their particular fields in an attempt to understand the importance of a general education—something noted as a key component in applying the liberal arts to a technical school.³⁶ Ideally, this reformation sought to make Cal Poly more like a university as it has always been, according to Chairman of the Academic Senate, Tim Wenzl, “atypical of other universities because it concentrates too much on majors and not enough on general education.”³⁷ This notion accepted the view that there is to be an emphasis on majors but promoted the idea that some sort of “balance” needed to be maintained between the two sides: major oriented education and general liberal education.³⁸

In 1984 the new General Education curriculum would be implemented with the final unit count of 79 units of general education in all majors except architecture and agriculture (73) and engineering (70) as there were courses that counted towards the major and for the general education requirements in these specific instances. This curriculum reform also called for the addition of a technical component to the General Education curriculum—something never before implemented in the CSU school system.³⁹ In adding two courses specifically designed to understand both computer science and different technological functions, Cal Poly pioneered something of a modern interpretation of the liberal arts. Although these courses place a strong emphasis on fields consisting of technology, they nonetheless attempted to broaden the intellect of the students taking part, something that would be re-emphasized in 1996.⁴⁰ Therefore, with the

³⁶ Taylor R. Durham, “Business and the Liberal Arts: Managing the Constructive Tensions” *New Directions for Teaching and Learning* 40, (Winter 1989): 31-38

³⁷ Nancy Lewis, “GE plan to come in four phases,” *Mustang Daily*, 6 October 1981, 3. <http://bit.ly/2muEIKX>, accessed 25 February 2017.

³⁸ *Cal Poly: The First Hundred Years* (San Luis Obispo; Robert E. Kennedy Library, California Polytechnic State University, 2001).

³⁹ Sharon Rezak, “Academic Senate Widens Requisites,” *Mustang Daily*, 23 October 1982, 1. <http://bit.ly/2mdX7fQ>, accessed 4 March 2017.

⁴⁰ Warren J. Baker, *Outlook: Views from the Administration*. Feb. 1996. Box 430, 145.02, Department of Special Collections and University Archives, Robert E. Kennedy Library, Accessed 6 February 2017.

goal of graduates having a “broader and richer background” in a newly forming society that heavily relied on technology—one had to be up to date on technology’s basic functions.⁴¹

General Education 1995-2001

1995 marked the year in which another monumental curriculum reform would be conceived, ultimately creating a more comprehensive involvement of the liberal arts and the technically minded school of Cal Poly. President Baker, in an edition of *Outlook: Views from the Administration*, noted that 1995 would be the “year of the curriculum”—a year that would build upon the most recent curricular changes in the early 1980s. Baker directly addressed the current status and goals of the general education curriculum, stating that they “form a core of knowledge shared by all of our graduates” noting that they are considered vital to the experience of a university. By using such phrases in describing the goals of general education as “roles of good citizens” and “enriching their [the students] lives”, Baker strove for a sense of “balance” in education, acknowledging the fact that much emphasis is placed on majors and subsequently, much attention is driven away from the general education programs which stood for the foundational base of a more involved human being.⁴²

Baker’s goals were met with the establishment of the Academic Senate Adhoc Committee on General Education which sought to accomplish two goals: “a new general education governance structure” and a “new general template for 4 unit courses”.⁴³ The latter of the two is key in understanding as it is the same template in which is in use today as the establishment of all general education courses as 4 units is vital in increasing the application of

⁴¹ Sharon Rezak, “General education to dip into technology classes,” *Mustang Daily*, 23 October 1982, 2. <http://bit.ly/2mdX7fO>, accessed 4 March 2017.

⁴² Warren J. Baker, *Outlook: Views from the Administration*, March 1995. Box 430, 145.02, Department of Special Collections and University Archives, Robert E. Kennedy Library, accessed 6 February 2017.

⁴³ “Cal Poly Report,” *California State Polytechnic College Report*, 5 April 1996. <http://bit.ly/2mPXxLr>, accessed 29 January 2017.

them. It is inferred that Baker's reasoning behind this is that with the increased unit count, the courses would thereby require more effort on the students' part to succeed in the class. This change thereby acted as something of a continuation of his plans 15 years prior where the *quality* of the class was stressed over the *quantity*. In fact, the unit requirement for general education classes was reduced from 79 to 72 units after they had all been changed to 4 units.⁴⁴ Ultimately, more time was then devoted to a smaller number of general education courses, ideally creating a greater sense of devotion and attachment.

The Credit/No Credit Dilemma

As the courses were now set to 4 units, general education now seemingly had more substance against major-oriented classes. Unfortunately, with the implications of the credit/no credit policy, students were thus able to still resist complete immersion into the general education curriculum. The credit/ no credit grading policy consisted of a student taking a class that, passing with a C- or better, received "credit" for the class that did not therefore affect one's grade point average.⁴⁵ This grading policy ideally offered a sense of flexibility or an "exploratory purpose" regarding classes outside of a student's major—if they presented themselves to be more difficult than expected, students were able to opt out of having it reflect negatively towards their GPAs.⁴⁶ But, while this is the situation that was made to help them, it also allowed students the

⁴⁴ MEMO from Harvey Greenwald to Academic Senators and Department Chair. 24 Feb. 1997. Box 430, 145.02, Department of Special Collections and University Archives, Robert E. Kennedy Library, accessed 6 February 2017.

⁴⁵ Academic Affairs. "The 1994-1997 Cal Poly Catalog." Course Catalogs. 1994-1997. Course Catalogs. Digital Commons @ Cal Poly, San Luis Obispo. <http://bit.ly/2mKIFw9>, accessed 17 February 2017.

⁴⁶ Gil Sery, "Credit/no credit changes don't make the grade," *Mustang Daily*, 13 May 1997, 4. <http://bit.ly/2IRDCcn>, accessed 29 January 2017.

opportunity to breeze through these classes without concentrated effort and as a result, breezing through their educational core.⁴⁷

President Baker recognized this tendency and in 1997, withdrew the credit/no credit grading policy completely, idealizing greater student involvement.⁴⁸ Baker's reasoning regarding the decision was colored rather liberally as he notes that, "we are trying to achieve a particular outcome in creating the foundation of life long learning and to create a breadth of knowledge and understanding." He stated that general education was an "essential element of an educated person" and that students were not exercising their intellectual capabilities with the seriousness they should have been in regards to these courses due to credit no credit.⁴⁹ The complete removal then represents almost a sort of utopian approach to this problem—that since the classes are taken for credit with no way around it then ideally students will apply themselves seemingly more, especially since classes were now 4 units apiece. Baker's general education formula emphasized something more towards an obligation, thereby getting the students more involved and attached to their subject matter than just "getting it out of the way."⁵⁰

While Baker's plan stressed a more liberally educated agenda, students and faculty seemed to hold mixed attitudes. Alan Dunton, opinion writer for the Mustang Daily takes the optimistic approach that Baker seemingly had in mind, emphasizing that "the collective student

⁴⁷ Shoshana Hebshi, "Is the new grading Policy credible?" Mustang Daily, 6 March 1997, 7. <http://bit.ly/2lmseHt>, accessed 29 January 2017.

⁴⁸ Maria Garcia, "Baker serves final vote on fate of credit/no credit," *Mustang Daily*, 17 Jan 1997, 1. <http://bit.ly/2mgQhb5>, accessed 27 January 2017

⁴⁹ Shoshana Hebshi, "Is the new grading Policy credible?" Mustang Daily, 6 March 1997, 7. <http://bit.ly/2lmseHt>, accessed 29 January 2017.

⁵⁰ Cal Poly Report, *California State Polytechnic College Report*, 10 May 1979. <http://bit.ly/2lmguF7>, accessed 29 January 2017.

body intelligence will rise” and that “all education matters and should be taken seriously, not skimmed over like cliff notes”—something very reminiscent of John Henry Cardinal Newman.⁵¹

While this article stresses the advantages and ideal situation that could arise from the elimination of credit/no credit, students and faculty felt that coercing students to dedicate themselves to General Education classes would draw the attention away from the professional major courses, courses of great specificity, and subsequently decrease the prestigious unique status of Cal Poly as a technical school.⁵² Student Eors H. Revesz discussed the irrelevance and misdirection of general education courses stating that it would “only result in the emphasis of lower level GE&B courses over upper level laboratories and elective in an engineering students major” noting that there is still an adherence, much like one Baker addressed in 1980 to these Polytechnic Roots.⁵³ This is ultimately the great dilemma in understanding some sort of congruence between general education and major courses; obviously, the students have a tendency to address their major-based needs first (understandably) but this approach is deemed to have become too specific in the betterment of students as universal individuals. Although we are now predominately discussing the ‘90s, Chairman of the Academic Senate Michael Wenzl in 1979 addressed this point perfectly asking the provocative question, “should students spend all their time studying to get an entry level job? Or should they study something they won’t get a chance to for the rest of their lives?” It is inferred that in most professional majors, the job predominates.⁵⁴

⁵¹ Alan Dunton, “Credit/no credit elimination best for students,” *Mustang Daily*, 5 Feb. 1997, 4. <http://bit.ly/2lmn3Hz>, accessed 29 January 2017.

⁵² Bob Dignam, “Balancing Technology and GE problematic,” *Mustang Daily*, 4 April, 1997, 4. <http://bit.ly/2lkrmDT>, accessed 29 January 2017.

⁵³ Eors H. Revesz, “Academic Senate taking the P our of CP,” *Mustang Daily*, 10 March 1997, 4. <http://bit.ly/2lmc6Gc>, accessed 29 January 2017.

⁵⁴ Jill Hendrickson, “Proposed general ed changes may add to required courses,” *Mustang Daily*, 5 October 1979, 1. <http://bit.ly/2mdTZRc>, accessed 4 March 2017.

As the general education unit requirement rested at 72 units and courses were all 4 units, the unrest regarding the credit/no credit policy was seemingly the thorn in the side of the entire general education reform. President Baker decided to address this controversy and appeal to a middle ground regarding the fate of credit/no credit. The resolution was that students could take 16 units (4 courses) credit/no credit with 4 units in their major, 4 units in the general education courses and 8 units reserved for electives.⁵⁵ Therefore, it still disciplines the student to put in more effort to their general education courses but allowed some room for involvement in other fields they were unsure about.⁵⁶ From this information regarding the credit/no credit grading policy, it seems that the technical side of Cal Poly was not ready to completely eliminate it with the fear that the university's reputation would be contested.

Technical Comparison

Cal Poly is not the only school to have struggled with similar instances of incorporating general education classes into a technically-oriented campus. In the case of the University of Oklahoma State University- Okmulgee, the emphasis on vocational and practical training has always come first as internships favoring technical experience are a vital part of the educational experience. This became problematic for the university in the sense that in most recent years, businesses are now looking for both “technically trained students” and “students who have a thirst for lifelong learning as well as being proficient in problem-solving skills”. From a college that wanted to make students “marketable” this dilemma ends up in the general education department to help create these newly desired skills. The implementation of these general

⁵⁵ Brad Davis, “New Grading Proposal Presented to Senate,” *Mustang Daily*, 13 March 1997, 3. <http://bit.ly/2mKAeRx>, accessed 29 January 2017.

⁵⁶ Gil Sery, “Credit/no credit changes don’t make the grade,” *Mustang Daily*, 13 May 1997, 4. <http://bit.ly/2IRDCcn>, accessed 29 January 2017.

courses is limited due Oklahoma State only offering a AA degree, but nonetheless required students to take 2 classes each trimester outside of their major courses for the first four trimesters, followed by one general course for the last two trimesters. Even though this is an attempt to combine liberal and technical education, this college finds it difficult to compensate for the growing demand of liberally educated students by businesses as the non-major material does not seem to resonate with the students.⁵⁷

Upon its foundation in 1824, The Rensselaer Polytechnic Institute in New York wanted to stress “the application of science to the common purposes of life” which was observed as a “radical departure from the liberal arts.” This was established as the ultimate model of professional study at an undergraduate level. But, although there was a “preparatory studies” curriculum implemented in 1826, the college still maintained a strong technical root. It experienced the same phenomenon as Oklahoma State-Okmulgee where it must therefore cope with the idea that businesses now idealize a technical and liberal education. In response to this, it implemented such courses as “Nature and Society”, “Freedom and Culture”, and “Progress and Its Problems” to get freshmen oriented with various disciplines.⁵⁸ Recently, the core curriculum revolves around 24 credit hours centered around the H.A.S.S. (Humanities, Arts, and Social Sciences) Department, aiming to make a liberal education relevant to the lackluster engagement of the engineering students—appeal of these courses for engineering students is severely lacking.⁵⁹ These courses, although constituted as liberal, deal with very technologically savvy instrumentation and knowledge, still seeming to put very practical uses to liberal arts ideas. It

⁵⁷ Stuart Tichener, “Technical Training and General Education: Can We Really Provide Both?” *ERIC Clearinghouse for Community Colleges*, December 2001, 6-7.

⁵⁸ Dwight A. Sangrey and Thomas Phelan, “Liberal Learning and Engineering Education” *New Directions for Teaching and Learning* 40, (Winter 1989): 49-58

⁵⁹ “HASS Core Curriculum.” Rensselaer Polytechnic Institution. <http://www.hass.rpi.edu/pl/hass-core-curriculum>. Accessed 14 February 2017.

appears to be that Rensselaer recognizes the importance of the liberal arts in their curriculum and although being primarily a technical school, seeks to implement policies that incorporate the liberal arts with a modern, technologically infused spin, similar to Cal Poly's implementation of 2 technology courses.⁶⁰

Conclusion

While Cal Poly deals with the implementation of the liberal arts into technically emphasized coursework, the advancement towards becoming “truly educated persons”, a main goal of general education, is a key factor in understanding the importance of holding on to general education.⁶¹ As the general education courses taken in college aim to provide a solid foundation, they also aim to perpetuate continued education after schooling is complete—students broaden their already broad knowledge provided to them throughout college and thereby expand from “educated” into the “truly educated.” Although the term “truly educated” sounds somewhat pretentious, the idea that courses in college turn on the faculty and aim to get the student to absorb as much information and knowledge as possible in a quest for “lifelong learning” is something of great beauty.⁶² Therefore, as I acknowledge how incredible intelligent one must be to work within technical fields of study, the idea of universal knowledge is key to understanding how that specific intelligence involves itself on the level of humanity. Also, this idea is reciprocated as it is best to acknowledge that in achieving the concept of “truly educated”, the knowledge of these specific fields coming from a liberal arts perspective is nothing but vital in understanding society.

⁶⁰ Sangrey and Phelan, 49-58.

⁶¹ Academic Affairs, “The 1981-1983 Cal Poly Catalog.” Course Catalogs. 1981-1983. Course Catalogs. Digital Commons @ Cal Poly, San Luis Obispo. <http://bit.ly/2m3athL>. Accessed 17 February 2017.

⁶² Shoshana Hebshi, “Is the new grading Policy credible?” Mustang Daily, 6 March 1997, 7. <http://bit.ly/2lmseHt>, accessed 29 January 2017.

Cal Poly is now defined as a “comprehensive polytechnic university”—a title that seemingly has multiple contradictions to its name and ultimately summarizes its unique state.⁶³ The “comprehensive” aspect refers directly to the implementation of a strong liberal arts core guided by general education proving that there is an effort to maintain the ancient Greek core of a liberal education even at a technical school. Juxtaposed next to the “polytechnic” component, there is coherence between the “generalist” and the “careerist” attitude that conveys a state of adaptability inherent in the students upon graduation. Concluding with the final term, “university” there is an effort to make this specific college more applicable and in tune with other colleges that have a non-specific core.⁶⁴ This conglomeration of terms designates the unique experience that is California Polytechnic State University, San Luis Obispo.

⁶³ “University Learning Objectives.” California Polytechnic University, San Luis Obispo. <http://www.catalog.calpoly.edu/universitylearningobjectives>, accessed 14 February 2017

⁶⁴ Warren J. Baker. “*Outlook: Views from the Administration*,” Feb. 1996. Box 430, 145.02, Department of Special Collections and University Archives, Robert E. Kennedy Library, Accessed 6 February 2017.

Works Cited

- Academic Affairs, "The 1981-1983 Cal Poly Catalog." Course Catalogs. 1981-1983. Course Catalogs. Digital Commons @ Cal Poly, San Luis Obispo. <http://bit.ly/2m3athL>. Accessed 17 February 2017.
- Academic Affairs. "The 1994-1997 Cal Poly Catalog." Course Catalogs. 1994-1997. Course Catalogs. Digital Commons @ Cal Poly, San Luis Obispo. <http://bit.ly/2mKIFw9>, accessed 17 February 2017.
- Angel, Myron. History of the California Polytechnic School at San Luis Obispo, California (San Luis Obispo: Tribune Print 1907), 39.
- Baker, Warren J. "Outlook: Views from the Administration." Feb. 1996. Box 430, 145.02, Department of Special Collections and University Archives, Robert E. Kennedy Library, Accessed Feb. 6 2017.
- Baker, Warren J. Baker. "Outlook: Views from the Administration." March 1995. Box 430, 145.02, Department of Special Collections and University Archives, Robert E. Kennedy Library, accessed 6 February 2017.
- "Cal Poly Report," *California State Polytechnic College Report*, 5 April 1996. <http://bit.ly/2mPXxLr>. Accessed 29 January 2017.
- "Cal Poly Report," *California State Polytechnic College Report*, 10 May 1979. <http://bit.ly/2mL0gno>. Accessed Jan 29, 2017.
- "The Chancellor Comments," *Cal Poly Report*, October 1975. <http://bit.ly/2ksfrUU>. Accessed Jan 29, 2017.
- "The Chancellor Comments," *California State Polytechnic College Report* April 1970. <http://bit.ly/2kAH7ls>. Accessed 29 January 2017.
- Davis, Brad. "New Grading Proposal Presented to Senate," *Mustang Daily*, 13 March 1997, 3. <http://bit.ly/2mKAeRx>. Accessed 29 January 2017.
- Dignam, Bob. "Balancing Technology and GE problematic," *Mustang Daily*, 4 April, 1997, 4. <http://bit.ly/2lkrmDT>, accessed 29 January 2017.
- Dunton, Alan. "Credit/no credit elimination best for students." *Mustang Daily*, 5 Feb. 1997, 4. <http://bit.ly/2lmn3Hz>. Accessed Jan 29, 2017.
- Garcia, Maria. "Baker serves final vote on fate of credit/no credit." *Mustang Daily*, 17 Jan 1997. <http://bit.ly/2mgQhb5>. Accessed 27 Jan. 2017

Graham, Rye. "Baker against unit increase." *Mustang Daily*, 5 October 1979, 1.
<http://bit.ly/2mdTZRc>. Accessed 29 January, 2017.

Hampsey, John, email message to Kevin Hegyi, 5 February 2017.

Hendrickson, Jill. "Proposed general ed changes may add to required courses." *Mustang Daily*, 5 October 1979, 1. <http://bit.ly/2mdTZRc>. Accessed 4 March 2017.

Hebshi, Shoshana. "Is the new grading Policy credible?" *Mustang Daily*, 6 March 1997, 7.
<http://bit.ly/2lmseHt>, accessed 29 January 2017.

Kennedy, Robert. *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 University, 2001.

Lewis, Nancy. "Academic Senate OK's GE procedure resolution." *Mustang Daily*, 28 May, 1981. Accessed 4 March 2017.

_____. "GE plan to come in four phases," *Mustang Daily*, 6 October 1981, 3.
<http://bit.ly/2muEIKX>, accessed 25 February 2017.

_____. "General Education Election: 543 faculty take part." *Mustang Daily*, 30 October, 1981.
<http://bit.ly/2n0sj27>. Accessed 4 March 2017.

"liberal, n.1". OED Online. December 2016. Oxford University Press.
<http://www.oed.com/viewdictionaryentry/Entry/11125> (accessed February 07, 2017).

McConahey, Meg. "Baker Backs GE proposal by teachers." *Mustang Daily*, 8 Nov. 1979, 1.
<http://bit.ly/2mQXcJl>

MEMO from Harvey Greenwald to Academic Senators and Department Chair. 24 Feb. 1997. Box 430, 145.02, Department of Special Collections and University Archives, Robert E. Kennedy Library, Accessed Feb. 6 2017.

Revesz, Eors H. "Academic Senate taking the P our of CP." *Mustang Daily*, 10 March 1997,
<http://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=6121&context=studentnews> Accessed Jan 29, 2017.

Rezak, Sharon. "Academic Senate Widens Requisites." *Mustang Daily*, 23 October 1982.
<http://bit.ly/2mdX7fO>. Accessed 4 March 2017.

Sery, Gil. "Credit/no credit changes don't make the grade," *Mustang Daily*, 13 May 1997, 4.
<http://bit.ly/21RDCcn>, accessed 29 January 2017.

Stringer, Nancy. "Baker happy with his progress at Poly." *Mustang Daily*, 2 Feb 1984, 1.
<http://bit.ly/2mR1HDN>

Secondary Sources

Boyer, Ernest L. "College: The Undergraduate Experience". (Boyer Archives, Harvard Colloquium on the Undergraduate Experience in America, November 12 1986),11-17.
<http://bit.ly/2murVIm>, accessed 4 March 2017.

Cal Poly: The First Hundred Years (San Luis Obispo; Robert E. Kennedy Library, California Polytechnic State University, 2001

Durham, Taylor R. "Buisness and the Liberal Arts: Managing the Constructive Tensions" *New Directions for Teaching and Learning* 40, (Winter 1989): 31-38.

"HASS Core Curriculum." *Rensselaer Polytechnic Institution*. <http://www.hass.rpi.edu/pl/hass-core-curriculum>. Accessed 14 Feb, 2017.

Geiger, Robert. *The American College in the Nineteenth Century*. Nashville: Vanderbilt University Press, 2000.

Jones, Norman. "The Continuous Death and Resurrection of the Liberal Arts." *Liberal Education* 101, no. 4 (Fall 2015): 9-24.

Newman, John Henry Cardinal. "The Idea of a University." In *The Norton Anthology of English Literature*, edited by Stephen Greenblatt, 1035-1042. New York: Norton & Company, 2006.

Sack, Saul. "What Was It? What Is It?" *History of Education Quarterly* 2, no. 4 (Dec. 1962): 210-224.

Sangrey, Dwight A. and Thomas Phelan. "Liberal Learning and Engineering Education" *New Directions for Teaching and Learning* 40, (Winter 1989): 49-58

"Seven Liberal Arts." *Funk and Wagnalls New World Encyclopedia*. Chicago: World Book Inc, 2016.

Tichenor, Stuart. "Technical Training and General Education: Can We Really Provide Both?" *Eric Clearinghouse for Community Colleges*, December 2001.

"University Learning Objectives." *California Polytechnic University, San Luis Obispo*.
<http://www.catalog.calpoly.edu/universitylearningobjectives>. Accessed 14 Feb. 2017.

