ACCREDITATION, KNOWLEDGE, AND STRATEGIES
OF PROFESSIONALIZING OCCUPATIONS

A Thesis in
Higher Education

by
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Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Doctor of Philosophy

August 2000
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ABSTRACT

Ever since specialized accrediting agencies began to proliferate in the United States during the early decades of the twentieth century, scholars have speculated about the goals and strategies of these agencies and their effect on professional education. Many scholars assert that the professionalizing occupations of journalism and engineering used medicine’s professionalization process as a model, and that the goal of all specialized accrediting agencies is to gatekeep and control a profession’s body of knowledge to enhance both individual members’ and the profession’s status. Neither of these hypotheses has been tested with empirical evidence. Furthermore, sociologists have accused the historians who examine the professions, their associations, and their prestige attainment of neglecting to make interprofessional comparisons and selecting random starting and ending points in time. To address this gap, this study involved comparative case studies of the professionalization of both journalism and engineering between 1919 and 1938.

This study, a goals-based evaluation that is historical in nature, answered what the professional associations hoped to gain, what strategies were used to attain the professional associations’ goals, how effective the chosen strategies were for meeting the goals, and, what effect each strategy had on journalism’s and engineering’s professional education. This study focused on these four areas by examining the location of journalism’s and engineering’s professional knowledge, the access to these bodies of knowledge in educational institutions, how completion of professional education was marked, and the requirements for practice. A comparison of these four areas, a second dimension of analysis, was then made between journalism and engineering. Once described and analyzed, the major findings, conclusions, and implications for practice and research were presented.

This study found that national coordination fosters goal attainment, accreditation needs the associations’ united support, that journalism made more progress toward accreditation between 1919 and 1938 than engineering, and, engineering did not use medicine’s professionalization model as many scholars believe. If the successful closure of the body of knowledge indicates the attainment of professional status, as many scholars assert, neither journalism nor engineering professionalized between 1919 and 1938.
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ACKNOWLEDGMENTS

I would like to thank many individuals who helped make it possible for me to undertake and complete this study. I thank those professors at San Jose State University, California State University (Stanislaus), and The Pennsylvania State University (University Park) who encouraged my interests in education, history and accreditation. I especially thank Joseph Corbin, Carol Colbeck, and Dhushy Sathianathan for their support, expertise, guidance, and friendship. Special thanks also are given to Julianna, Kris, Walter, Bob, Lisa, Chris, Lucille, and Joe, among many others, who have shared with me their computer expertise, support, interest, questions, laughter, and love. Great appreciation is given to George D. Peterson and his staff at the Accreditation Board for Engineering and Technology headquarters, and to Harry Miller and his staff at the State Historical Society of Wisconsin. I am also in debt to Trudi, Sally, and Bev for keeping me sane by answering my questions and laughing with me.

This work and its associated accomplishments would not have been possible without the love and guidance of my family and the Lord. This study is dedicated to Peter and Jonathan, and the memory of my mother, Gail.
Our sense of humor must be lost
If we keep spending time and cost
Answering! Ithener and his ilk,
Why? In our veins flows buttermilk.
If we keep playing the defense,
God in heaven! Get some sense!
Ignor, disdain! Fools e’er will be
Kicking men from A to Z.
My parting words to you are these,
"Sleep with dogs and rise with fleas!"
Chapter 1

INTRODUCTION TO THIS STUDY

Ever since specialized accrediting agencies began to proliferate in the United States during the early decades of the twentieth century, scholars have speculated about the goals and strategies of these agencies and their effect on professional education. Accreditation “is the process whereby an organization or agency recognizes a college or university or a program of study as having met certain pre-determined qualifications or standards.”

Although it is very costly, accreditation is highly desired by most institutions of postsecondary education and their professional degree programs. Institutional accreditation, also referred to as regional accreditation, is the assessment and evaluation of an entire college or university and began in the United States in the 1880s. Specialized accreditation, or professional accreditation, assesses and evaluates a program of study within a postsecondary institution, and was initiated in the United States in the early 1900s with the profession of medicine.

The American Medical Association (AMA), created in 1847, initially exerted little control over the schools which trained future physicians. By 1906, there were 162 medical schools, but they had not yet been held accountable to standards for program quality, teaching quality, and in admissions.


3 Sanders, 10; Selden, Accreditation: A Struggle, 56-57; Selden, Accreditation and the Public Interest, 6-7.

influential reports changed medical education and started the trend toward specialized accreditation. The first report was drafted by the Council on Medical Education, an AMA committee formed in 1902. The Council developed an ideal standard, published lists categorizing "medical schools in four classes based on the percentage of state licensure examination failures," designed a ten-category rating system of qualification, and started physical inspections of facilities in 1906. The collaboration between the AMA and the Carnegie Foundation for the Advancement of Teaching produced the very influential and informative Flexner Report, published in 1910. N. P. Colwell, of the AMA's Council on Medical Education, and Abraham Flexner, of the Carnegie Foundation, advocated that medical schools should be incorporated "as organic departments of universities," proprietary schools should be eliminated, basic science courses should be taught by full-time faculty members, teaching hospitals should be used for future physicians to gain clinical experience, and emphasized a post-baccalaureate degree should be required for medical education. These two reports had a profound effect on medical education. By 1920, medical schools had become associated with universities, and were reduced in number to eighty-five.

Other occupations viewed medicine as a model profession, setting "a pattern that was followed in most other professions." These included agriculture, architecture, business, engineering, journalism, and

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8 Raymond B. Allen, Medical Education and the Changing Order (New York: Commonwealth Fund, 1946), 16.

9 Glidden, 189; Sanders, 11; Selden, Accreditation: A Struggle, 57-62; Young, 3-4.
school teaching, among others, each beginning to professionalize during the late nineteenth century. Historically, medicine, law and theology were considered the only true professions. Professionalization is the process by which members of an occupation codify a body of ideas and skills, develop a culture and a code of ethics, and seek community sanction for the purpose of improving their individual and occupation’s status. Professional associations, apparently following the AMA’s example, delegated responsibility and power to selected members who formed an accrediting body to raise standards, police their respective professional education programs and facilities, and conduct comprehensive studies of these programs in order to accredit those programs that met or exceeded minimum standards. Throughout this dissertation, the term accrediting agency is used in reference to this kind of accrediting body, unless otherwise indicated. Many of the emerging professions created these specialized accrediting agencies at the same time as their professional associations were formed.

Specialized accreditation gained momentum throughout the twentieth century. When Flexner’s report was published in 1910, six specialized accrediting agencies were recognized by either a state or the federal government. By 1939, sixteen specialized accrediting agencies were recognized by the United States Department of Education. These agencies accredited the following professional programs, using today’s professional titles: architecture, business administration, clinical psychology, culinary arts, dentistry, engineering, forestry, journalism, landscape architecture, law, library sciences, medicine, music, nursing, public administration, and recreation and park management. By 1960, the National Commission on Accrediting recognized twenty-two agencies and the United States Commissioner of Education


recognized twenty-five agencies. In 1991, there were “as many as 90 specialized groups [which] accredit[ed] particular programs.”

Empirical research has been conducted on important aspects of specialized accrediting agencies. Scholars have investigated who does the actual accrediting of a program, where and how the accreditation takes place, and, how and why specialized accreditation was created. Sometimes, accrediting bodies are composed of institutions rather than individuals from a specific profession. Some of these agencies were created intentionally for accreditation activities while others were created for alternative purposes, but accreditation became their primary responsibility.

Several scholars assert that the goal of all specialized accrediting agencies is to gatekeep and control a profession’s body of knowledge to enhance both individual members’ and the profession’s status or prestige. This hypothesis has not yet been tested with empirical evidence. Furthermore, sociologists have accused the historians who examine the professions, their associations, and their prestige attainment of neglecting “to use their history for any analytical or theoretical purpose and therefore seldom bother[ing] even to make inter-professional ... comparisons.... Their general rule is to analyse one profession” by

14 Selden, Accreditation: A Struggle, 96, note no. 1.
17 Glidden, 191.
selecting both starting and ending points of their investigations at what seem “to be entirely random points in time.”

Research Questions and Subjects

Scholars assert most associations of professionalizing occupations, including engineering’s and journalism’s, followed the pattern of professionalization modeled by medicine’s AMA and its Council on Medical Education. Researchers have not yet examined primary empirical sources to ascertain what professional associations that followed the AMA model actually hoped to gain by creating accrediting agencies, what strategies those charged with accrediting responsibilities used to attain their association’s goals, and what effects the strategies had on education for the professions. To address this gap, this study involved comparative case studies of two occupations that are believed by scholars and the federal government to have professionalized between the two world wars. Through careful analysis of source documents generated by the two occupations’ professional associations and those members charged with accrediting responsibilities, this study sought to answer the following questions:

1) What did professional associations hope to gain by charging selected members with accrediting responsibilities?
2) What strategies did these members use to attain the professional associations’ goals?
3) How effective were the chosen strategies for meeting the goals?
4) What were the effects of each strategy on education for the professions?

The professionalizing occupations selected for this investigation are journalism and engineering. The first professional associations of journalism, the American Conference of Teachers of Journalism, later renamed the American Association of Teachers of Journalism (AATJ), founded in 1912, and the American Association of Schools and Departments of Journalism (AASDJ), founded in 1917, were the earliest

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ancestors of the National Council on Professional Education for Journalism (NCPEJ), formed in 1939, which later evolved into the American Council on Education for Journalism (ACEJ) in 1945, and then the Accrediting Council on Education for Journalism and Mass Communications (ACEJMC), in 1987. The first formal engineering professional association formed in 1852. The Engineers’ Council for Professional Development (ECPD), the forerunner of the Accreditation Board for Engineering and Technology (ABET), was founded in 1932. The ACEJMC and the ABET are these professions’ respective accrediting agencies. Both agencies are recognized by the United States Department of Education.

This investigation focused on the goals, strategies and their effectiveness, and the effects of the accrediting efforts made by journalism and engineering between 1919 and 1938. The starting point, a critical factor in shaping the analysis of evidence, is the official end of World War I. The signing of the Treaty of Versailles was a watershed event not only in American history, but the histories of both journalism and engineering. United States President Woodrow Wilson created the Committee on Public Information in 1917, thereby employing “dozens of journalists writing, collecting, and distributing information favorable to the American war policy. It was America’s contribution to making World War I ‘the first modern effort at systematic, nationwide manipulation of collective passions.’” When the war ended, the demand for public relations specialists rose dramatically and journalists modified their talents

from simply reporting to exerting their powers in this “entirely new occupation.”

Herbert Hoover emerged as an effective leader of the engineering profession in 1919. He “combined technical excellence, professional dedication, and eminent public service in a highly personal blend that appealed to virtually all engineering factions” and was called “‘the engineering method personified.’”

This investigation ends in 1938, the year the United States Department of Labor first officially recognized journalism and engineering as professions. In the following year, this recognition was published in the first publication of its Dictionary of Occupational Titles.

Improved understanding of the goals, strategies and their effectiveness, and the effects of accrediting efforts is important for several reasons. Occupations that are now trying to attain professional status may learn valuable lessons from carefully analyzed experiences of occupations such as journalism and engineering whose professionalizing efforts included the development of accrediting procedures. In the United States, specialized accrediting agencies continue to proliferate. Currently, over fifty specialized agencies accredit programs related to just the medical profession alone, including pharmacy, nursing, and other health care education programs. Furthermore, some American professional associations have begun to encourage other nations to accept and adopt American professional standards. Better understanding of the goals, strategies, and effects of the early efforts made by occupations in the United States to accredit their professional education programs is needed to identify aspects of the process that should be avoided or nurtured in other national, cultural, and policy settings.

**Historical Background and National Trends**

Three national trends that became prominent during the Progressive Era, professionalization, the rise of the modern university, and specialized accreditation, are relevant to this study. These three trends are described and their histories are briefly reviewed in this section.

**Historiography of Twentieth Century Professionalization**

At least four noted historians have investigated the trend toward professionalization. Each of these historians addressed at least four of five major sets of questions: (1) How and why did the middle class in Progressive America originate and who comprised it? (2) Who were identified as professionals and what were their goals? (3) To what degree did Darwinian thinking influence the professionalization process? (4) How were science and knowledge viewed by different groups of individuals, such as professionals, laborers, recent immigrants, policy-makers, or women? (5) What role did the American university play in the rise of professionalization?

In *The Search for Order, 1877-1920*, Robert H. Wiebe argued that professionalism was the manifestation of the middle class’ ambition to achieve order. Burton J. Bledstein, in his work *The Culture of Professionalism: The Middle Class and the Development of Higher Education in America*, argued that individuals in the middle class took advantage of a new opportunity to create a new culture. This culture was designed for the main purpose of allowing individuals to identify themselves as professionals. In this culture, individuals could compare their intellectual powers with others and satisfy their emotional needs, which included “earning a good living ... and emulating the status of those above one on the social


32 Bledstein, ix-x.
Professionalism was a coping mechanism to attain personal autonomy, economic security, and social status in a society changed by industrialization according to Steven J. Diner in *A Very Different Age: Americans of the Progressive Era*. Samuel Haber disagreed. In *The Quest for Authority and Honor in the American Professions, 1750-1900*, Haber argued professionalism was nothing new to the Progressive Era. The ascendance of Darwinian thought simply allowed professionals to reassert their status of authority and honor which was their legacy from eighteenth-century English gentlemen. The new American university model created an environment from which new professions emerged. Sociologist Sir Alexander Morris Carr-Saunders, who, along with P. A. Wilson conducted some of the first research on the professions, basically concurred with Haber’s thesis, and emphasized that the movement of professionalism was a natural response to large scale organization of society in his work, “Professionalization in Historical Perspective.”

Although these four historians do not agree on the primary reason for, or the process of, professionalization, they do agree that the attainment of a higher social status was an important impetus for professionalizing the American middle class. They also agree that the emergence of the modern American university played an important role in developing a culture of professionalism.

**Rise of the Modern University**

The history of the rise of the American university, delineated so well by Laurence R. Veysey, and the contributions made by research universities in advancing knowledge, described by Roger L. Geiger,

33 Bledstein, 80.


35 Haber, *The Quest*, ix.

illuminate the important role postsecondary institutions played in professionalism. With the advent and
growth of the modern university, especially the research university, professions developed in a safe,
protected, and nurturing environment, anchoring their cultures in their bodies of knowledge.

Between Harvard’s founding in 1636 and the 1870s, American postsecondary institutions were
primarily small denominational colleges. Each college had four or five professors who were usually
ministers, and educational programs focused on inculcating mental discipline and morality. Curricula
included philosophy, religion, and classical languages, and sometimes natural sciences. By the dawn of the
twentieth century, major changes in institutional types and curricula were taking place. Modern
universities evolved, in part, to serve Americans’ desires for pride, status, and career training.

The evolution of modern universities was guided by a generation of new presidents. These new
university presidents had been professors, and belonged to the group of middle class members who were
professionalizing their occupations. Charles W. Eliot and Nicholas Murray Butler reinvigorated the older
Stanley Hall ran the newly built University of Chicago, Stanford University, and Clark University,
respectively. Both administrators and presidents of many of the modern universities belonged to the
middle class. They shared similar desires and molded their American universities to identify, serve, and
educate students who could best achieve success. Students were provided access to professional
knowledge so they could assume professional careers that would best serve society. Haber stated that the
presidents’ growing influence was “the most striking feature in the development of governance in higher
education.” Bledstein identified the presidents as “ideological spokesmen for a growing middle class.”

Historians assert that the American university played an important role in professionalization
during the Progressive Era. Diner pointed out that by the turn of the century the new focus on
disseminating new knowledge and technology and the Ph. D. degree, which “provided more than adequate

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37 Roger L. Geiger, To Advance Knowledge: The Growth of American Research Universities, 1900-1940 (New York:
Oxford University Press, 1986); Laurence R. Veysey, The Emergence of the American University (Chicago: The

38 Haber, The Quest, 285.

39 Bledstein, 129.
certification of professional competence and social respectability,” greatly influenced the status of the new American university. These developments, in turn, enhanced the status of the institutions, the professors, and the graduates. Wiebe acknowledged the “crucial role” the universities played in the professionalization processes experienced by school teachers, journalists, social workers, physicians, and lawyers. He also stated the universities “held an unquestioned power to legitimize, for no new profession felt complete--or scientific--without its distinct academic curriculum.” Professionals argued their disciplines were becoming more and more scientific and the only way to understand these developments was through formalized higher education programs. Haber referred to the emergence of the American university as a major cultural event through its absorption of “the popular enthusiasm for science,” and “made more effective and honorable” the practical arts “through the application of science” while maintaining “an attachment to broad notions of gentlemanly culture.” Bledstein emphasized the university’s role in creating a social hierarchy in American society as well as its contribution of knowledge to the culture of professionalism.

Bledstein also pointed out the structural format of formal postsecondary education programs provided an excellent forum for “[s]pecial rituals, including many of the activities formalized in graduate school, [which] reinforced the mysteriousness of those powers and enhanced the jurisdictional claim.” Ceremonial rituals included Ph. D. dissertations, which were considered to make original contributions to the body of knowledge, “[i]nternships, professional oaths, ordination, association meetings, scholarly papers, awards, prizes, recognition of a priesthood of elders: all served participants and transmitted general

40 Diner, 190.
41 Wiebe, 121.
42 Wiebe, 121.
43 Haber, The Quest, 276.
44 Haber, The Quest, 276.
45 Bledstein, 34.
46 Bledstein, 94.
information to the client public.”\textsuperscript{47} These rituals enhanced the legitimacy and influence of those who participated, and replaced birthright as an accelerator up the social status hierarchy.\textsuperscript{48} “The more elaborate the rituals of the profession, the more esoteric its theoretical knowledge, the more imposing its symbols of authority, the more respectable its demeanor, the more vivid its service to society--the more prestige and status the public was willing to bestow upon its representatives.”\textsuperscript{49}

One type of modern American university is the research university, an institution identified by the number of doctor of philosophy degrees granted, “volumes in the library, or dollars expended for research.”\textsuperscript{50} These universities are among the best known in the nation and are noted “for their numerous contributions to the advancement of knowledge.”\textsuperscript{51} A profession’s body of knowledge is characterized by its growth, and these bodies of knowledge are claimed by academic disciplines housed within universities.

Before the emergence of the modern university, knowledge and skills of the professions were obtained by future practitioners through apprenticeships or in proprietary schools. For a fee, a professional practitioner would tutor a student who wished to join the profession. The practitioner would share the secrets of the profession, through specialized knowledge, skills, and techniques, and train the student until the tutor believed the student was ready to practice. The elimination of apprenticeship programs and the “proprietary (for-profit) professional school” enticed “successive groups of aspiring professionals and their new or reinvigorated professional organizations” to seek housing their knowledge in the new modern universities.\textsuperscript{52} The lure which attracted professional schools to universities was the potential improvement of perceived prestige. An education that required a prerequisite of the traditional liberal arts was believed to result in higher prestige once the professional was practicing. The universities offered access to

\textsuperscript{47} Bledstein, 94.

\textsuperscript{48} Bledstein, 33; Haber, \textit{The Quest}, 277; Harris and Troutt, 28; Veysey, 265-266.

\textsuperscript{49} Bledstein, 94.

\textsuperscript{50} Geiger, v.

\textsuperscript{51} Geiger, v-vi.

specialized skill training, technologies, and scientific research, which made professional knowledge less accessible to the general public.

**History of Specialized Accreditation**

Postsecondary education accreditation, the control over standards in education, dates back to Medieval times when the Church had the right to grant or withhold teaching licenses from those charged with educating students. Specialized accreditation, or professional accreditation, assesses and evaluates a program of study within a postsecondary institution, and was initiated in the United States in the early 1900s with the profession of medicine. Medical schools themselves “had little interest in restricting entry to the professions and wished to convey knowledge which they judged to be interesting and important, without regard to the day-to-day requirements of professional practice.” At the AMA’s organizational meeting in 1847, a committee on medical education was appointed, yet this committee did little in the following fifty-seven years but advocate higher standards. Not until the AMA reorganized in 1902, and the Council on Medical Education was made a permanent body, did real advances in specialized accreditation occur. The Flexner Report, publicizing the poor conditions and drastic improvements needed in medical education, forced the medical profession to immediately address these issues.

Medicine, along with law and theology, was considered a traditional and highly professionalized occupation. As late as 1930, Flexner still believed medicine and law were the only real professions worthy of a university education and training, but most members of other occupations and professions disagreed. Members of most professionalizing occupations viewed medicine as a model profession.

55 Gidden, 188.
57 Sanders, 11; Selden, *Accreditation: A Struggle*, 57-62; Young, 3-4.
associations of professionalizing occupations believed that by eliminating propriety schools, using full-time faculty, and emphasizing post-baccalaureate degrees, as was believed the AMA had successfully done, the status of their occupations would be raised to that of the professions. This would bring increased prestige to the profession, its practitioners, and the profession’s body of knowledge. Recognizing “the spirit of reform was in the air and the age of muckrakers was at hand,” the associations of emerging professions realized their aspiring professions would be susceptible to the same public humiliation, scrutiny, and criticism.\(^{58}\) By emulating the medical profession’s example, a pattern was set for other professionalizing occupations to follow.\(^ {59}\)

Why did accreditation take off “as a national phenomena”?\(^ {60}\) Max McConn called the period of time between 1890 and 1915 “the Age of Standards” while the President of Princeton University, Woodrow Wilson, stated in 1907 that “[w]e are on the eve of a period when we are going to set up standards.... It is inevitable.”\(^ {61}\) After the introduction of the elective system at Harvard in 1872, the credit system followed. This created a need for course-by-course student performance assessment.\(^ {62}\) Accrediting agencies set standards and provided circumstances to assess and evaluate students, faculty members, and programs. Specialized accreditation was not only a product of the time, but “shared the characteristics of the society that spawned it: idealistic, self-motivated, reform-minded, desiring improvement, believing in both individual initiative and voluntary collective action, and distrustful of government.”\(^ {63}\)


\(^{60}\) Young, 2.


\(^{62}\) Harris and Troutt, 33.

\(^{63}\) Young, 5-6.
During the 1920s and 1930s, the progressive education movement took a strong hold. This movement was based on the belief that American society constituted a democracy “in which people live freely by their own determinations and in such a way that they not only do not interfere with the free living of other people but actually aid other people to live freely for themselves.” Members of society believed that “a discipline that is self-imposed and self-realized is necessary to attaining the more important end in which the person is interested.” People of the Progressive Era, especially those in the middle class, were interested in increasing their social status. In the same way, both professional education programs and the colleges and universities which housed the professions’ bodies of knowledge also wanted improved status.

A large body of literature was examined in preparation for this study. Both historians and sociologists have investigated professionalism, attributes that identify a professional, professional associations, monopolization strategies, gatekeeping power, and status attainment. Many scholars have also investigated the process of professionalization, creating “a vast yet scattered [body of] literature and a literature of greatly varying merit.” A brief review of the pertinent literature and definitions of important terms follow.

**Models Used to Study the Professions**

A profession is an occupation characterized by “specialized knowledge and skill required to perform different tasks in a division of labor.” The professional’s work is guided by a sense of duty, often undertaken only by those individuals who have been granted specific certificates or credentials

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65 Butts, 314.

66 Bledstein; Diner; Haber, *The Quest*; Wiebe.


authorizing practice, and after having completed a long and formal education. The subject of what characterizes a profession was first brought to scholarly attention as early as 1915 by Abraham Flexner’s article “Is Social Work a Profession?” In the United States, this research mainly has been the domain of sociologists and undertaken using either the attribute model or the process model of study.

**Attribute Model**

Beginning in the 1930s, sociologists studied the professions by identifying attributes or characteristics which distinguished them from other occupations. This form of study, which dominated through the 1960s, has been referred to as the attribute model, the taxonomy model, the structuralist’s model, the functionalist’s model, and the Ivy League School model. Although there are minor disagreements on the number and descriptions of these attributes, most scholars agree on the following—a true profession has its own specialized body of knowledge, a culture sustained by at least one formal

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71 Pavalko, 19.
association, a code of ethics, recognized authority, and community sanction. The attribute model’s purpose is to distinguish a profession from a non-profession. While using the attribute model, researchers view both the “attempted and actual movement along the continuum toward the profession end” of the spectrum.

Various scholars have identified four to eight attributes of professions. The attributes themselves are less varied than the scholars who proposed them. In 1933, Carr-Saunders and Wilson identified four attributes that distinguish a profession from a non-profession: (1) a prolonged and specialized intellectual training; (2) the pursuit of knowledge and its application; (3) the power to self-regulate the profession; and, (4) a professional association. They found “the application of an intellectual technique to the ordinary business of life, acquired as the result of prolonged and specialized training,” as the crucial element defining a profession. Carr-Saunders and Wilson were influenced by an essay written in 1920 which led to their stressing “the contributions of the professions to orderly social progress, as a bridge between knowledge and power.”

Many scholars agree on these four attributes and add a code of ethics, and/or emphasize service. Other scholarly research identifies various combinations of these attributes, deleting one or another, or adding one or two other distinguishing characteristics, such as full-time activity, the practice of agitation to gain popular and legal support, the ceremony of awards, and motivation of the membership. Most

72 Pavalko, 19.
73 Pavalko, 34.
74 Carr-Saunders, 2-3.
75 Carr-Saunders and Wilson, 491.
scholars agree with the five attributes identified by Ernest Greenwood, in 1957. Greenwood’s five attributes—a body of knowledge, a culture sustained by at least one formal association, a code of ethics, recognized authority, and community sanction—distinguish professions from non-professions, and are defined below.

**Body of Knowledge**

Bodies of knowledge, or theories, are grouped in and distributed throughout academic disciplines, which are housed in institutions of postsecondary education. John M. Braxton and Lowell L. Hargens summarized the works which describe the variations among academic disciplines. Examples include the works of Anthony Biglan and Judith L. Stoecker, who have described academic disciplines in dimensions of pure and applied, life and non-life, and hard and soft, and Steven Brint, who clustered formal knowledge into six “spheres of social purpose.” These categories are business services, applied science, culture and communication, civic regulation, human services, and culture creation.

A profession’s body of knowledge is one “that supports characteristic skills of a profession and has been organized into an internally consistent system.” This system of abstract propositions describes “in general terms the classes of phenomena comprising the profession’s focus of interest” and provides the bases from which professionals rationalize their activities in concrete situations. These bodies are

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81 Greenwood, 11.

82 Greenwood, 11.
“organized along logically consistent, rationally conceptualized dimensions.” While some scholars profess it is the union of the science and the art of a profession, woven together throughout its body of knowledge, that distinguishes it from a knowledge base, others disagree.

Some scholars argue that professions only indirectly apply their knowledge to problems they face. More often they “improvise and engage in artistic interpretation” or create a reality. Randall Collins found that professions through required education “impose irrelevant cultural requirements” rather than reflecting necessary job skills related to changing technology. In society’s view and belief, professions do bring science and art together in their bodies of knowledge, institutionalize it, and “bring knowledge to bear on a variety of problems” to better serve society. The successes of knowledge application are “well publicized (by the professions themselves and the mass media), bringing fame and fortune both to the professions and to some of their outstanding members,” while the failures are “usually transformed into the failures of individual practitioners and criticism of both the professions and wrongdoers is routinely done behind closed doors.” When a professional applies knowledge to society’s problems, the public believes it is the body of knowledge only accessible to that practitioner of his or her particular profession which allows the professional to perform certain kinds of things which benefit society. For example, a physician can cure people because of the medical profession’s body of knowledge. Actually nurses and other health care practitioners perform many of the same services, yet the public does not attribute as much prestige to nurses as to physicians. It is the profession’s association, in this case the AMA, that maintains certain aspects of the medical knowledge base as the exclusive domain of physicians.


85 Rossides, 7.

86 Collins; Rossides, 67.

87 Rossides, 127.

88 Rossides, 127.
Every knowledge base is a potential body of knowledge for a profession’s education program. The challenge shared by all professionalizing occupations is “getting the science and the craft together for the education of a profession,” while the associated prestige is determined, in part, by how the knowledge is presented by the association to the public.\textsuperscript{89} A professional program of education consists of a combination of the basic arts and sciences, the profession’s sciences, and the application of knowledge.\textsuperscript{90} According to Seward Hiltner, five requirements must be met to designate a knowledge base as a profession’s body of knowledge and create a program of education for the profession’s future practitioners. First, future practitioners must learn how their activities operate the fundamental principles which anchor their discipline. These actions are operated “through technical means” directed at, and for, the benefit of “human welfare.”\textsuperscript{91} These actions are carried with responsibility by the practitioner, and the profession must recognize to whom this responsibility is directed. The last requirement is practitioners must also act in harmony with others in their profession, both present members and those of the past, carrying on long-time traditions and creating new ones. The expert use of, and care given to, the profession’s body of knowledge by practitioners in the public’s view is paramount.

\textbf{Culture}

Culture, sustained by at least one formal association, is created by a combination of “values, norms, and symbols” that “generate a social configuration unique to the profession,” and are defined in the body of knowledge.\textsuperscript{92} Edgar H. Schein defined organizational culture as

\begin{quote}
... a pattern of basic assumptions--invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration--that has
\end{quote}


\textsuperscript{91} Hiltner, 253-254.

\textsuperscript{92} Greenwood, 16.
worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. 93

Culture is created by the leaders of a formal association and it is their job to manage and, if necessary, destroy parts of the culture in order for the profession to protect, enhance, and increase its perceived status. For example, there might be certain dress codes, “ways of challenging an outmoded theory[,] introducing a new technique,” or “correct ways of grooming a protégé.” 94 Bledstein argued that participation in an occupational culture is a vehicle for middle class people to achieve social status measured in terms of prestige, respect, honor, financial resources, and style of living.

Code of Ethics

A code of ethics is a regulative set of principles, both written (formal) and unwritten (informal), that declares ideals or standards of behavior which compel certain behavioral action from members of the organization, and makes the “profession’s commitment to the social welfare ... a matter of public record.” 95 These ideals often include imposing “the duty to offer service whenever and wherever it is required, to give only the best, to abstain from competition, advertisement, and all commercial haggling, and to respect the confidence of the client.” 96 While codes of ethics are common to all professions, a profession’s specific code can be a “potent force toward conformity” within the profession. 97 A professional association can, and often does, actively enforce rewards for positive behavior and punishments for negative behavior upon its members. 98


94 Greenwood, 17.

95 Greenwood, 14.

96 Marshall, 327.


98 Greenwood, 14-15.
Recognized Authority

Since the beneficiaries, or clients, of the professional’s expertise believe they do not possess the knowledge and skills of the professional, they are unable to “diagnose” their needs or “discriminate among the range of possibilities for meeting them.”\(^9\) Clients also believe they lack the knowledge and skills necessary “to evaluate the caliber of the professional service” received.\(^10\) The profession’s authority is based on the “extensive education in the systematic theory of his discipline [which] imparts to the professional a type of knowledge that highlights the layman’s comparative ignorance.”\(^11\)

According to Haber, the 1888 Supreme Court decision in *Dent v. West Virginia* helped secure the rise of professionalism in America.\(^12\) The Court found unanimously, in a decision written by Justice Stephen J. Field, that “no one had the right to practice a profession without the necessary qualifications determined by ‘an authority competent to judge.’” That authority turned out to be the profession itself.\(^13\) The idea of competence judged by authority “not only upheld the profession’s restriction of competition, it also set off the professions as unique occupations with distinctive and appropriate powers.”\(^14\) Certificates, licenses, credentials, and postsecondary education degrees signal to the public that professionals have attained a certain level of quality, implying a sense of power, status, and authority.\(^15\)

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\(^10\) Greenwood, 12.

\(^11\) Greenwood, 12.


\(^13\) Haber, *The Quest*, 202; Rubin, 43-45.

\(^14\) Haber, *The Quest*, 202.

\(^15\) Bledstein, 33; Bogue and Saunders, 31; Harris and Troutt, 277; Veysey, 265-266.
Community Sanction

Once the profession’s authority is recognized by the public, society confers, both formally and informally, a series of privileges and powers upon the profession. These privileges and powers, supported by legislation, include confidentiality between professional and client and professional performance standards. These standards are set and evaluated by the profession itself and anchored in its body of knowledge. Because of these privileges and powers, the profession acquires a monopoly on certain services and practices, and campaigns to prove “that the human need being served is of sufficient social importance to justify the superior performance.”

Since knowledge “provides powerful control over nature and society, it is important to society that such knowledge be used primarily in the community interest.” The body of knowledge and its use determine the degree of community sanction and recognized authority. If the knowledge is inaccessible to anyone but the professional, society agrees the professional is the expert and the only one to be trusted in its application. The professional’s authority is recognized and confirmed, especially when legislation supports the authority. The body of knowledge also defines the values and symbols which help establish and identify the culture, and influences the amount of force the professional association exerts to bring about conformity within the profession. These five attributes are those that most scholars agree distinguish a profession from a non-profession, and they are identified and studied by scholars using the attribute model.

106 Greenwood, 13-14.
107 Greenwood, 14.
108 Barber, 672.
Process Model

The process model, or Chicago School model, used to understand the professions emerged in the 1970s. Scholars who use the process model believe it is more sophisticated (not to mention “considerably more cynical”) than the attribute model. This model views the attributes that distinguish a profession “as resources that are used in the competition for rewards and privileges” and focuses on the profession’s use and acquisition of power. By using the process model to understand the professions, information about the acquisition of power, the development of monopolies, and claims to increase the status of a profession can be explored. The process model provides the opportunity to focus on “change over time through efforts to professionalize.” I used the formal organization approach from the process model for this investigation which allowed me to focus on the goals of the organizations and the strategies used to attain them. In this investigation, the organizations are the professional associations and their accrediting agencies.

Professional Associations

Formal associations sustain the culture of professions. Geoffrey Millerson proposed four different types of formal associations: the prestige association, the study association, the qualifying association, and, the occupational association. These associations form in various ways. Wilbert E. Moore and Gerald W. Rosenblum described the formation as a three-step process. Members of a professionalizing occupation

109 Pavalko, 19.

110 Pavalko, 34.


112 Pavalko, 34.


seek those that agree with them, decide to raise the technical criteria of membership in the association, and create an authenticating agency to fix problems incurred by raising standards and creating new rules of membership in both the association and the professionalizing occupation. The authenticating agency is composed of those members charged with accrediting responsibilities.

Scholars assert the goals of all formal professional associations are the same: to ensure exclusiveness, to exercise authority over their professions’ bodies of knowledge, and sometimes to gain control over the behavior of individuals belonging to other professions or occupations.\textsuperscript{115} Hannes Siegrist believed that, along with control and efficiency in determining the focus of the group’s attention, a key element to study is the association’s autonomy to settle disputes within and outside the membership.\textsuperscript{116} He argued associations exercise this autonomy and decision-making power in order to gain social and political clout, financial resources, and to increase the profession’s body of skills and expertise. These various forms of capital can increase the profession’s power in negotiating such things as working conditions, salaries, and fringe benefits for its members. T. H. Marshall stated that an important goal for an association is to guarantee of technical efficiency through certification and licensing, and by enforcing the profession’s ethical code.\textsuperscript{117} The formal association protects the profession from unqualified or threatening invaders, sets high remuneration standards, and safeguards working conditions of its practitioners.\textsuperscript{118} The association can often become very effective in applying pressure on individuals and other groups to sway decisions and actions in its favor.\textsuperscript{119}


\textsuperscript{117} Marshall, 327.

\textsuperscript{118} Anderson, 4; Marshall, 327.

\textsuperscript{119} Barber, 683; Siegrist, 182.
Professional associations create or adapt formal groups, charged with the responsibility to certify or license their professions’ practitioners. These formal groups are specialized accrediting agencies and are often granted authority by the state to certify the attainment of certain standards of practice through a formal course of study in institutions of postsecondary education. A specialized accrediting agency also has the responsibility of protecting the symbols of a profession’s culture and upholding and enforcing its values and norms among the association’s membership.

Many researchers believe that, along with “control over economic resources” and “authority, or legitimate control over the activities of others,” a profession’s body of knowledge is a “valued resource” which translates to power. The professional association’s control and protection make this valuable resource a scarce resource, difficult for those outside the organization to access. The control over the scarce resource of specialized knowledge enhances the profession’s status because it permits the practitioners of the profession “to maximize their own advantage.” Both power and status depend on their ability to protect and control.

**Monopolization Strategies**

Scholars have speculated that professional associations use strategies to increase productivity, hence monetary rewards, to increase political muscle to change public policy to favor the profession.

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120 Bogue and Saunders, 31-33.
124 Treiman, 209.
125 Haber, “The Professions,” 270; Siegrist, 199.
126 Corrine W. Larson, 322.
to raise the quality of new recruits to the profession, or to control access to the profession’s body of knowledge. There are two types of strategies, associative and closure. Professional occupations may use associative strategies which attempt to “assimilate [the other] organized interests and thus neutralize them” which reduces the threat of competition both within and outside the organization. This assimilation will continue until the organization is “strong enough to make social and occupational demarcations, to enclose a certain area of interest.” An example of an associative strategy is the creation of a national professional association. As individuals connect with others who share a common interest, they will form a local association. Usually the strongest or most recognized local association will combine with other local associations from different geographical areas, creating a regional association. In the same way, regional associations join forces, creating a national association. In the latter part of the twentieth century, many national associations from around the world created international associations representing individual professions. Another example of an associative strategy is the extent to which a professionalizing occupation offers society and other occupations, including other professions, an invitation to experience a selected activity normally reserved for its own practitioners. Such activities might include riding along with a police officer in a patrol car, witnessing an autopsy, or participating in a summer internship program with a lawyer or a politician. These strategies are used to neutralize the profession’s competition, to increase society’s recognition and approval of the profession, and to highlight the layman’s comparative ignorance, all of which enhance the profession’s status and power.


129 Selander, 142.

130 Selander, 140.

A profession may use closure strategies to repel “other organized interests within [the profession’s] own field of work” and to organize itself around a body of knowledge. Monopolization of knowledge occurs as professions create new knowledge and technologies. The profession creates the illusion that its body of knowledge has an exotic, mystical, and special quality, so individuals outside the profession are unable to access or use it. This is accomplished as professionals deliberately create a unique jargon redefining words and metaphors. This jargon builds an ambiance of mystique around the body of knowledge, distancing those outside the profession. The goal is to create a knowledge gap between the professionals and everyone else. This action is a closure strategy. Another example of a closure strategy is the profession’s setting of high admission standards. These standards must be satisfied by those who desire access to the body of knowledge, in order to practice in the future. This closure strategy denies access to those perceived by the members of a profession as least fit. Two other closure strategies are the length of time dictated to learn the body of knowledge, which will exclude access to those unable to afford a long educational process, thus eliminating certain students, and the granting of certificates, licenses, and degrees, which allows only those who satisfied all requirements to practice the profession. These closure strategies are all exercised by the exhibition of a special type of power called gatekeeping.

The scholars who proposed theories describing both associative and closure strategies have done so based on assumptions, unsupported by empirical evidence. Noel Parry and Jose Parry theorized about associative strategies, while Kurt Lewin, Raymond Murphy, and Frank Parkin popularized Max Weber’s

132 Selander, 142.
134 Abbott; JoAnne Brown; Magali Sarfatti Larson; Moore with Rosenblum; Wilensky; Young.
135 Freidson, Professionalism Reborn.
136 Kurt Lewin, Field Theory in Social Science: Selected Theoretical Papers (New York: Harper and Brothers, 1951), 204.
concept of closure. Staffan Selander believed the assumptions put forth by these scholars offered “theoretically a good potential to explain how modern occupations outline their projects of professionalization.”

Because these assumptions are thus far unsupported by empirical evidence, the questions remain—what did the professional associations hope to gain for their profession and their members by charging selected members with accrediting responsibilities? What strategies did these members employ to attain the goal(s) of the professional association? How effective were the enacted strategies? How did the goals and strategies affect professional education? In order to find the answers to these questions, this investigation was performed.

Methods, Evidence, and Analysis

This study, a goals-based evaluation, measures “the extent to which a program or evaluation has attained clear and specific objectives.” The process model of professionalization guided the investigation. By using the process model, the researcher “tends to concentrate the analysis upon the organizational mechanisms and techniques, and upon their consequences for the pursuit of specified organizational goals.”

This study, which is historical in nature, identified a professional association’s goals, the strategies employed by its specialized accrediting agency to attain those goals, how effectively the strategies met the goals, and the effects upon the profession’s body of knowledge. Historical inquiry was used in the data

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139 Selander, 140.


141 Turner and Hodge, 32.
The collection process and the period of time selected for this investigation is 1919 through 1938. The goals of this investigation were to interpret the evidence gathered to shed light on both the effectiveness of strategies used within the historical period and to explore their implications for current accreditation efforts. Once the accrediting goals of the professional associations were identified, the strategies the accrediting members employed were assessed for their overall effectiveness. This assessment was made by comparing the types of strategies proposed, attempted, accomplished, and undertaken by journalism’s ACEJMC and engineering’s ABET during their professionalizing processes between 1919 and 1938.

Many kinds of documents were examined. These included the professional association’s and its accrediting agency’s meeting minutes, annual reports, memoranda, bulletins, procedure statements, news letters, press releases, reports, mandates, public statements or presented papers, proposals, plans of action, constitutions of organization, and surveys. Personal correspondence between association members and with members of the profession and its educators also provided valuable information. Other source documents reviewed include the accreditation standards, and discussions carried on in professional journals, and selected secondary sources.

Documentary evidence sought described the actions taken to initiate and maintain specific strategies employed by each professionalizing occupation’s accrediting agency. The subjects of interest included, but were not limited to, the establishment, monitoring, and modifications of the standards that protected and controlled each professionalizing occupation’s body of knowledge. This analysis focused on standards addressing four areas in relation to the profession’s body of knowledge: (1) the location of the body of knowledge housed within the institution; (2) the access to the body of knowledge by future practitioners; (3) marked completion of access to an institution’s professional program’s body of knowledge through a certification process, and any award(s) necessary to practice; and, (4) requirements of practice. Changes made by journalism’s professional associations and engineering’s professional

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associations to their standards between 1919 and 1938 were reported and analyzed. Recommendations of strategies that should be employed and those enacted were identified and their effectiveness was measured. A comparison was then made between journalism’s goals, strategies and their effectiveness, and the effect upon journalism’s body of knowledge, with those of engineering’s.

The initial focus of this investigation was to identify the professional association’s goal(s) for its accrediting group. Once these were identified, documents were analyzed that described the strategies recommended and enacted by the members charged with accrediting responsibilities. These strategies, the second focus, were then analyzed to determine their effectiveness toward meeting the associations’ goals, the third focus. Effectiveness was determined by counting how many strategies were employed to reach each goal, and how many of the association’s goals were reached. Effectiveness was also determined by identifying which strategies were selected and why, and how quickly goals were accomplished. Another indicator of effectiveness was identifying to what degree consensus was reached by the accrediting members on which strategies to employ. For example, if the professional association set the goal that all future practitioners must be identifiable to a potential employer as having graduated from an accredited school, and charged the accrediting members of its profession with reaching this goal, evidence was sought that described which strategy(ies) the accreditors selected and employed. They may have: (1) threatened to pull accreditation of a postsecondary institution’s program if the required documentation was not provided within a specific period of time; (2) included some documentation that showed which graduates (potential employees) had passed a certifying exam; (3) modified admission standards to the programs to better identify successful candidates; (4) required individuals already practicing to return to college to obtain the required documentation; (5) employed all of these strategies; or, (6) employed a combination of these actions.

Effectiveness was described in terms of how quickly programs made changes and what steps of institutionalizing these changes were made. Effectiveness was also described in terms of whether the accrediting agency had a complete plan to reach a specified goal as soon as it was charged by the association or if the agency kept modifying the number and types of strategies employed until it was confident the goal would be achieved. Other indicators of effectiveness were descriptions of repeated use
of successful tactics, recognition of tactics which did not produce the desired outcomes, and whether unsuccessful strategies were used again and under what circumstances. Effectiveness was then evaluated on a scale of very effective, somewhat effective, very limited, not effective, and, effect unknown. These evaluations were summarized in tables.

The fourth area focused on the effects of these goals and the strategies on the profession’s educational programs. This analysis described the ways in which the profession’s education programs were changed and if these changes were planned, unexpected, or permanent during the twenty-year period under investigation. Changes included the length of prescribed study, stricter admission and graduation requirements, and the facilities and materials required for an institution to gain accreditation of its professional programs.

This process of identifying goals and strategies, describing the effectiveness of the strategies, and describing the effects on profession’s body of knowledge was performed with each professionalizing occupation under study. A second dimension of analysis was made by comparing the goals, the accrediting strategies, their effectiveness, and their impact on journalism’s programs of education, with those of engineering’s. This comparison included the goals set and attained, the strategies recommended and employed, and the effectiveness of these strategies on both journalism’s and engineering’s respective professional education programs. The impact of these professionalizing efforts on the respective professions’ body of knowledge was described and analyzed, and provided insight to implications for current and future practice and research.

**Limitations of this Study**

As stated previously, this investigation focused on documents and other evidence indicating the events and the actions undertaken between the years of 1919 and 1938 by selected professional associations of journalism and engineering, and especially their respective accrediting agencies. Because of this focus, the opinions and actions of the American public, other professions and professionalizing occupations, and institutions of postsecondary education were not included in this study. Although many goals set and
achieved by the associations of both professionalizing occupations under study, as well as strategies employed by their respective accrediting agencies dealt with the actual and desired content of their respective bodies of knowledge, this investigation solely focused on the gatekeeping of the body of knowledge. Thus, the analyses focused on where the body of knowledge was located, who was allowed access to learn or teach it, what certified mastery of the knowledge, and who was allowed to use the knowledge in practice. The content of the body of knowledge was not a focus of this study.

Most of the terminology used to present the data and the conclusions is in general use in Education. The terms that are not generally used or those that have specific or unique definitions directly related to this study, are defined in the text. For the convenience of the reader, acronyms frequently used throughout this text are listed in Appendix A.

Summary

In summary, an important stakeholding group within a profession is its professional association, and within this group is another, the specialized accrediting agency. The agency is charged with the responsibility to employ strategies in order to help the professional association reach its goal(s), including that of gatekeeping and controlling the profession’s body of knowledge. This study compares and contrasts the actions undertaken by journalism’s accrediting agency, which evolved into the ACEJMC, and engineering’s accrediting agency, which evolved into the ABET, between 1919 and 1938 in order to identify the goals of the professional associations, the strategies their respective accrediting agencies recommended and employed to attain these goals, the effectiveness of these strategies, and in what ways these strategies affected the professions’ bodies of knowledge.

This first chapter of the dissertation included an introduction to this study, the research questions, the justification, the setting, the methodology, a description of both the kinds of evidence used and the analysis, and the limitations of the study. The second chapter includes a brief history of journalism, its professional associations, and journalism education in the United States, a description of the evidence collected that was produced between 1919 and 1938, and an analysis of the evidence. Chapter Three
parallels the format delineated in the second chapter, but focuses on engineering, its professional
associations, and engineering education in the United States. The fourth chapter records descriptions of the
strategies journalism’s and engineering’s professional associations recommended and employed,
accrediting actions, the effectiveness of the strategies, the strategies’ impact on the respective professional
education programs, and a summary of my findings. Chapter Five summarizes my conclusions,
implications for practice and research, and offers suggestions for further study. All appendixes and
references follow the concluding chapter.
Chapter 2

ASSOCIATIONS AND EDUCATION FOR JOURNALISM

Shall we tweak the noses of numerous deans of liberal arts, of general sciences, of arts and science, with the curt demand that the educational machinery be overhauled for the purpose of giving journalism a new status?

This chapter begins with a brief history of the occupation of journalism, journalism education, and journalism’s professionalizing efforts prior to 1919. The following sections detail journalism’s professional associations’ goals for professional journalism education between 1919 and 1938 and the strategies employed by those members charged with accrediting responsibilities to reach the associations’ goals. The targets of the strategies, including the location of journalism’s professional education, the access to journalism education, the certification of graduates, and the requirements for practice, are the focus of this chapter. A brief summary of the findings will follow this description and analysis. The


effects of the strategies on journalism’s professional education will be discussed in detail, and compared to engineering’s strategies and effects, in Chapter Four.

The types of evidence collected and used for this description and analysis were materials produced by the professional associations, including constitutions and amendments, proposals, meeting minutes, memoranda, press releases, annual, committee, and other reports, standards, surveys, presented papers, personal correspondence, and convention transactions and proceedings. All of these documents are currently located in the State Historical Society of Wisconsin, Archives Division, in Madison, which is adjacent to the University of Wisconsin (Madison) campus, a key location in the history of the professionalization of journalism. Many of these documents are also reprinted in journalism’s professional journal, Journalism Quarterly. Government reports and very few selected secondary sources were also used, all of which are available in, or through, both the Pattee and Paterno Libraries of The Pennsylvania State University (University Park), State College, Pennsylvania, or both the Clark and Wahlquist Libraries of San Jose State University, San Jose, California.

 Definition

Individuals who work for the press are practitioners in the field of journalism. The popular definitions and connotations associated with the term “journalism” were brought to the United States from England and then developed a history unique to America. The word journalism “was a joke” and “a self-styled journalist was [considered by the American public] in the same category as a self-styled poet.” This analogy might be a result of poet Philip Freneau’s editorship of the National Gazette, an early newspaper that specialized in reporting national politics of the 1790s. A century later, reporters and others working at newspapers were considered to be liars and sensationalists promoting sales and circulation of the Yellow Press for owners like Joseph Pulitzer and William Randolph Hearst. Serving the needs of the American

public was not most reporters’ priority. By the turn of the twentieth century, reporters were considered muckrakers who wrote their biting criticisms of the government and exposés of the social evils during the Progressive Era.

With the onset of World War I, President Woodrow Wilson’s Committee on Public Information gave new meaning and responsibility to journalists. Journalists were needed to collect, write, and distribute information to the American public that supported the United States’ war policy. Reporters were responsible for public relations, allowing journalists to showcase their talents of persuasion. After armistice, Wilson encouraged journalists to continue to serve the public, but his charge lacked wartime intensity. Between the two world wars, journalism’s professional associations, especially the American Association of Teachers of Journalism (AATJ) and the American Association of Schools and Departments of Journalism (AASDJ), worked diligently to define journalism for future practitioners. The two associations constantly refined their definitions by getting input from many sources, such as newspaper editors and owners, journalism educators, and other newspaper-related association members. In 1937, the AATJ and the AASDJ agreed to define journalism as “an art or technique in gathering facts, writing for rapid reading, and editing for clarity and comprehensiveness.” In addition to defining journalism, the journalism educators of these two associations were actively defining journalism education. They set many goals, following the models of other traditional professions, especially medicine. The journalism associations initiated the first principles of education for journalism, generated lists of accredited schools and departments of journalism, defined and set admission standards to journalism degree programs, established qualifying criteria for those individuals desiring to practice, and implemented a code of ethics, all before 1925.

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7 Several authors disagree that journalism accredited or made visitations to schools of journalism before World War II. For example, see Luxon, 100-101; Leslie G. Moeller, “Journalism Education,” in Accreditation in Higher Education.
Identification and Relationships of Journalism’s Associations

In order to define journalism and set goals for journalism education, individuals concerned with professionalizing journalism formally organized. The first step was taken by teachers of journalism courses who met in California in 1910 to share their feelings, experiences, and ideas about teaching journalism. They discussed curriculum modes, environments, and goals they wished journalism education could achieve. Journalism teachers met informally again the following year at the University of Missouri, which concurrently hosted a week of events related to journalism. In 1912, these teachers met once again at what they called the American Conference of Teachers of Journalism, this time organizing an association. The constitution explained the purpose of the association was to hold annual conferences that would provide an “opportunity ... for hearing papers on the subject [of journalism education] and for discussing them; and to collect statistics relating to schools, courses, and teaching in journalism.”8 Membership was open to any educator interested in the teaching of journalism.

At this 1912 meeting in Chicago, attending individuals came from fourteen postsecondary institutions. These included Cincinnati, Columbia, De Pauw, Indiana, Iowa State, Kansas, Kansas Agricultural College, Marquette, Massachusetts Agricultural College, Michigan, Minnesota College of Agriculture, Missouri, Notre Dame, and Wisconsin.9 Representatives from Editor and Publisher magazine, the National Printer-Journalist, the Inland Printer, the Publishers’ Auxiliary, and the Chicago Tribune also attended.10 Members discussed creating another association whose members would be schools, not individuals, and would be concerned with the education of journalists. At some point between 1912 and 1915, these journalism teachers renamed their association the American Association of Teachers of

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8 Ralph D. Casey, “Journalism, Technical Training and the Social Sciences,” Journalism Quarterly 9, no. 1 (Mar., 1932): 31; Constitution of the American Conference of Teachers [later known as the American Association of Teachers of Journalism (AATJ)], 1912, art. 2.

9 Emery and McKerns, 10.

10 Emery and McKerns, 10.
Journalism (AATJ). At the 1916 conference held at the University of Kansas (Lawrence), the AATJ membership increased to 107 individuals. A total of 175 teachers attended from 55 institutions. The AATJ members agreed an association of schools would help them achieve many of their goals and decided both associations would meet together annually. Two, and later three, days between the Christmas holiday and New Years Day were selected as the annual meeting days. Each association would meet separately and then on one day, both memberships would meet together. Many individuals held membership in both associations, one as an individual and the other as a representative of a member institution.

This second professional journalism association, the American Association of Schools and Departments of Journalism (AASDJ) formed in 1917 with ten charter members: Columbia, Indiana, Kansas, Missouri, Montana, Ohio State, Oregon, Texas, Washington, and Wisconsin. The purpose of the AASDJ was “the improvement of education in preparation for journalism, especially in colleges and universities.” The constitution stated all schools or departments of journalism located in the United States or Canada were eligible for membership if they met certain minimum standards: (1) journalism instruction must be organized as a separate academic unit with at least two full-time faculty members who ranked no lower than instructors; (2) student entrance requirements, as described below, were upheld; (3) the journalism program in the college or university should consist of four years (during two, students were required to be residents); (4) students must be regular candidates for either a bachelor’s or master’s degree; (5) a specific number of journalism units (which varied from school to school, depending on the course content and its name) were included as part of the 120 units required for the bachelor’s degree; (6) laboratory work must be included in the four-year program; and, (7) these criteria must be in place for at least one year prior to AASDJ membership application. At the 1917 annual meeting, members of both the AASDJ and the AATJ voted to adjourn their formal meetings until the end of World War I.

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11 Emery and McKerns, 9-10.
12 Emery and McKerns, 13.
13 Emery and McKerns, 13.
14 Constitution of the American Association of Schools and Departments of Journalism (AASDJ), 1917, art. 2.
Along with the AATJ and the AASDJ, several other professional associations played key roles in the professionalization of journalism and journalism education between 1919 and 1938. The American Society of Newspaper Editors (ASNE) formed in 1923. Its purpose was

‘... to promote acquaintance among members, to develop a stronger professional esprit de corps, to maintain the dignity and rights of the profession, to consider and perhaps establish ethical standards of professional conduct, to interchange ideas for the advancement of professional ideals, and for the more effective application of professional labors, and to work collectively for the solution of common problems.’

The Southern Newspaper Publishers Association (SNPA), the Inland Daily Press Association (IDPA), the American Newspaper Publishers Association (ANPA), and the National Editorial Association (NEA), each serving the interests of dailies, among various joint committees and councils, most notably the AASDJ’s Council on Education for Journalism (CEJ), were influential and instrumental in professionalizing the occupation of journalism. Some of their individual and most of their joint goals, and the strategies used to reach these goals are described and analyzed in this chapter. The primary focus will remain on the AATJ’s, the AASDJ’s, and the CEJ’s actions. A genealogy of these associations is delineated in Appendix B.

**Brief History of Professionalizing Efforts Prior to 1919**

Until journalism teachers first met informally in 1910, there had been no real effort to professionalize the occupation of journalism. The new associations of journalism educators (the AATJ)

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18 Prominently missing from journalism’s professionalizing history between the wars, especially in comparison with engineering’s professionalization efforts chronicled in Chapter Three of this study and when compared with the professionalization processes of medicine and law, is an association with the Carnegie Foundation for the Advancement of Teaching. Leaders of journalism’s associations made numerous attempts to engage the Carnegie Foundation’s help to investigate and study different elements of journalism education, all to no avail. In 1930, after another invitation was politely refused by the Carnegie Foundation, the Chairman of the CEJ appealed to the American public. He wrote an article that pleaded, “Surely the importance of the press in the democratic government and society of the United States is sufficiently great to justify one of the large foundations in undertaking such a study.” [Willard Grovesnor Bleyer, “The Future of Schools of Journalism,” Christian Science Monitor (13 Dec. 1930): n. p.].
and schools and departments of journalism (the AASDJ), began to define journalism, journalists, and the associations’ roles and responsibilities for professionalizing journalism. While journalists and journalism educators contemplated these roles and responsibilities during the associations’ formal adjournment between 1917 and 1920, United States President Wilson provided the journalism associations more reasons to professionalize.

In April 1917, one week after the United States Congress declared war on Germany, President Wilson created the Committee on Public Information (CPI) to mobilize public opinion in support of the United States’ war effort. Newspaper men agreed to a voluntary censorship that safeguarded sensitive information, yet kept Americans reasonably well informed. Hundreds of writers, artists, and reporters were hired by both the government and newspaper owners and editors to mount this propaganda campaign. The CPI stressed two points: the United States was only fighting for freedom and democracy; and, the Germans were monsters who could only satisfy their lust and greed by conquering the world. The CPI was successful in attaining its goal of changing public opinion. Members of the American public bought war bonds. They worked more often, and those who were unemployed found jobs, raising attendance numbers in the factories. Much of the general public came to believe that participation in the war was necessary, if not a golden opportunity. At war’s end in 1919, Wilson charged journalists with the new responsibility of exerting their powers of writing to better serve the public.19

The most significant obstacle journalism associations faced in controlling practice in the field was the First Amendment of the United States Constitution.20 The Freedom of the Press was a revered right not to be infringed, especially by the press itself. The AATJ, the AASDJ, and other journalism-related associations, were opposed to “any form of state licensing or control” of journalism’s practitioners.21 However, at least two attempts were made to create state laws to regulate and license practicing journalists. The first was proposed in 1913 by a former lieutenant governor of Illinois and a similar proposal was sent


20 Luxon, 100.

in the form of a bill to the Oklahoma legislature in 1923. Neither was successful. According to the AATJ President in 1929, the main weakness in professionalizing journalism was the lack of licensing for practice. Since neither legislation nor the professional associations could prevent the practice of journalism by those deemed unfit, and the public had negative perceptions of the term journalism, journalists developed an inferiority complex. The AATJ and the AASDJ actively sought to remove the stigma attached to journalism by raising its perceived prestige through the professionalization process.

**Brief History of Journalism Education Prior to 1919**

Long before 1919, most newspaper owners and editors believed that “a newspaper reporter is born, not made,” and therefore formal education was not necessary. Instead, both newspaper owners and editors valued first-hand experience through internship or apprenticeship. Nevertheless, serious talk among educators and college administrators about journalism education began after the Civil War at Washington College (later Washington and Lee University). The first courses in journalism education were offered in 1873 at Kansas State College. These courses offered practical training in printing. Between 1878 and 1884, the University of Missouri offered courses in the history and materials of journalism. The University of Pennsylvania was first to organize a journalism curriculum between 1893 and 1901. During this same period, Indiana, Iowa, Kansas, Michigan, Nebraska and Ohio State each offered one or more courses in journalism. In 1905, the University of Wisconsin (Madison) founded the first school of journalism which reflected Professor Willard Grosvenor Bleyer’s scholarly interests. The school was part of the college.
that offered a liberal arts degree. The following year, Bleyer outlined a junior-senior curriculum, a prototype which “decades later became the basic command of accreditation.” This four-year program consisted of one-part journalism education and three-parts science, social science, and humanities education. In 1908, the first separate school of journalism, founded at the University of Missouri, offered a bachelor’s degree in journalism. This school focused on the practical aspects of journalism. Because the school was a separate division in the university, a background in liberal arts was not emphasized within the school. The school’s director visualized journalists as interpreters, not recorders, of news, and therefore encouraged “students to study the social sciences and the humanities by wide reading on the job.”

Throughout this chapter, the phrase “school of journalism” is not limited to separate schools, but also includes organized and recognized groups of courses and departments of journalism unless otherwise indicated.

No professional associations promoted journalism education prior to the 1910s. The AATJ and the AASDJ leaders believed they could professionalize both the occupation of journalism and journalism education. Obstacles to professionalize included the long tradition of apprenticeships and the negative public stereotypes associated with journalists or reporters.

**Professionalization Process**

When Wilson challenged journalism with new responsibility to serve the public at the end of World War I, most people associated journalists, reporters and editors with the sensationalism of yellow journalism and the muckrakers of the Progressive Era. But in the early 1920s, the American public, especially the middle class, was becoming consumer-oriented. This opened up opportunities for journalism textbooks on journalism education and practice, first and sixth President of the AATJ in 1912 and in 1920, respectively, AASDJ President in 1921, Chairman of both the CEJ and the National Joint Committee of Schools of Journalism and Newspaper Groups from their foundings in 1924 and 1930, respectively, to his death in 1935, and, Chairman of the Council on Research from its founding in 1924 through 1928, was critical to the professionalization of journalism.

26 Emery and McKerns, 5.
27 Emery and McKerns, 8.
to redefine itself. The public wanted to buy everything that was for sale, including cars, ready-made
clothes, new food products, and hygiene goods, and journalists adapted their selling skills. Taking
advantage of newly introduced technologies, such as color print and the ability to mass produce materials
efficiently, and new forms of media, such as magazines, dailies, movies, and radio, journalists had ways to
fill the desires of a consumer society.

National advertising flourished during the 1920s. Advertising helped consumers identify products
and brand names and created new wants. Advertising was also a professionalizing occupation between the
two world wars. Although advertising’s use of psychology to sell products could help journalists sell both
ideas and products to the American public, advertising’s negative stereotypes were becoming associated
with journalists. For example, Phineas Taylor Barnum was famous for his outlandish and garish
showmanship of dazzling pageants, fetes, and circus acts. Although his antics were highly entertaining,
Barnum’s goal was to profit from vulnerable suckers. He made no attempt to hide his goal and his tactics
were stereotyped in the minds of the American public. This negative stereotype quickly contaminated
journalism when advertising and journalism were associated together in print. In the 1920s, “advertising
agents were not only [regarded as] men of confidence; they were [still seen as] confidence men.” This
association with advertising became another obstacle in professionalizing journalism. According to
sociologist Andrew Abbott,

[t]he clearest force driving reporters toward a formal conception of their jurisdiction was
in fact competition with hired publicity agents. Journalists of the 1920s were amazed to
discover that about 50 percent of the stories in the New York Times originated in the
work of publicity agents. Reporters saw such stories (correctly) as little better than
advertising, and their reaction led on the one hand to a renewed drive for formal
professional structures, and on the other to a frank recognition of subjectivity in
reporting. 

28 M. Kathleen Silva, “A Brief Historiography of Professionalism and the Professional Advertiser During the
Progressive Era,” Student Research Paper, The Pennsylvania State University (University Park, Penn.: Department of
History and Religious Studies Program, Spring 1999).

29 Michael Schudson, Advertising, the Uneasy Persuasion: Its Dubious Impact on American Society (New York: Basic

Trying to fulfill President Wilson’s charge of becoming public-relations experts while fighting old and new stereotypes, many journalists adopted ballyhoo, a loud exaggerated or sensational propaganda technique. Some journalists celebrated individuals who made notable accomplishments as bigger-than-life heroes. Sports figures, like Babe Ruth and Jack Dempsey, and film stars, like Clara Bow, Charlie Chaplin, and Rudolph Valentino, were favorite subjects. Stories and articles of this type increased newspaper and magazine sales and circulation. In Spring 1927, when Charles Lindbergh crossed the Atlantic, magazine and newspaper sales and circulation greatly increased.

When the stock market crashed in 1929 and the Depression began, journalism faced new challenges. Newspapers were hard hit by the Depression.31 “Many folded or were merged; many more fought back with their only easy weapons, exaggeration and sensationalism.”32 This made the public widely distrust the “print media, and newspapers in particular,” because the public believed the written word was “propaganda serving a special interest.”33 As the press lost its credibility and influence during the 1930s, another journalistic medium, radio, came of age.34

Americans preferred radio and believed it freer from prejudice than the newspapers. The American public believed journalists who worked for newspapers were disinterested in their work and that newspaper editors were only interested in serving their own needs and desires.35 Americans viewed newspapers as impersonal, and radio as not only personal, but also direct. Historian William Stott described the public’s perception of newspapers as being

... unimaginably indirect: they are writing, to begin with--writing by someone the name of whom is rarely given, someone usually at great distance from where the article was, with such obvious labor, set in type, printed, and distributed.36

32 Stott, 78.
33 Stott, 77.
34 Stott, 80.
35 Stott, 80.
36 Stott, 81.
In 1938, President Franklin D. Roosevelt “told the Society of Newspaper Editors that 85 per cent of America’s daily papers were ‘inculcating fear in this country’ and suspicion of the New Deal. He said the problem traced back to the newspaper owners, who tampered with the news to promote their interests.”

With the change from the 1920s reliance on written presentation to 1930s reliance on audio and visual presentation, the press fell out of step with its audience. Amidst this changing environment for journalists, journalism associations forged on with their professionalizing efforts. The associations responded to the changing desires of the American public by adjusting the curriculum content of schools of journalism, such as requiring course work in radio journalism and photojournalism. The associations' efforts were not always in the best interest of practicing journalists. For example, because the AATJ and the AASDJ emphasized the importance of a college education, many journalism graduates entered the job market with little or no practical experience. Many editors valued experience more than education in the 1930s when journalism jobs were few. Many applicants with experience and no college degrees were preferred over college graduates without experience.

**Associations and Journalism Education**

Most newspaper owners, editors, and publishers had always believed that a good reporter was born, not made. When education for journalists was first offered in postsecondary institutions, editors believed it was unnecessary. At the turn of the twentieth century, these beliefs began to gradually change. By the dawn of the 1920s, many journalism educators, newspaper owners, editors, and publishers agreed “no question” remained. In 1922, at the Press Congress of the World, participants agreed that educated

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37 Stott, 77-78.
38 Stott, 78.
and trained reporters rendered “better and higher service to their newspapers and the public” than uneducated and untrained reporters.\textsuperscript{40}

Members of journalism’s professional associations, who already believed journalism education was essential for good practice, also believed journalism should serve the public and industry. They selected the highly regarded professions of medicine, law, and engineering as models of professionalization to emulate.\textsuperscript{41} Following the example of these professions, Wisconsin professor Bleyer asserted in 1931 that education was more important than experience for practice of the journalism profession.\textsuperscript{42} The professional associations of the AATJ and the AASDJ assumed a national leadership role in journalism education. They persuaded many individual schools of journalism and colleges accept their recommendations of who should sit on a proposed committee devoted to improving journalism education. Bleyer first informally proposed the establishment of such a committee in 1920, to be named the Council on Journalistic Education, analogous to the American Medical Association (AMA)’s Council on Medical Education.\textsuperscript{43} This name apparently never was formally approved because from 1923 until 1931, the committee was called the Council on Education for Journalism (CEJ). It was officially established by the AASDJ on 27 December 1923.\textsuperscript{44} The word “journalistic” may have been avoided because it could mean journalist-like and the journalist was closely associated with the negative stereotype of the time. If so, this action provides evidence that the associations were actively trying to raise prestige associated with journalism and its practitioners.

\textsuperscript{40} Hornaday, 115.

\textsuperscript{41} Eric W. Allen, “Presidential Address: Medical Schools, Law Schools and Schools of Journalism,” Journalism Quarterly 8, no. 1 (Mar. 1931): 196-211.


\textsuperscript{44} American Association of Schools and Departments of Journalism (AASDJ), Minutes of the Convention of Chicago, 27 Dec. 1923. (Convention Records, Association for Education in Journalism, 1912-1977. State Historical Society of Wisconsin, Archives Division, Madison, Wisc.), 2.
The CEJ, chaired by Bleyer from its inception to his death in 1935, was a five-member committee of “heads of schools and departments of journalism, in which instruction in journalism has been most fully developed.” The CEJ members were elected by the AASDJ membership ballot and served four-year terms. Committee members were not restricted to the AASDJ membership but had to be approved by both the AATJ and the AASDJ memberships. The purpose of the CEJ was to establish and maintain “standards of journalistic education and the classification of schools of journalism in accordance with such standards.” The delegation of this responsibility by the leaders of the AATJ and the AASDJ followed the example of the AMA’s Council on Medical Education. Although informal recognition by various individual educators of outstanding journalism schools began in 1905, no accrediting responsibilities were undertaken by these educators nor were standards set to be met or exceeded. The accrediting responsibility, charged formally to the CEJ, was stated as being a response to the American Society of Newspaper Editor (ASNE)’s suggestion at its April 1923 meeting. When Bleyer formally proposed the creation of the CEJ to the AASDJ, he supported the ASNE’s suggestion that the CEJ should be specifically modeled after the AMA’s Council on Medical Education, established in 1904, and the American Bar Association’s Council on Legal Education, recently established in 1921. Like these councils, the CEJ should set standards regarding the location of journalism’s education, the access by those teaching and learning journalism education, certification of graduates, and the requirements for practice. Members of the CEJ should make visitations of the schools of journalism and publish lists of the names of the schools accredited. Both the AASDJ and the AATJ membership agreed.

46 Constitution of the American Association of Schools and Departments of Journalism (AASDJ), 1938, art. 4, sect. 4.
47 Bleyer, Resolutions, 1.
49 ASNE, 7; Bleyer, Resolutions, 1. According to Glidden, the Council on Medical Education was formed in 1902 (Glidden, 188).
According to Bleyer, the purpose of a journalism education was “to teach students how to think straight about what is going on in the world at large and how to apply what they have learned to understanding and interpreting the day’s news.”\(^5\) Before 1919, journalism educators who held membership in the AATJ and represented their institutions that were members of the AASDJ recognized that both associations needed to work together to reach these goals. Members also realized that the involvement of other journalism-related professional associations, such as the ASNE and the SNPA, was necessary to professionalize journalism education. The AATJ and the AASDJ actively sought the involvement of newspaper editors by the early 1920s. In 1924, many newspaper editors had been convinced by members of the journalism associations that journalism education was valuable, but many editors still held to the old theory that valued experience over education. It was this belief journalism’s professional associations set out to disprove.\(^5\) As newspaper owners and publishers recognized the value of journalism education, they were asked by the AATJ and the AASDJ to convince their editors, who were in charge of hiring new employees, and newspaper associations of journalism education’s importance and value. In 1930, this informal coordination between the ASNE, the SNPA, the IDPA, the NEA, and the AATJ and the AASDJ was formalized with the creation of the National Joint Committee of Schools of Journalism and Newspaper Groups, a standing committee of the AASDJ.

To create the National Joint Committee, members of the AASDJ and the AATJ first gained the cooperation of the ASNE and the NEA to form a committee in 1930, referred to as the Joint Committee of Schools of Journalism and Newspaper Groups, to study education problems in journalism.\(^5\) The original duties of this Joint Committee included representing the AASDJ at meetings with other newspaper-related associations, and basing all its discussions and recommendations in “the principles embodied in the

\(^{50}\) Bleyer, “What Schools of Journalism Are Trying To Do,” 39.


statement of 1924.” This Joint Committee was expected to give its progress report at the 1931 AASDJ convention. The Joint Committee of Schools of Journalism and Newspaper Groups, also referred to as the Joint Committee on Education, was renamed later that year as the National Joint Committee of Schools of Journalism and Newspaper Groups. In 1939, this committee was renamed the National Council on Professional Education for Journalism (NCPEJ), when membership was expanded to include the ANPA, the IDPA, and the SNPA, in addition to the five representatives of the AASDJ (which comprised the CEJ), the NEA, and the ASNE.

Although the National Joint Committee started with flurry of activity in 1930, it was inactive for the next five years. In 1936, the National Joint Committee offered an apology for its dormancy, blamed the Depression, stated that it had been “sleeping,” not dead, and was ready to do whatever the CEJ, by then renamed the National Council on Education for Journalism (NCEJ), wanted. The NCEJ sent a list of twenty-one resolutions and a copy of the 1924 Statement of Principles to the Joint Committee to use as a starting point of action. (See Appendix C). Because of the debate between members of the AATJ and the AASDJ, discussed below, heightened, the NCEJ’s attention was solely focused on the work of the National Council on Education for Journalism.

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57 Lawrence W. Murphy, National Council on Education for Journalism Report, 4-8.
Joint Committee. A great deal of activity began in 1936, and within three years, the NCPEJ was created. Members of the NCPEJ had the sole responsibility to set standards and accredit schools of journalism.

The major point of debate between and within the AATJ and the AASDJ was a 1934 formal proposal to merge the two associations. Talk about a possible merger had occurred earlier. A committee was set by the AASDJ to investigate possible ramifications of the proposed merger. In 1938, the committee recommended against the merger and suggested the AASDJ meet biennially in even years, and one regional meeting would be held in each of six regions, every odd-numbered year. The recommendation was accepted and the amendment was adopted. Not only did this proposed associative strategy cause disharmony among several members and member institutions, it opened the opportunity for the NCEJ to focus all of its attention and energy toward the work of the National Joint Committee. By 1937, the NCEJ began separating itself from the AASDJ and the AATJ. Eventually, the NCEJ and the National Joint Committee formed the NCPEJ in 1939. The NCPEJ “assumed the responsibility to ‘act as a recognizing or accrediting agency for schools of journalism, to give official recognition ... to schools that will meet the standards that we [the members of the NCPEJ] think are necessary for effective education.’”

The NCPEJ evolved into the American Council on Education for Journalism (ACEJ) in 1945. It was renamed the Accrediting Council on Education for Journalism and Mass Communications (ACEJMC), in 1987. This is the current national accrediting association. Meanwhile, the AATJ membership believed journalism needed a national association which focused on the professional aspects of journalism, such as maintaining ethics, encouraging and discussing research, and increasing the prestige of practicing

59 Casey, 34.
journalists and journalism educators. Members of the AATJ formed the Association for Education in Journalism (AEJ) in 1950, which was renamed in 1983, the Association for Education in Journalism and Mass Communications (AEJMC).

**Goals**

The four main goals identified by the members and leaders of the AATJ and the AASDJ were set before 1919 and evidenced by the formation of the AATJ and the 1917 constitution, which remained unchanged through 1921. The AATJ and the AASDJ membership wanted (1) to raise the occupation of journalism to professional status like law and medicine in order to increase the prestige of the practitioner, the educator, and the schools which offered journalism education; (2) to convince all newspaper owners and editors to value a formal, standardized, four-year program of journalism education over on-the-job training; (3) to improve the overall quality of schools of journalism, especially those published on lists of accreditation; and, (4) to better serve the American public and the industry. To achieve these goals, the AATJ and the AASDJ leaders created the CEJ, that later evolved into the NCEJ, and charged its members with the responsibility to do whatever they believed would be successful. Members of the AATJ and the AASDJ also contributed ideas to aid in the attainment of the associations’ goals. Leaders of the AATJ, the AASDJ, and the CEJ agreed to use medicine’s and law’s respective councils on education as their role models. In addition to attaining these goals, the journalism associations wanted to define the necessary body of knowledge for journalism practice, to achieve uniformity of all schools of journalism, and raise the quality of journalism education.

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63 Constitution of the AASDJ, 1917; Constitution of the AATJ, 1912; Emery and McKerns, 10.
Strategies

The CEJ, under the leadership of professor Bleyer, borrowed, devised, and employed a number of strategies aimed at specific areas the members of the CEJ and later, those of the NCEJ, believed were in need of improvement or strengthening. The CEJ’s members selected both closure and associative strategies. Nearly all of these strategies involved the setting of minimum standards, to be achieved by schools that wished Class A accreditation, the highest form of accreditation for journalism schools. The strategies were targeted at four main aspects of journalism education identified by the CEJ members as needing improvement. These four aspects included the location of journalism education in postsecondary institutions, admission requirements for students and qualities desired of journalism educators, the certification of graduates, and the requirements of practice. Many closure strategies were employed by the CEJ membership. Associative strategies were used very infrequently and were quickly modified by the CEJ members into closure strategies. The detailed descriptions of these strategies and their targets follow.

Location of Knowledge

Members of the AATJ, the AASDJ, and the CEJ used strategies to restrict the location where journalism knowledge was taught and learned. The purposes of these closure strategies were: (1) to eliminate journalism programs outside regionally accredited colleges or universities; (2) to eliminate poor quality schools within regionally accredited colleges and universities; (3) to eliminate smaller schools and schools in geographical areas perceived by the leaders of journalism’s associations to be too congested in relation to jobs available to graduates; (4) to eliminate all journalism courses offered outside the accredited or non-accredited school of journalism, especially those courses and departments located in departments of English; and, (5) to restrict journalism education to separate professional journalism schools by eliminating journalism courses and departments in liberal arts schools. The primary strategy used to restrict the location of journalism education was accreditation of all schools of journalism which were reported by their educators and administrators to meet the CEJ’s standards. In 1928, formal accreditation replaced informal
accreditation because the CEJ members physically inspected schools of journalism whose educators and administrators believed met standards.

Between 1905 and 1916, schools of journalism were recognized informally by various journalism educators. Beginning in 1917, members of the AATJ and the AASDJ classified schools according to how well the schools’ educators and administrators reported their schools met the standards listed for membership to the AASDJ. This is defined as informal accreditation because standards were set, yet visitations were not made.64 Association adjournment in 1918 and 1919 did not disrupt this informal accreditation work.65 Between 1921 and 1923, informal accreditation was the responsibility of the AASDJ’s Committee on Classification. The CEJ informally accredited schools from 1924 until 1928. Members of the CEJ based these classifications on surveys and AASDJ membership applications completed by journalism educators and administrators at institutions desiring AASDJ membership.

Between 1928 and 1938, the CEJ members physically inspected the schools of journalism desiring AASDJ membership, and thus formal accreditation began for schools of journalism.66

In 1917, the ten charter member institutions of the AASDJ began official informal accreditation of schools of journalism that educators and administrators of those schools reported set standards were met. The Committee on Classification categorized institutions of the AASDJ in lists of “A,” “B,” and “C” classes. At that time, the AASDJ recognized thirteen professional programs as Class A and seven as Class B programs.67 Each year until 1926, the number of Class A programs increased. The number of Class B programs increased until 1921, dropped slightly in 1922, and slowly increased again. See Appendix D for year by year listing.

65 Lawrence W. Murphy, Compilation, 47.
67 Lawrence W. Murphy, Compilation, 47.
Until 1923, these informal accreditations were not publicized outside the associations but the criteria for recognition were published in newspapers and the \textit{Journalism Quarterly}, and were available upon request.\footnote{Lawrence W. Murphy, Compilation, 38.} In 1924, the names of the schools of journalism and their classifications were published not only in \textit{Journalism Quarterly}, but in public newspapers as well. The “A” list schools were upheld as the model programs while the “B” list schools were encouraged to make the “A” list. Schools of journalism listed in the published classifications as “C” schools were believed by the AASDJ and the AATJ membership to be in great need of improvement. These “C” schools were often threatened by the professional associations’ membership to have their names removed from the published accredited lists, leaving only Class A and Class B institutions. However, many of the AATJ and the AASDJ members believed this would result in a type of public humiliation which the professionalizing occupation, as well as the member colleges and universities, wished to avoid at all possible costs.

By 1926, the CEJ was informally accrediting journalism schools. It imposed new standards which made member institutions of the AASDJ the only ones eligible for Class A classification. This cut the number of Class A schools from thirty-six down to eighteen. The number of member institutions in the Class B category, which did not require AASDJ membership, increased from ten to twenty-eight. Publication of the list of informally accredited schools, and then in 1928, the formally accredited schools, were limited to those institutions on the “A” list, and continued throughout the period of this investigation. A list of “B” schools was maintained for the use of the CEJ’s members only. Schools of journalism classified as “C” schools were dropped from the list in 1929 because the associations’ leaders believed schools not listed in either the “A” or “B” list were “regarded as unworthy of professional standing.”\footnote{United States Publisher, \textit{Journalism Institutions Classified: United States Publisher Rates Departments and Schools by Association Requirements, 1929-1930}, (University of Illinois Files, Association for Education in Journalism, 1912-1977. State Historical Society of Wisconsin, Archives Division, Madison, Wisc.), 1.} By 1929, twenty-two programs were accredited as Class A schools and twenty-six were accredited as Class B schools. Ten years later, thirty-two Class A schools and thirty-four Class B schools were recognized by the
AASDJ and endorsed by the AATJ. By 1940, 542 journalism programs were operating in the United States, thirty-two of which had Class A accreditation.  

Both leaderships of the AATJ and the AASDJ opposed journalism education offered outside regionally accredited colleges or universities. In 1920, the National Council of Teachers of English unanimously adopted a resolution abolishing “all high school courses professing to teach journalism as a vocation.” Apparently the English teachers and members of the professional associations agreed high school journalism gave “none of the intellectual and ethical preparation necessary to a proper professional career.” In 1922, members of the AATJ amended their constitution to read that although they wished to cooperate with high school English teachers in their effort “to improve their communities through the press” and use newspapers to help students learn and improve composition skills, “such activities must be deprecated if they come to be construed as an attempt at pre-professional or vocational courses in journalism.” In 1931, the AATJ reiterated its stance against the teaching of journalism in high schools by approving a resolution which stated that its members “deplore and condemn the prevalent use in high school of journalism textbooks which have been designed primarily for college and university journalism instruction.” At this time, there were very few textbooks legally published and available for use in journalism instruction.

Journalism associations also tried to prevent trade schools from offering journalism training courses. In 1924, Nelson Antrim Crawford, head of the Department of Industrial Journalism at Kansas State Agricultural College, an AASDJ member institution, believed trade and vocational schools could only “produce [students] who can write ‘good stories,’” not “trained investigator[s] seeking the objective

70 Sutton, 106.
71 Crawford, 173-174.
72 Crawford, 174.
facts.” At the 1930 convention, the AATJ members approved a resolution condemning all “vocational training for journalism, except as given by newspapers and in efficiently organized schools and departments of journalism.” In 1933, the AATJ’s Committee on the Basic Content of Non-professional Courses recommended the appointment of a committee to work with the CEJ, “to gain the pertinent data and to draw up ... suggestions for the guidance of the college with regard to their [sic] courses in journalism with a view toward co-ordinating pre-professional and professional work offered to liberal arts and other students.” This initial effort at articulation was later extended to include junior college course work.

While the CEJ members began physically inspecting schools to formally accredit them in 1928, they did not begin inspecting night schools and schools offering part-time programs for ten years. In 1937, such schools were physically “inspected by a member of the Council [on Education for Journalism] before a recommendation for [AASDJ] membership was considered.” Leaders of the professional associations’ dim view of non-accredited schools of journalism was well publicized. Nevertheless, in 1937 the AASDJ stated it did not discriminate against any professional program of journalism, regardless of the institution that housed the knowledge, as long as the program had “achieve[d] the full equivalent of the day-school programs.” This is evidence that the professional associations were unable to eliminate all non-four-year programs and had to acknowledge them eventually.

In 1928, the AASDJ adopted an amendment to list for publication those member institutions not “conforming to the spirit and the letter of the requirements for membership,” and therefore jeopardizing

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75 Crawford, 169-170.
76 AATJ, Proceedings of the 19th Annual Convention, 12.
79 AASDJ, Minutes of the 12th Convention, 5; NCEJ, Proceedings of Meeting, n. p.
their Class A accreditation. School visitations were made by members of the CEJ, and schools were grouped into prestige rankings. At the 1929 convention, the AASDJ president “instructed the secretary to collect all copies of the tentative grouping and to destroy them.” The AASDJ president suspected the AATJ members of schools that were listed would take offense to the public shame instigated by the AASDJ’s actions. This act removed the possibility of causing any ill feelings between the members of the two associations. Between 1927 and 1930, the AASDJ and the CEJ members made numerous attempts to raise the AASDJ membership standards higher, all to no avail. Most of the resolutions of the proposal were withdrawn in 1930.

In 1935, the AATJ approved a resolution which repeated its 1930 commitment to keeping journalism’s body of knowledge confined to those institutions “which are able to organize it efficiently, to staff it adequately, and to supplement the formal courses with the proper laboratory facilities and professional connections, and particularly that the high schools limit their field of activity to the school community.” As expected, many journalism programs were “restricted [from accreditation] because of the high standards.” As a result, other professional associations of journalism educators incorporated to rival the AATJ. For example, the American Society of Journalism School Administrators formed in 1944.

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81 American Association of Schools and Departments of Journalism (AASDJ), Minutes of the 11th Convention of Iowa City, Iowa, 28 Dec. 1927, (Convention Records, Association for Education in Journalism, 1912-1977. State Historical Society of Wisconsin, Archives Division, Madison, Wisc.), 5; AASDJ, Minutes of the 12th Convention, 2.


83 AASDJ, Minutes of the 11th Convention, 8-11; AASDJ, Minutes of the 12th Convention, 3; AASDJ, Minutes of the 13th Convention, 8-9; AASDJ, Minutes of the 14th Convention, 23-25.


86 Emery and McKerns, 31-46.
because of the “slights and injustices experienced by journalism teachers in the smaller schools and departments of journalism.”

The AASDJ members employed another strategy to prevent poor quality programs and non-member schools from being accredited as “A” or “B” schools. The CEJ recommended and the AASDJ approved the requirement of laboratories and libraries to be available to students and used by journalism teachers in instruction. By 1937, amendments to the AASDJ’s constitution required accredited schools to have “a collection of the standard books on various phases of journalism ... available for use of the students” and “[s]ufficient laboratory equipment ... for use in connection with instruction in the technique of journalism to familiarize students with the methods of copyreading and with typography and makeup.”

An associative strategy used to prevent poor quality programs from attaining “A” or “B” accreditation was the invitation to “the American Library Association, the American Bibliographical Society, the H. W. Wilson Company, and other organizations and persons,” such as the American Historical Association and librarians of member institutions, to work together in order to create a “union list of newspaper files” for students and instructors. No other documentation produced by the AATJ, the AASDJ, or the CEJ was discovered during this investigation that referred to this alliance or its successes and failures. If a minimum list of files was created, it is likely each school receiving an “A” or “B” accreditation would be required to have these files. This is an example of using an associative strategy to create an environment in which a closure strategy could be enacted. Most of the smaller schools and many of the mid-sized programs were unlikely to afford the maintenance of such a file. Many schools outside the regular four-year programs offered in a large college or university would also struggle to meet this proposed requirement.

The professional associations not only tried to prevent the accreditation of poor quality programs but also some programs that met or were likely to soon meet the AASDJ standards. These programs were

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88 American Association of Schools and Departments of Journalism (AASDJ), Standards, Adopted 1937, (University of Illinois Files, Association for Education in Journalism, 1912-1977. State Historical Society of Wisconsin, Archives Division, Madison, Wisc.), 2, standards 13 and 14.

89 AATJ, Proceedings of the 19th Annual Convention, 3-4.
targeted because of their location in small colleges. The AASDJ did not expect an increase in membership from “the smaller colleges” because of the “competition ... of the larger universities and colleges,” and the high standards. Some members of the AATJ from the smaller institutions requested help and cooperation from members from larger institutions at the 1933 AATJ convention. One member of the AATJ suggested “that the Committee on the Basic Content of Non-professional Courses consider the possibility of promoting the organization of” some type of congress, similar to one organized in Texas, Louisiana, and Oklahoma that had been somewhat helpful to smaller colleges. No resolutions were submitted. This lack of action suggests the members of the AATJ were not too interested in helping the members from the smaller institutions prepare for CEJ accreditation and possible AASDJ membership.

Assertions made by editors, college administrators and educators, and various other members of the public suggested there were too many schools of journalism in the country and their graduates were “flooding the market.” In 1926, the CEJ published the results of a study to ascertain the number of journalism schools, and where each was physically located. One finding indicated that seventeen states had no schools of journalism. This was significant because all of these states were publishing at least one newspaper. This indicated to both the AATJ and the AASDJ memberships that it was likely the reporters working at these newspapers were not accredited school of journalism graduates. The leaders of the associations desired all practicing journalists to be graduates of accredited schools; therefore, the newspapers in these seventeen states needed at least one accredited school to produce graduates for employment, unless a nearby accredited school could supply enough graduates. In 1928, the survey was repeated. The report expressed the CEJ’s concerns “that [non-accredited] schools already started may

90 Barlow, 1.
95 “Journalistic Education in the United States, Presentation of Report for 1928-29,” Journalism Quarterly 6,
over-expand, to compete with existing accredited schools. The report advocated eliminating “the expansion of departments of journalism not already giving a professional program,” and that institutions should begin actively limiting enrollment.96

Members of the NCPEJ conducted their own survey in the Spring of 1940. The findings confirmed the long-time suspicions of the CEJ members that poorer quality institutions were too numerous. The Class A schools were strong enough to supply educated journalists even for areas without accredited schools of journalism. Moreover, poor quality and non-accredited programs clustered around the accredited Class A schools.97 The 1940 NCPEJ study concluded that “the most urgent need” at that time was to eliminate those programs that were “attempting to carry on professional programs of journalism that fail[ed] to measure up” to the AASDJ’s Class A schools of journalism.98

Even when journalism courses were located in regionally accredited institutions, the professional associations strived to restrict all journalism classes to separate journalism schools, similar to the actions taken by the AMA’s Council on Medical Education.99 The 1919 AASDJ constitution required that journalism instruction “must be organized as a separate academic unit.”100 After much debate, the AASDJ required this “separate academic unit” to offer “an undergraduate degree” in journalism. This standard made it difficult for clusters of journalism courses and many departments of journalism to be accredited.101 This amendment made those institutions which organized journalism courses or departments in English departments ineligible for accreditation.

97 Sutton, 113-114.
98 Sutton, 115.
99 Glidden, 189.
100 Constitution of the American Association of Schools and Departments of Journalism (AASDJ), 1919, art. 3, sect. 3 subsect. 1.
Members of the AATJ and the AASDJ generally agreed on curriculum content, standards, committee formations, membership criteria, goals, and strategies. One of the points hotly debated between and within the associations, however, were proposals to deny accreditation to courses and departments of journalism, in order to eliminate the words “and Departments” from the AASDJ’s name. In 1934, a formal resolution to remove the words “and Departments” from the association’s name was rejected in a very close vote. Again in 1935, the CEJ proposed to change the AASDJ’s name to the American Association of Schools of Journalism.102 During the ensuing discussion, a member said the name change “would be a help to some of the member institutions.”103 The proposal was tabled, but the debate was renewed at the 1936 convention. Some members objected that a name change would “be embarrassing to some of the [AATJ] members,” it would “drive a wedge between the two classes [Class A and Class B] of membership,” and, “the term ‘school’ is itself variously [sic] interpreted.”104 The motion for adoption was tabled and was not brought up again during the period under study.

Access to Journalism Education

Restricting access to journalism’s body of knowledge was believed by the CEJ members to be a crucial element to attain the goals of the members of the AATJ and the AASDJ. Strategies selected by the members of the CEJ involved setting standards for who should learn and who should teach in journalism’s degree programs. The CEJ raised suggested standards of admission to schools of journalism several times between 1919 and 1938. Schools had to meet or exceed these standards in order to receive or continue their Class A or Class B accreditation. Prior to 1924, all student applicants to the AASDJ’s member schools were required to have a high school diploma “from a secondary school accredited by the state


103 AASDJ, Proceedings of the 18th Convention. 10.

university” or “at least 14 units of approved secondary school work.” In 1924, the AASDJ accreditation standards required that member schools admit only those students who had successfully completed at least two years of liberal arts (general education) study in a college or university. In 1929, new standards restricted journalism courses to upper-division students. Students who desired admittance to the AASDJ accredited schools of journalism had to have had “at least one year of approved academic work” and the understanding that journalism courses taken in their “freshman year ... [would not] be credited toward the requirement for a degree in journalism.” The following year, a minimum of “two years of approved academic work” was required and “no courses in journalism given in the freshman or sophomore year ... [would] be credited toward the requirements for the degree in journalism except such courses as [we]re also credited toward the bachelor’s degree in other departments.”

In April 1931, members of the NEA, the ASNE, the AATJ, and the AASDJ asserted that admission standards were high enough and attention should be directed “to and securing recognition of the work being done and the methods used in their schools.” The following four years, the CEJ’s focus shifted from courses and credits to students’ characteristics. In 1936, members of the CEJ, then renamed the NCEJ, suggested that “personal qualities of students, as well as grades, enter into candidacy for a degree.” By 1937, only the students who had successfully completed at least two full years of a regular four-year course leading to a baccalaureate degree” would be allowed to take the “distinctly professional courses offered” in the school of journalism. In schools of journalism desiring AASDJ accreditation, the majority of students who attended full-time had to “be regularly enrolled candidates for a bachelor’s,
master’s, or doctor’s degree.”

In addition, a new standard specified that schools give students degree credit for practical journalistic work only if it was “done under the immediate supervision of an instructor in journalism as a part of a regular course in journalism.”

The AASDJ constitutional changes in 1938 relaxed the standard regarding journalism courses taken in the first two years. The new amendment read:

> Non-professional and introductory courses in journalism preferably for the purpose of vocational guidance or of determining the ability and aptitude of students for journalism, may be offered in the freshman and sophomore years, but distinctly professional courses in journalism should be open only to students who have successfully completed at least two years of a regular four-year course leading to a baccalaureate degree.

Between 1919 and 1938, the number of schools of journalism that were Class A or Class B accredited doubled. This suggests that quality increased in many schools, even with rising standards. Also, the number of schools eligible for AASDJ membership increased during these twenty years. See Appendix D for the tallies of both “A” and “B” schools.

While raising the standards for access to journalism’s body of knowledge by prospective students, the CEJ, with the professional associations’ approval, also raised standards for teachers of journalism education during this twenty-year period. Prior to 1919, no standards existed, no model professors were widely known, and “practically no textbooks on the subject” had been written. In his capacity of AASDJ president, Wisconsin professor Bleyer addressed the AATJ membership at the 1921 convention. He recalled two major problems faced by journalism educators prior to 1919. One problem was “hostility—on the part of practical newspaper men, most of whom were still inclined to believe that the only place to learn journalism was in a newspaper office.” The other obstacle was that administrators in colleges and

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111 AASDJ, Standards, 1, standard 2.
112 AASDJ, Standards, 1, standard 4.
113 AASDJ, Standards, 2, standard 10.
114 Constitution of the AASDJ, 1938, art. 3, sect. 3, subsect. 2.
116 Bleyer, Constructive Program, 1.
universities had not yet been “convinced that instruction in journalism was a necessary part of higher education.”\textsuperscript{117} Given these problems, the professional associations of journalism initially set low standards for teachers. For example, the 1919 standards required journalism educators to be at least of the rank of instructors, and a school needed at least two full-time teachers to be eligible for AASDJ membership.\textsuperscript{118} There were no requirements that an individual needed a degree, and if a teacher had one, no restrictions were enforced regarding which discipline the degree noted. Many individuals became college instructors in the journalism schools who had backgrounds in English composition.\textsuperscript{119}

Although the professional associations valued education over experience for new practitioners, they cared that journalism educators have practical experience more than specific academic credentials. A 1923 survey conducted by the AATJ showed that most instructors in journalism had had some work experience at a newspaper office.\textsuperscript{120} Five years later, the AASDJ approved the CEJ’s recommendation “that no teacher of journalism be appointed to a full professorship unless he has had at least five years of experience in professional newspaper work and that other instructors shall have had at least two years of such experience.”\textsuperscript{121} In 1929, the CEJ recommended the AASDJ and the AATJ encourage teachers of journalism courses to conduct and publish research. Research on journalism was lacking. Both the professional associations and scholars of professionalism believed research would aid in professionalizing the occupation and the “scientification” of journalism’s body of knowledge.\textsuperscript{122} The AASDJ also approved a constitutional amendment which stated that schools of journalism should be organized “with a dean, director, or full professor at its head, and with at least two full-time teachers of journalism of professional

\textsuperscript{117} Bleyer, \textit{Constructive Program}, 1.

\textsuperscript{118} Constitution of the American Association of Schools and Departments of Journalism (AASDJ), 1921, art. 3, sect. 3, subsect. 1.

\textsuperscript{119} Lawrence W. Murphy, AASDJ, Presidential Address of the 20th Convention of Columbus, Ohio, 29 Dec. 1937, (Conventiion Records, Association for Education in Journalism, 1912-1977. State Historical Society of Wisconsin, Archives Division, Madison, Wisc.), 1.

\textsuperscript{120} ASNE, 3.

\textsuperscript{121} AASDJ, Minutes of the 12th Convention, 5.

\textsuperscript{122} AASDJ, Minutes of the 13th Convention, 8; Selander, 141-142.
rank.”  

This action of designating a leadership hierarchy within the school of journalism was similar to the AMA’s Council on Medical Education’s standards.  

In 1931, two new standing committees were established by the AASDJ. The Placement Interchange Bureau and the Lecture Bureau both evolved from the special committees for the interchange of journalism instructors and for the arrangement of lectures by American and European teachers and editors. Members of the AATJ, the AASDJ, and the CEJ believed that these two bureaus might “materially increase [the AASDJ’s] service as an organization to individual members,” which at this time, was overwhelmingly comprised of journalism educators representing the member institutions. Exposing American journalism teachers to foreign journalism educators and editors might encourage American journalism teachers to explore new ways of teaching and to use new resources such as foreign textbooks for educating their students.

Members of the AATJ’s Committee on Qualifications of Teachers in 1933 listed many characteristics as highly desirable for all teachers of journalism. This list included a college degree, high powers of inspiration, respect of students, peers, and colleagues, use of formal pedagogical methods, and engagement in their own life-long learning. In addition, the committee formally condemned “the unethical and illegal practice of certain persons in selecting the best parts of various copyrighted textbooks, mimeographing those selections, and selling them as substitutes for the textbooks themselves.” The AATJ committee also recommended “that a minimum of five years of versatile and important newspaper experience shall be a prerequisite to the appointment of any person as a professor, associate professor, or


124 Glidden, 189.


assistant professor of professional journalism,” but this resolution was not adopted. In 1935, the AATJ passed a resolution condemning “as unsound and shortsighted any policy which emphasizes the Ph. D. at the expense of adequate professional experience and actual writing pertinent to journalism as a qualification for such an appointment.”

Other new standards adopted in 1938 indirectly affected journalism instructors. For example, libraries and laboratories required in accredited schools implied journalism teachers should be knowledgeable about “the standard books on various phases of journalism” so the collection could be used by students. In addition, accredited schools were required to have “sufficient laboratory equipment” to be used “in connection with instruction.” This requirement was similar to the AMA’s Council on Medical Education’s standards. The number of instructors in the school should “be sufficient to insure careful attention to the individual needs of students,” and “the amount of class and laboratory work required of each instructor shall not exceed that of instructors in similar departments.” Journalism teachers were also “encouraged to carry on research work and to contribute to the literature of the subject.”

Marking Completion


130 Herbert, 69.


133 Glidden, 189.

134 Constitution of the AASDJ, 1938, art. 3, sect. 3, subsect. 11.

135 Constitution of the AASDJ, 1938, art. 3, sect. 3, subsect. 12.
Journalism’s professional associations attempted several strategies to certify that individuals had mastered journalism’s body of knowledge. In 1919, the AASDJ constitution required that most students in the school of journalism should “be regular candidates for a bachelor’s or master’s degree.”\textsuperscript{136} If the degree sought was to contain the designation of journalism, the student was required to pass “24 units or semester hours (on the basis of 120 units required for the bachelor’s degree) in professional courses in journalism.”\textsuperscript{137} At this time, schools offered various baccalaureate degrees, including the Bachelor of Arts in Journalism, the Bachelor’s in Journalism, and the Bachelor of Science in Journalism. There was no uniformity in courses or programs offered and therefore no uniformity in degrees offered by the various postsecondary institutions. Most journalism educators and both the AATJ and the AASDJ memberships, however, agreed that the first two years of the four-year curriculum should emphasize a general arts, humanities, and social science background, not science. In 1927, a representative from Kansas State Agricultural College spoke out about the AASDJ’s discrimination against the Bachelor of Science degree in Journalism. He argued that a Bachelor of Science degree would bring at least the same amount of prestige to practicing journalists as the Bachelor of Arts degree. He urged the AASDJ membership to postpone a vote on new amendments which designated that schools of journalism granting the Bachelor of Arts degree in Journalism would be the only schools eligible for Class A or Class B accreditation.\textsuperscript{138} If the amendments were adopted, Kansas State Agricultural College, along with several other institutions would be reclassified from “A” to lower status, unless they replaced their Bachelor of Science degree with the Bachelor of Arts degree. The vote was postponed for one year, then two. This set of proposed amendments was never again presented in its original form.

In 1929, members of the AASDJ approved a constitutional amendment which required schools of journalism to offer “a degree in journalism, certificate in journalism, or notation indicating completion of professional courses.”\textsuperscript{139} In 1937, new standards with regard to degree completion were adopted. Standard

\textsuperscript{136} Constitution of the AASDJ, 1919, art. 3, sect. 3, subsect. 4.
\textsuperscript{137} Constitution of the AASDJ, 1919, art. 3, sect. 3, subsect. 5.
\textsuperscript{138} AASDJ, Minutes of the 11th Convention, 10-11.
\textsuperscript{139} AASDJ, Minutes of the 13th Convention, 8.
Three stated that “four years work in a university consisting of not less than 120 semester units shall be required for the bachelor’s degree in journalism,” and Standard Five stated that this “bachelor’s degree shall be distinctive, indicating that the students have completed the professional requirements in journalism.”\textsuperscript{140} The following year, the constitution was amended to state that “[i]n addition to the bachelor’s degree, some form of recognition should be conferred” which indicated the student had “successfully completed the professional requirements in journalism.”\textsuperscript{141} How to measure the completion of the professional requirements was also discussed.\textsuperscript{142}

The associations’ members explored another aspect of marking journalism education completion by developing requirements for advanced study leading to a graduate degree. The CEJ members conducted the first investigation of journalism graduate study and informally reported their findings at the 1926 convention.\textsuperscript{143} All AASDJ member institutions had been sent a survey asking about their graduate programs. Although nearly fifty institutions were sent the survey, “only five replies” were returned.\textsuperscript{144} The CEJ offered no recommendations to the AASDJ because it lacked sufficient information. The AASDJ charged the CEJ “to make a statement [at the next convention, recognizing the value of graduate study in journalism] thereupon as may be used to present the financial needs of such a study to those who may be interested.”\textsuperscript{145}

The CEJ conducted another survey and reported its findings at the 1927 convention.\textsuperscript{146} The results indicated that ten schools and departments of journalism offered graduate study to 112 students,

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\textsuperscript{140} AASDJ, \textit{Standards}, 1, standard 5.  \\
\textsuperscript{141} Constitution of the AASDJ, 1938, art. 3, sect. 3, subsect. 5.  \\
\textsuperscript{143} American Association of Schools and Departments of Journalism (AASDJ), \textit{Minutes of the 10th Convention of Columbus, Ohio}, 29 Dec. 1926, (Convention Records, Association for Education in Journalism, 1912-1977. State Historical Society of Wisconsin, Archives Division, Madison, Wisc.), 2.  \\
\textsuperscript{144} AASDJ, \textit{Minutes of the 10th Convention}, 2.  \\
\textsuperscript{145} AASDJ, \textit{Minutes of the 10th Convention}, 2.  \\
\textsuperscript{146} AASDJ, \textit{Minutes of the 11th Convention}, 2-4.
\end{flushright}
approximately half of which were Master’s degree candidates, and 64 students had received a Master’s degree in the prior two years. The AASDJ decided to have the CEJ conduct a mail ballot vote of the membership on a proposed amendment that would require “a minimum of 24 credits of graduate courses ... for the master’s degree in journalism, at least one-half shall consist of graduate work in journalism, and that the graduate work in journalism shall be included in not less than two year-courses open to graduate students only, exclusive of research work and the thesis requirements.” The amendment was adopted the following year. In 1927, a plea was made by an AASDJ representative of a member institution to better coordinate the senior year as not only the capstone year of a complete undergraduate program which prepared students for a start in their careers, but also as a stepping stone to graduate study.

Until 1938, there were few changes in the requirements for graduate study. The required two year-courses that had been limited to “graduate students only” were loosened to be courses designed “primarily for graduate students.” The NCEJ accepted a report summarized in seven statements regarding graduate study that was published in the Journalism Quarterly in March 1938. In brief, these seven statements and the NCEJ’s responses were: (1) thesis for master’s degree (unanimously endorsed by the NCEJ); (2) at least one-third of graduate course work to be taken outside the journalism department (the members of the Committee of Graduate Study were in disagreement as to the exact percentage of study); (3) thesis should be of publishable quality; (4) a fully equipped, graduate reading room should be provided for all graduate students; (5) a bound newspaper file should be accessible by all graduate students; (6) typical graduate courses should be available; and, (7) discussions should be held about offering a doctorate.

147 AASDJ, Minutes of the 11th Convention, 4.
148 AASDJ, Minutes of the 11th Convention, 6.
149 AASDJ, Minutes of the 12th Convention, 3.
151 Lawrence W. Murphy, Compilation, 4.
in journalism. No conclusions or recommendations were made by the committee who submitted this report and the NCEJ took no actions responding to this report before 1939.

Most of the AATJ’s, the AASDJ’s, and the CEJ’s attention was focused on the four-year undergraduate program. Members were most concerned about where the body of knowledge would be located, which students would be admitted to journalism’s programs, which educators should teach those students, and how graduates of journalism education would be identified. Graduate study was investigated by members of the AASDJ and some recommendations were made during the twenty-year period under study, but journalism’s professional associations did not spend much of their attention on this. In addition, the associations did give some attention to devising some form of recognition that indicated the eligibility of the graduates to practice the art and technique of journalism.

Certification for Practice

One method proposed for establishing the quality of individual journalists involved identifying their academic credentials. In 1928, the American Society of Newspaper Editors (ASNE) suggested to the AASDJ that some form of identification “be devised to protect schools and departments of journalism from the discredit often brought upon them by students who misrepresent themselves to editors as accredited graduates in journalism.” The CEJ proposed that individual institutions issue identification cards. Later that day, a committee proposed the text for a model identification card and,

152 Lawrence W. Murphy, Compilation, 4-5.
153 AASDJ, Minutes of the 12th Convention, 1.
154 AASDJ, Minutes of the 12th Convention, 3-4.
... the following text was adopted:

American Association of Schools and Departments of Journalism in co-operation with the American Society of Newspaper Editors.

____________________ was graduated from the School of Journalism, University of ______________________ in ____________________. Inquiries concerning this person, made by mail or telegraph, will be answered promptly.

____________________

Director, ____________________

(The reverse of the card will contain a list of the schools and departments of journalism belonging to the association.)

Members of the AASDJ understood that “it was not probable that editors generally would take the trouble to require of applicants for positions a card of identification and recommendation.” Many editors had long believed that experience through an apprenticeship was the only education a new reporter needed. Many editors also believed very strongly that reporters were born and not made. Still, the professional associations were determined to change this belief by asserting that there were many practicing journalists considered by both editors and the professional associations as unqualified and sub-standard.

No evidence produced between 1928 and 1936 was discovered that indicated either the AATJ or the AASDJ memberships undertook further actions to more clearly identify individuals they deemed eligible for practice. Indirectly, evidence suggests at least one institution, the University of Wisconsin (Madison), consistently awarded the identification cards to its school of journalism graduates during this period. In May 1936, the Chairman of the National Joint Committee of Schools of Journalism and Newspaper Groups sent a letter to all AASDJ member schools encouraging their journalism educators to reinstate the use of identification cards for graduates. A sample of the identification card then being used at the University of Wisconsin (Madison) was attached to the letter. A scanned photocopy of the front and

155 AASDJ, Minutes of the 12th Convention, 4.
156 AASDJ, Minutes of the 12th Convention, 4.
157 Grant M[ilnor] Hyde, Committee on Newspaper Cooperation, Letter to AASDJ Member Schools, 29 May 1936. (University of Illinois Files, Association for Education in Journalism, 1912-1977. State Historical Society of Wisconsin, Archives Division, Madison, Wisc.).
back of the identification card is in Appendix E. The Chairman acknowledged the fact that several schools had been distributing these cards but many had stopped. He asserted that the purpose for using the cards had remained the same—“to combat the bad repute caused by newspaper applicants representing themselves as ‘graduates in journalism.’” In the middle of the Depression, journalism jobs were few, and both the AATJ and the AASDJ memberships wanted the graduates of the accredited schools of journalism to be employed. Also by the mid-1930s, many newspapers owners and editors were beginning to value journalism education, and members of the journalism associations believed editors would be more likely to hire a school of journalism graduate than someone who had experience.

Certification by examination was also suggested, but not adopted. In 1930, an associate editor proposed that the AATJ certify the capabilities of journalists. He suggested that the AATJ create an organization similar to the American Institute of Accountants. This proposed Institute would examine and certify “the fitness of persons to work on newspapers.” By naming the organization the American Institute of Journalism, rather than Journalists, the negative connotations and stereotypes associated with journalists, like “self-styled poets” and P. T. Barnum discussed earlier in this chapter, might be avoided. He suggested a hierarchy of levels of membership (Reporter membership, Assistant Editor membership, and Editor membership), where advancement through the levels would be through a combination of examinations and experience. All graduates with at least a bachelor’s degree in journalism would be granted Reporter membership, and those wishing to practice without a degree could obtain Reporter membership status only by successfully passing an examination. To enter or advance through membership, a test must be passed. An examination board of the Institute, administered by a managing editor who held

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158 Hyde, Letter to AASDJ Member Schools, 29 May 1936.

159 Hyde, Letter to AASDJ Member Schools, 29 May 1936.

160 AATJ, Proceedings of the 20th Annual Convention, 2; Converse, 45; and, Hornaday, 115.

161 Atwood, 1-3.

162 Atwood, 1.

163 Atwood, 2.
membership in the Institute, would devise the questions and grade the examination. This process would reduce the numbers of unqualified journalists from practicing, but not necessarily require practitioners to have formal education. Although AATJ members discussed the editor’s presentation, no actions were taken prior to 1938.

At the 1933 AATJ convention, a managing editor criticized journalism education. He stated graduates of the accredited schools of journalism believed they were over-qualified to start at an entry level position at a newspaper because they had a Bachelor of Arts in Journalism degree. Although editors valued the degree more than they had previously, college graduates generally began at the bottom. He continued by stating that the “trait editors most preferred to find in their beginners” was humility. An AATJ member responded to the editor by stating that journalism educators had “made notable strides in professional education” in the previous twenty-five years, and the schools were “devoted to the conception that journalism is a profession and that the training for it must be on a high level.” Apparently the AATJ members believed the attitude instilled in their graduates was exactly what the editors were looking for in a new employee. The editor was pointing out the fit was not as close as the professional associations believed. This mismatch may be an indication that the professional associations of journalism were not as aware of the needs and desires of the newspaper editors as they believed they were, especially in connection with journalism’s educational preparation for graduates’ transition into practice.

Undaunted, the professional associations continued their efforts to prepare journalism students for practice in the same way and ensure graduates of accredited schools priority in the job market. In 1934, the AASDJ reaffirmed its Declaration of Principles, first drafted in 1924, that described journalism education as “adequate preparation” and “sufficiently practical to show the application of the knowledge to the
practice of journalism.‖ In this reaffirmation process, the practice of apprenticeship as a “method of preparation ... [was] discouraged as inadequate for the demand of [then] present-day journalism.‖

Little evidence was found of other attempts made by journalism’s professional associations to control the number of practitioners in the field. For example, the AATJ formed a committee to limit the size of graduating classes. Evidence collected in this investigation only revealed the committee was in existence at the time of the 1931 AATJ convention. The committee’s chairman stated “that the information in the hands of the [six-member] committee is insufficient for the purpose of a report” at that time. The committee’s continuance was approved; however, no other evidence of its actions was discovered during this investigation. The only other evidence collected that indicated the professional associations’ actions to control the practice of journalism was a proposal made at the 1935 AATJ convention requiring apprenticeships for graduates be limited to one year by the American Newspaper Guild. The resolution failed.

**Summary of Associations’ Actions**

Members of the journalism associations set goals and enacted strategies to raise the quality of journalism education and its practitioners. These goals included the raising of the occupation of journalism to professional status; convincing newspaper owners, publishers, and editors to value a formal, standardized, four-year program of journalism education over on-the-job training; improving the overall quality of their schools of journalism; and, better serving the American public and the industry. The majority of strategies recommended and enacted by the members of journalism’s professional associations

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172 Herbert, 69.
were closure strategies. The effectiveness of each strategy is analyzed in Chapter Four and compared to those strategies recommended and employed by engineering’s professional associations.
Chapter 3

ASSOCIATIONS AND EDUCATION FOR ENGINEERING

But, let me ask, will the publication of our grievances through the medium of the press change the situation, or is the public the proper body to whom we should address our complaints with the hope of obtaining relief? I think that we ought rather to look to ourselves for the remedy.¹

Following a similar format to the previous chapter, this chapter begins with a brief history of the occupation of engineering, engineering education, and engineering’s professionalizing efforts prior to 1919. The following sections detail engineering’s professional associations’ goals for professional engineering education between 1919 and 1938, and the strategies recommended and employed by members to reach the associations’ goals. The targets of the strategies, including the location of engineering’s body of knowledge, the access to engineering education, the certification of graduates, and the requirements for practice, are the focus of this chapter. A brief summary of the findings follows this description and analysis. The effects of the strategies on engineering’s professional education will be discussed in detail, and compared to journalism’s strategies and effects in Chapter Four.

The main source of evidence collected and used for this description and analysis included documents generated by the members of the Society for the Promotion of Engineering Education (SPEE) between 1919 and 1938. This evidence was composed of committee, annual, and national reports and surveys, proceedings and transactions, presented papers, constitutions, amendments, proposals, and formal recommendations. Much of this material has been reprinted in the SPEE’s professional journal. Originally published as a pamphlet titled Engineering Education, the publication evolved into the Journal of Engineering Education by 1924. Another source used was materials about and from the Engineers’
Council for Professional Development (ECPD) which consisted of professional journal articles and very few selected secondary sources. The Accreditation Board for Engineering and Technology (ABET) headquarters, located in Baltimore, has only photocopied, edited annual reports of the ECPD from 1933 to the present available for public viewing. Other materials in the ABET archive are inaccessible to the public “[d]ue to the confidential nature of the ABET accreditation process.” Archival documentation of the professionalization of engineering and its early accrediting efforts is located throughout the country in many institutions of postsecondary education. Time and money constraints made visiting each of these locations impractical and inefficient. Other investigators of the history of engineering assert

... there is little secondary material to which someone interested in the history of engineering organizations can turn. The best primary sources remain the technical periodicals, [and] the transactions and proceedings of the societies.... Few engineers have left personal manuscript collections, and fewer still were concerned with organizational problems.

Selected journal articles from the many professional associations were included in this analysis. Because “[v]irtually all of the major engineering societies in America have had more or less celebrated cases of censorship,” I have tried to cross-check information presented with more than one primary source. All of the resources used for this chapter are available in, or through, both the Pattee and Paterno Libraries of The Pennsylvania State University (University Park), State College, Pennsylvania, or both the Clark and Wahlquist Libraries of San Jose State University, San Jose, California.


2 Mimi Traynor, E-mail to author, 17 Nov. 1999.

3 Maryanne Weiss, E-mail to author, 28 Sept. 1999.


5 Layton, The Revolt, 16.
**Definition**

Since the early 1800s, the terms “engineer,” “engineering,” and “engineering education” have been defined variously.⁶ Even as recently as 1972, defining engineering was a problem because an engineer “certainly does not have to have a degree from an engineering school, nor a state license.”⁷ For the purpose of clarification in this investigation, the following definitions have been used throughout this chapter, unless otherwise indicated. Engineering is “the art of directing the forces of nature for the service of man,” through “a process of planning, organizing, and executing work ... and is distinguished from artisanship by its demand on the intellectual qualities of its practitioners.”⁸ An engineer is one who practices this art and executes this process. Engineering education is a set of courses, or a formal program of courses offered by an institution of postsecondary education for the purpose of graduating engineers. These definitions are general but still represent all of engineering investigated in this study, regardless of which branch or division of engineering an engineer studied or practiced.

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⁸ Jackson, Present Status, 7.
Identification and Relationships of Engineering Associations

Engineering is divided into disciplinary divisions—civil, mining and metallurgy, mechanical, electrical, and chemical, among others. Some would argue engineering “should really be treated as several professions” divided by specialties. Each specialty of engineering had its own professional association: the American Society of Civil Engineers (ASCE) was founded in 1852; the American Institute of Mining and Metallurgical Engineers (AIME) in 1871; the American Society of Mechanical Engineers (ASME) in 1880; the American Institute of Electrical Engineers (AIEE) in 1884; and, the American Institute of Chemical Engineers (AICE) in 1908. For clarification purposes, the discipline-specific professional associations that are discipline-related are referred to in this study as professional or engineering societies.

At the 1893 World’s Columbian Exposition, in Chicago, the Society for the Promotion of Engineering Education (SPEE) was formed. The SPEE, referred to hereafter as engineering’s professional association, was created by a group of engineering educators who made up one division of the Congress of Engineers, which had met at the Exposition.

During the nineteenth century, many regional and local engineering organizations were formed but failed for various reasons including the difficulty and cost in assembling members, opposition of local perceptions, such as jealousy and partiality, and challenges by unions and other federally organized

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9 Abbott, 82.


11 Esther Lucile Brown, 45.
The American Society of Civil Engineers (ASCE) was the first national professional society. It formed in 1852, but died out in 1855. “Only in 1867, with the establishment of a permanent” ASCE did a national professional society for engineering succeed. The mission of the ASCE was to control its membership for the purpose of setting “the qualified civil engineer apart from the incompetent practitioner,” but many local sections of the society disagreed. These local organizations supported legal registration of practicing engineers rather than let the national society control practice through its membership requirements. The ASCE “developed an elaborate set of procedures to maintain professional standards” related to society membership, and was viewed as representing all engineers.

The first challenger to the ASCE’s perceived dominance over all of engineering was the American Institute of Mining and Metallurgical Engineers (AIME). Organized in 1871, the AIME “showed little or no interest in professionalism.” The AIME’s mission was to serve industry. The next national engineering society to organize was for mechanical engineers. Although organized in 1880, for its first twenty years, the American Society of Mechanical Engineers (ASME) “did not function as a professional association.” Instead, it operated “primarily as a clearing house for practical and scientific information

13 Calhoun, 189.
14 Calhoun, 189.
16 Wisely, 103.
17 Wisely, 103.
19 Layton, The Revolt, 33.
20 Layton, The Revolt, 35.
21 Calvert, The Mechanical Engineer, 126.
and an elite social club.”22 The ASME hoped to combine the goals of professionalism, like that of the ASCE, with serving industry, like the AIME.23 The American Institute of Electrical Engineers (AIEE) formed in 1884 as “a formal electrical engineering society” and was created so America could “greet the ‘foreign electrical savants’ expected to meet at the International Electrical Exhibition.”24 From the first presidential address to the AIEE members, the society’s leaders asserted that engineering education would not be a primary concern. Instead, “establishing the necessity of pure science to advance engineering” was the AIEE focus.25 Like the AIEE, the other professional societies had no real interest in formal engineering education.

These four founder societies—civil, mechanical, mining and metallurgy, and electrical—“were thought to comprise all engineering. Each of the founder societies attempted to maintain the integrity of its professional domain in order to preserve ‘the powerful group action which can be exercised by a large single organization.”26 But they were not successful in claiming a monopoly over all fields of engineering. Nearly every year between 1890 and the mid-1960s, a new organization claimed a field previously held by one of the founder societies, “except for the chemical engineers.”27 The American Institute of Chemical Engineers (AICE) formed in 1908, and, until World War II, was the only national society for chemical engineers in the United States.

As early as 1886, proposals to unify divisions and the national professional societies of engineering were suggested by members of the various societies.28 Although this desire grew along with

22 Calvert, The Mechanical Engineer, 126.
23 Layton, The Revolt, 35.
25 McMahon, 4.
27 Layton, The Revolt, 41.
28 Layton, The Revolt, 45.
the “further development of a professional spirit,” it was believed impossible to unify the entire professionalizing occupation of engineering because of the societies’ “distinct professional heritage and tasks.” Industrialist and philanthropist Andrew Carnegie donated one million dollars in a highly publicized effort to unify the founder societies. The funds were used by three of the four founder societies to build a union engineering building in New York City. When the ASCE declined to participate, the AIME, the ASME, and the AIEE agreed to join forces, partly because this “action isolated civil engineers and raised the prestige of the other societies.” The building was dedicated in 1907. Eleven years later, the ASCE also moved in. During the first decade of the twentieth century, “the founder societies greatly increased their areas of united action,” but very little attention was directed to engineering education or accrediting actions for the purpose of professionalizing engineering.

At the World’s Columbian Exposition of 1893, held in Chicago, teachers of engineering met for the first time as one division of the Engineering Congress. Attendance was high. These teachers generated so much attention and interest from other engineering educators and members from the various societies that the attendees of this division made their group permanent and named it the Society for the Promotion of Engineering Education (SPEE). A committee appointed by those engineering educators proposed a constitution which stated individuals responsible for teaching engineering or anyone interested in engineering education could become members. The mission of the association was “the promotion of the highest ideals in the conduct of engineering education with respect to administration, curriculum, and

29 Abbott, 105; Layton, The Revolt, 46.
30 Calvert, The Mechanical Engineer, 222.
32 Calvert, The Mechanical Engineer, 222-223.
33 Calvert, The Mechanical Engineer, 224.
34 Esther Lucile Brown, 45.
teaching work, and the maintenance of a high professional standard among its members.”

The SPEE was invited to keep its offices in the Engineering Societies’ Building and moved in by 1923.

One other organization played a key role in the early accreditation and professionalizing efforts of engineering. The National Council of State Boards of Engineering Examiners (NCSBEE), founded in 1920, was primarily “concerned [with] the certification of engineers.” Representatives from seven state boards began paralleling each of their states’ “practice in the examination and registration of engineers” with efforts “to promote the public welfare by improvement of professional engineering standards through uniform administration of State Engineering Registration Laws, the facilitating of reciprocal relations between state boards, and by defining and maintaining National Qualifications for Registration.”

The NCSBEE took upon itself the responsibility of norming the practice of examining and registering, or licensing, engineers according to state legislation. Appointed individuals, not necessarily engineers or engineering educators, served as state representatives on the National Council. The first states to create state examination boards were Wyoming in 1907, Louisiana in 1908, and Illinois in 1915. The NCSBEE, which began with seven states, increased to membership of twenty-nine states and two possessions by 1935, representing about 40,000 registered engineers. Not all states had examination laws or licensed and/or registered their engineers. Those states that did license engineers, did not agree on the criteria. A “National Bureau of Engineering Registration was established [in 1935] by the [National]


37 Esther Lucile Brown, 41.


40 Hoover and Fish, 3.

41 Esther Lucile Brown, 50.
Council primarily as a medium whereby professional engineers who wish[ed] to practice in more than one state may secure a certificate of qualification that will entitle them to engage in such practice without being obliged to register in each state that they enter.”  

The National Council took this action because members feared that more than fifty lists of differing criteria might be used. The representatives decided to create a national list to simplify eligibility requirements for engineers practicing in more than one state and to identify and smooth over points of non-conformity. In 1932, the ASCE, the AIME, the ASME, the AIEE, the SPEE, the AICE, and the NCSBEE created the ECPD, which in 1980 evolved into the ABET, recognized today as engineering education’s accrediting agency.

In February 1932, three delegates each from the ASCE, the AIME, the ASME, the AIEE, and the SPEE, met at the first Conference on Certification into the Profession. The goal of this conference was to find ways to enhance the “professional status of the engineering.” The fifteen representatives “approved the proposal for joint action in principle, and directed the chairman to appoint a planning committee and to invite representation [from the AICE and the NCSBEE] to a subsequent conference.” At the second conference on 14 April 1932 attended by representatives from all seven organizations, a report by the planning committee was submitted to all twenty-one members, “given careful consideration, revised somewhat, and approved.” This plan, delineated below, was then submitted “for adoption to the governing boards of the [seven] participating organizations.” By 21 October 1932, all seven associations approved the plan.

42 Esther Lucile Brown, 51-52.
46 Rees, 129.
47 Rees, 129.
48 Rees, 129.
To reach the goal of enhanced status, participants at the April conference established two objectives, one general and one specific. The general objective of the conference was to “coordinate and promote efforts and aspirations directed toward higher professional standards of education and practice, greater solidarity of the profession, and greater effectiveness in dealing with technical, social, and economic problems.” The specific objective was to develop a system whereby the progress of the young engineer toward professional standing can be recognized by the public, by the profession, and by the man himself, through the development of technical and other qualifications which will enable him to meet minimum professional standards.

The ECPD, a joint committee equally representing the seven organizations, was formed. Although all seven of these organizations played an important role in professionalizing the occupation of engineering between 1919 and 1938, the primary focus of this investigation will remain on the actions of the SPEE and the ECPD, and their efforts to professionalize engineering education. A genealogy of these organizations is delineated in Appendix F.

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49 “Engineers’ Council for Professional Development,” 515.

50 “Engineers’ Council for Professional Development,” 515.

51 As in the previous chapter, I have avoided references to specific individuals by name throughout my description and analysis of the professionalization efforts of engineering in this chapter; however, one individual must be recognized. William Elgin Wickenden, the Director of the Investigation made by the SPEE from 1923 to 1929, was the key person, in my opinion, in professionalizing engineering and establishing precedents for accreditation of engineering education. Before World War I, Wickenden had been a professor at both the Massachusetts Institute of Technology and the University of Wisconsin. During the war, “he directed recruitment and education for the research laboratories of the Western Electric Company and later became Assistant Vice-President of the American Telephone and Telegraph Company, directing the educational activities of the Bell system.” [Charles F. Scott, “Report of the Chairman,” 6]. He, along with the Associate Director, “visited most of the engineering schools in this country for information and counsel,” as well as many engineering schools in Europe. [Society for the Promotion of Engineering Education, Forward to Report of the Investigation of Engineering Education, 1923-1929, vol. 1, Society for the Promotion of Engineering Education (Lancaster, Penn.: Lancaster Press, Inc., 1930), iii]. In September 1929, Wickenden retired as Director and was appointed President of the Case School of Applied Science, yet he continued educating then current and future engineers through his numerous lectures and published articles.
Brief History of Professionalization Efforts Prior to 1919

Engineering has sometimes been considered as one of the traditional, gentlemanly professions along with medicine, law, and theology.\(^{52}\) During the early nineteenth century, “Americans already believed that technical skill was a fundamental element of the nation’s historic destiny.”\(^{53}\) They had witnessed “an era of canal building, bringing many able men into prominence,” followed by a period of railroad building.\(^{54}\) With mechanical engineer Frederick W. Taylor’s scientific management approach and contributions to the “traditional quality paradigm,” and “Fordism,” the qualities and value of engineers were well known and received by the American public.\(^{55}\)

Herbert Hoover was viewed by engineers and much of the general public as the ideal engineer. After graduating from Stanford in 1895 with a degree in geology, he held a succession of positions which led him to “a legendary reputation as the Great Engineer.”\(^{56}\) At the turn of the century, Hoover, then President of the ASME, instructed to the founder societies “that engineers could justify greater prestige for themselves only if they accepted collective responsibility for the well-being of the public in their attempt to organize a more efficient society.”\(^{57}\) In 1921, Hoover was appointed United States Secretary of Commerce and in 1929, elected President of the United States.

A young engineer was expected ... to start at the bottom of his profession, but success was determined by how quickly he moved into other enterprises. On an accelerated scale, Hoover’s career was a perfect example of the life cycle of the twentieth-century engineer before 1950.\(^{58}\)

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\(^{52}\) Calvert, “The Search,” 42; Newell, 135. Haber, in The Quest for Authority and Honor in the American Professions, 1750-1900, asserts professionals in the Progressive Era reasserted their status of authority and honor which was their legacy from eighteenth-century English gentlemen because of the ascendance of Darwinian thought.

\(^{53}\) Sinclair, 127.

\(^{54}\) Porter, 488.


\(^{58}\) Joan Hoff Wilson, 35.
During the first two decades of the twentieth century, engineering’s professional societies focused primarily on admitting quality members to their rosters and thereby enhancing their perceived prestige.\(^{59}\) Each division of engineering continued to draw lines of separation from the others. Each professional society had its own membership criteria, although criteria were similar, and each published its own scholarly journal, proceedings, and transactions.

Prestige and social standing of the individual and the profession of engineering were major concerns of the professional societies.\(^{60}\) As early as 1892, members expressed concerns over the fact that “no standard by which an engineer may be judged” existed, and that “the title conferred by an engineering school does not inform the public in the slightest degree as to the qualifications of the recipient to perform work.”\(^{61}\) Leaders of the professional societies asserted that membership in their organizations was sufficient validation of an engineer’s competency. They did not fight the NCSBEE, but rather ignored its existence until 1932, when the engineering societies joined forces with the NCSBEE by creating the ECPD. The leaders of the national engineering societies were primarily concerned with “creating and preserving a certain prestige and for rigidly excluding the applicants,” they perceived unfit for practice.\(^{62}\) The membership and leaders of the engineering societies believed they were very successful in this endeavor. For example, the constitutional amendments adopted by the ASCE between 1919 and 1938 all focused on raising the standards of membership.\(^{63}\) The constitutional amendments adopted included nominating procedures, Board composition, terms of office, membership and expulsion procedures, honorary membership requirements, membership grades, and admission procedures.\(^{64}\) “The ‘General Eligibility

\(^{59}\) Newell, 135.

\(^{60}\) Layton, *The Revolt*, 6; Newell, 137.

\(^{61}\) Porter, 491.

\(^{62}\) Calvert, “The Search,” 50; Layton, *The Revolt*, 6; Newell, 137. For a comparison of 1940 membership standards of the ASCE, the AIME, the ASME, the AIEE, the AICE, and the American Society of Agricultural Engineers, see Appendix B in Hoover and Fish, 418-421.

\(^{63}\) Wisely, 421-422.

\(^{64}\) Wisely, 421-422.
Requirements’ were essentially the same throughout the full 120 years [between 1852 and 1972], although the language was varied.”

**Brief History of Engineering Education Prior to 1919**

Engineering has been practiced since people used technology to control nature. The first formal engineering educational courses in the United States were offered in 1812. West Point Military Academy offered “certain courses in the sciences and in the application of engineering” to its students. Rensselaer Polytechnic Institute opened in 1827, but it would be two decades before more institutions offered engineering courses. Harvard’s Lawrence Scientific School (1847) and Yale’s Sheffield Scientific School (1854) doubled the number of institutions offering engineering education. By 1862, five more institutions were educating future engineers, bringing the total to nine schools. With the 1862 passage of the Morrill Act, legislation that gave land to states and territories for the support of colleges that would teach agriculture and mechanical skills, more engineering colleges were established, and “[b]y 1870, there were 17, in 1871 there were 41, and in 1872, 70, and in 1880, 85.” The vast majority of graduating engineers were civil engineers. The forty years between 1880 and 1920 are considered the “golden age for the application of science to American industry..., a period which also witnessed the rise of large industrial corporations.” In 1816, there were approximately thirty engineers practicing in the United States. In less than forty years, there were 2,000 civil engineers alone. Between 1880 and 1920, the number of

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65 Wisely, 105.

66 Esther Lucile Brown, 10.

67 Geiger, 4.

68 Esther Lucile Brown, 10.

69 Esther Lucile Brown, 11.

70 Rothstein, 75.


practicing engineers “increased by almost 2,000 percent, from 7,000 to 136,000.” Before the United States’ entrance into World War II, the number of engineers had increased to 297,488.74

The ASCE’s “first formal action ... in the domain of engineering education resulted from a communication early in 1874” from a Cornell professor “who urged that the Society declare what should be the course of instruction in schools and colleges for students of engineering.”75 On 6 May 1874, the ASCE responded, “the Society is not an advisory body in such matters” and suggested this question should be left answered by individual educators.76 This position, representative of the view of education taken by all the professional engineering societies, was only overturned seventy years later in May 1944.77 The ASCE reluctantly sent two members to join the SPEE’s Committee on Engineering Education in 1907.78 Charles Mann, later famous for his 1918 study of engineering education, said in 1916 at the ASCE annual meeting, “If you engineers will give the schools a clear definition of what the engineer is, the schoolmen will know how to use it to strengthen the school.... If you will define the product for the schools, the schoolmen will prove competent to produce it.”79 The engineering societies ignored Mann’s request throughout the period under investigation.

There existed a long history of the distrust of educators of the school culture by those individuals who had their roots in the shop culture.

Shop culture is characterized by the traditions of the nineteenth century American machine shop; school culture is characterized by the new technical and engineering colleges. More important is the fact that supporters of the shop culture were members of

73 Layton, The Revolt, 3.
75 Wisely, 80.
76 Wisely, 81.
77 Wisely, 88.
78 Wisely, 84.
79 Charles Riborg Mann, A Study of Engineering Education: Prepared for the Joint Committee on Engineering Education of the National Engineering Societies, Carnegie Foundation for the Advancement of Teaching, Bulletin No. 11 (Boston: Merrymount Press, 1918); Wisely, 86.
the old established elite, with a strong entrepreneurial orientation. The old elite was very much committed to a view of social mobility in the Horatio Alger tradition: upward mobility from machinist to mechanical engineer depended upon shop experience and proper gentlemanly attitudes. The new technical elite, on the other hand, was not composed of men with established social position and thus a strong interest in raising the status and prestige of the occupation; their criteria for mobility emphasized a sound engineering education rather than practical experience and demonstrated attributes of a gentleman engineer.\footnote{Calvert, “The Search,” 48; Perrucci and Gerstl, The Engineer and the Social System, 5.}

The SPEE’s first challenge was to attempt to neutralize the distinction between the shop culture and the school culture.\footnote{Calvert, “The Search,” 48.}

**Professionalization Process**

Engineering societies’ leadership exercised little control over the actions of their own members in practice. The leaders of the societies could not enforce their own codes of ethics nor hold their members accountable to the codes.\footnote{Rothstein, 89.} In 1910, the AIEE drafted a code of ethics which was adopted in 1912.\footnote{H. A. Wagner, “Principles of Professional Conduct in Engineering,” in Professionalization, eds. Howard M. Vollmer and Donald L. Mills (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1966), 138 [originally published in The Annals of the American Academy of Political and Social Science 297 (Jan. 1955): 46-52].} Within ten years, the ASCE and the ASME had adopted similar codes.\footnote{Wagner, 138.} Most of the societies had established some kind of committee “to serve as a court of appeal from decisions of” the societies’ respective ethical practice committees which “were given authority to suspend or expel members who violated the code,” but they rarely exercised that authority.\footnote{Wagner, 140.} Prominent engineering historian Edward Layton stated when engineering society leadership did suspend or expel members, it was usually done in secret because the action would have caused a loss of perceived prestige from the public.\footnote{Layton, The Revolt, 15; Rossides, 127.} Layton also

\footnote{Layton, The Revolt, 15; Rossides, 127.}
stated that publicizing the inner workings of the professional societies was long considered by members of the engineering societies as “bad form” and they paid great attention “to keep the real issues secret.”

Although many ethic codes were little more “than an expansion of the Golden Rule,” members of more than one professional society encountered compliance complications. These members had great difficulty in upholding the codes of ethics of each of the professional societies they held membership in because the details were often “dissimilar and sometimes contradictory.” The professional societies were unsuccessful “in creating a uniform set of ethical codes applicable to every engineer in every discipline.”

Members of the engineering societies had long recognized the lack of unity in direction for engineering education and control over engineering practice but did nothing to address either issue. As the profession developed and time passed, more professional societies organized which created an even greater challenge to the societies’ leadership to unify them. In 1926, the SPEE advocated the importance of coordinating the efforts of the professional societies and their many relationships with industry and the colleges. By surveying educators, the SPEE found opinions of educators on this subject as varied as the members of the professional societies. The societies could not restrict the practice of engineers they deemed unfit, paid no attention to engineering educators or the state boards, and could not limit use of “the name and position of engineer.”

87 Layton, *The Revolt*, 15; Rossides, 127.
88 Newell, 133.
89 Rothstein, 87.
90 Rothstein, 89.
Around 1930, several events may have led the professional societies to reevaluate their stance on the value and control of engineering education. Professional societies finally admitted the need for unity and control over the practitioners. Members of the societies believed their prestige was threatened by industry, unions, the Depression, their public failures, and the growing authority of the SPEE. They realized that they had to do something to preserve the prestige they still had, and they had to do something quickly.

Members and leadership of the professional societies sensed the presence of various threats to the profession’s prestige. Industries often tested job applicants to ascertain their level of engineering knowledge, especially in mathematical and scientific law application. In the experience of at least one major company, its personnel stated job applicants had substandard knowledge, skills, and talents.95 Engineering unions were gaining a great deal of support among practicing engineers. As early as 1882, the professional societies warned their membership to stay away from “rum and trade unions,” as well as other labor movements, but in 1918, the first engineering union, the Industrial Federation of Technical Engineers, Architects and Draftsmen, was organized.96 This union’s membership and popularity among practicing engineers peaked in 1920 and another “attempt to organize professional engineers was made in 1933, with the creation of the Federation of Architect, Engineers, Chemists and Technicians.”97 Again in 1935, unionism’s popularity increased among engineers as a response to the passage of the National Labor Relations Act, more commonly known as the Wagner Act, in which the federal government sided with unions in support of collective bargaining.98 Leaders of the engineering societies feared professional engineers would join unions that had non-professional engineers as members, thereby contaminating the status of the professional, and they seriously began searching for alternatives.99 They were concerned

98 Layton, The Revolt, 239.
about the appeal of unions and worried they could not prevent union membership. All the professional societies’ leaders believed they could do was warn engineers who desired “professional status not to turn to unionism.” An engineer who became a union member would be considered by other engineers as a failure and debase the status of all engineers through association.

With the crash of the stock market in 1929 and the ensuing depression of the 1930s, everyone in America faced new challenges to maintain their consumer lifestyles. Engineers, who had “long claimed that they had both the knowledge and the responsibility for solving the problems created by modern technology,” did not respond to the circumstances faced by the American public or reassure the public engineers could solve society’s problems. Instead, Layton asserted, engineers reacted with a sense of guilt, appeared “bankrupt of ideas, incapable of action, and obsessed with their own immediate selfish interest.” The engineering societies’ memberships renewed their interest in licensing the practice of engineers, in order to limit the number of qualified engineers and exclude those individuals the professional societies deemed unprofessional for the decreasing number of jobs available during the 1930s.

Engineering failures, such as breaking dams, crumbling skyscrapers, and collapsing bridges, caused irreparable damage to the profession’s prestige because an engineer “must do his work in the full glare of public notice. He has no courts of appeal to reverse his mistaken judgments: he cannot quietly bury his mistakes, or long conceal his deficiencies.” Even today, engineers tend to avoid acknowledging


101 Dvorak, 182; Shlakman, 327-328.

102 Newell, 137; Shlakman, 329.

103 Layton, The Revolt, 225.

104 Layton, The Revolt, 225, 229.

105 Layton, The Revolt, 236-237.

106 Hoover and Fish, 2.
mistakes made in their past, sometimes to the detriment of future success.\textsuperscript{107} Perhaps the biggest failure the engineering profession wished to avoid acknowledging was the perceived failure of President Hoover. Although he insisted that engineers could receive greater prestige for themselves if they led the American public safely and healthily into the twentieth-century world of technological wonders, he failed to do so, bringing perceived shame and embarrassment to the entire profession.\textsuperscript{108}

The Depression was not Hoover’s fault, but it was perceived as his failure by the public and his fellow engineers. Historian Joan Hoff Wilson described Hoover’s refusal “to update the old method of supplying ‘canned’ information or to make regular radio broadcasts, or to appear more affable, empathetic, or available,” as evidence of the public’s perception of Hoover being a failure.\textsuperscript{109} Hoover quickly gained “a reputation as a heartless reactionary who would not aid his own people in time of duress.”\textsuperscript{110} Although Hoover’s faults were not engineering’s faults, the engineering profession could not avoid facing Hoover’s failure as its own. Thus the Depression contributed to engineering’s quickly diminishing level of prestige. These perceived failures occurred in the full view of the American public.

In addition to the threats from industry, unions, the Depression, and prestige loss, the engineering societies’ leaders also perceived the engineering profession was threatened by the increasing power of, and growing support for, the SPEE. More and more engineers were supporting the implementation of the SPEE’s recommendations, such as creating an association of schools of engineering and providing semi-professional education for engineers.\textsuperscript{111} This support is evidenced by the scholarly articles published in various engineering journals. The SPEE had long claimed it was “not in itself a sufficiently representative agency,” to cure all the ills of the professionalizing occupation of engineering, but it did believe it was “the


\textsuperscript{108} Joan Hoff Wilson, 36.

\textsuperscript{109} Joan Hoff Wilson, 139-140.

\textsuperscript{110} Joan Hoff Wilson, 210.

best nucleus [engineers and engineering educators] have to start with."112 Yet, the SPEE was considered by many engineers and most engineering educators as the authority, and embraced the SPEE’s nine standards of engineering education.113 Educators supported the institutionalizing of standards at a national level because they believed standards would “give order to the irrational market place.”114 The fact that all hell broke loose after the 1929 crash sufficiently justified the need for education standards in the eyes of many engineering educators, engineers, and the public.

The professional societies, since their inceptions, addressed all their “problems by the formula ‘appoint a committee,’” and believed that the best solutions were derived from joint committees.115 Around 1930, the leaders of the engineering societies realized that an ideal joint committee, the SPEE, was already in place. The SPEE was willing to address engineering education issues, about which engineering societies’ memberships had little knowledge or interest. The societies’ membership consisted primarily of engineers who had been educated through the apprenticeship system. Most of the SPEE members had been educated in schools of engineering. The SPEE members had been very active, had successfully investigated engineering education with support from the Carnegie Foundation for the Advancement of Teaching, and the association was viewed by many as ready to accept full authority over the engineering profession. In 1924, the SPEE had reaffirmed its desire to create “a joint representative agency of the various groups concerned--schools, colleges, professional societies, industries--and put to the test American capacity for self-government through group cooperation.”116 The members of the SPEE called once again for the creation of a central authority and the need of unity, direction, and guidance. After the Depression


114 Calvert, The Mechanical Engineer, 280.

115 Wisely, 346, 349.

started, this agitation could no longer be ignored by the professional societies. Plans to create an agency, the ECPD, representing all parties related to the professionalization of the engineering occupation began to take shape by 1930.

Societies, Associations, and Engineering Education

By 1922, members of the SPEE recognized that engineering schools which had had a leadership role in professionalizing the occupation and engineering education were losing “their former leadership.” During an intensive investigation of engineering education between 1923 and 1929, the SPEE confirmed that more and more schools of engineering were developing different curricula, setting varying admission criteria, and did not follow the traditional models of the older engineering schools like West Point, and both Yale’s and Harvard’s scientific institutes. Members of the SPEE attributed this to the professional societies’ “failure to understand the imperative needs of a new day.” Perhaps this failure stemmed from the societies’ fear of, or disinterest in, dictating to the engineering schools. By 1929, battle wounds from the shop culture vs. school culture conflict were now apparent. Many individuals, including members of the SPEE believed professional societies’ should have “responsibility ... for setting up proper codes of qualifications, to serve as guides to both scientific and practical training,” and they needed “constant urging” to do so. At least one of the professional societies attempted to give the needed attention to engineering education. The youngest of the major societies, the AICE, listed as one of its objectives in its 1908 constitution, “[t]o cooperate with educational institutions for the improvement of the education of the


117 Dunlap, “Preparing the Engineer,” 51.

118 Doherty, 335; Dunlap, “Preparing the Engineer,” 51.


120 Wickenden, A Comparative Study, 263.
men who are to enter this profession.” 121 In 1922, the AICE’s Committee on Chemical Engineering Education, formed in 1908, reported the results of a study, including thirteen conclusions regarding engineering education for future chemical engineers. 122 These included reevaluating clock hours to make them equivalent to credit hours, requiring three years of general education before engineering students were admitted to engineering courses, raising and enforcing entrance requirements, and discouraging the use of undergraduate and graduate students as major instructors. 123 The report was unanimously accepted, the process of study repeated in 1926, “but no formal resolutions were adopted.” 124

In addition to guidance from the professional societies, schools of engineering wanted “a clearer understanding of the future training which their graduates [we]re to receive from employers.” 125 In a 1923 joint meeting of the National Industrial Conference Board (NICB) and the SPEE, representatives of the NICB “concluded from their personal experience that the only effective industrial education is that obtained within the industry itself.” 126 At the same time, these representatives agreed “that education in college and engineering school, and association with intelligent instruction and students, exercises a strong influence upon the capacity of young men to advance rapidly to positions of responsibility.” 127 The NICB concluded this meeting with several recommendations, including its affirmation of student internship in industry by either (1) “serving an apprenticeship ... before entering college,” (2) working in industry “during [the] student’s vacation,” (3) “supplementing industrial training after completing the theoretical


122 White, 67-73.

123 White, 69.


125 Wickenden, A Comparative Study, 264.


127 National Industrial Conference Board, 12.
course,” or (4) “by practical training coincidentally with theoretical training in college.” The NICB viewed engineering education in great need of “improving the effectiveness of the teaching force,” and many of the schools as simply being “rich in buildings and equipment.” The representatives at this meeting also believed that the effort to make technical education comprehensive for engineering students caused “an inevitable blurring of aims and compromise of standards.” Members of the SPEE recognized that they, industry, the professional societies, and the engineering schools were not in agreement over the role education should play in the professionalization process.

Traditionally, apprenticeship under a qualified practitioner was believed to be “an indispensable part of [the future practitioner’s] training” while a college education played “only a part of an engineer’s preparation.” The schools of engineering, left on their own, “followed the growth of the profession and endeavored to supply the demands for the increasing number of specialists.” The engineering societies wanted no responsibility for monitoring either experience or engineering education. Members of the societies believed industry should address experience and educators should address education. By 1929, this belief was causing “the most confusing problem of engineering education.” Professional societies were challenged, especially by members of the SPEE, to accept the responsibility of providing engineering education guidelines. Engineering educators believed it was the engineering societies’ leaders’ responsibility and “duty” because the “time spent in a university course, as well as the mental capacity of the student, [wa]s too limited for the acquisition of anything more than the elements of knowledge needed

129 National Industrial Conference Board, 23.
132 Porter, 490.
133 Bennett, “The Post College Education,” 310.
by the practicing engineer.” Engineering educators believed the professional societies needed to address this problem.

In addition to not agreeing on the role engineering education should play in professionalizing the occupation, members of the professional societies disagreed on the purpose of a college education. In 1893, graduates from any school of engineering, including two-year and four-year programs, were expected by society membership and industry to have acquired: “(1) A good common or high school education; (2) Ability to look oneself in the face and not be ashamed; (3) Practical gumption, and physical vigor; mental calmness and keenness; (4) Ability to appear always at one’s best; (5) A book knowledge of engineering; and, (6) Some practical knowledge of engineering.” No assessment or evaluation methods were suggested to ascertain competency. By 1922, members of the SPEE expected engineering graduates to know their environments and themselves, to be able to think, write, and speak well, to know “the sources of scientific information,” to be “skilled in the use of the method of applied science in the solution of engineering problems,” be “thoroughly trained in costs and values,” be able to “prove himself to be an economic asset in his work, and shall understand the commercial and ethical aspects of professional practice,” and “be taught throughout his college course that one of his chief functions in life is to serve is community.” All judgments made as to how well students had been educated were made subjectively by the graduates’ future employers.

Between the two world wars, there was little agreement as to the purpose of an engineering education. In 1923, the National Industrial Conference Board asserted the “primary object” of schools of engineering was “to develop young men for effective service in industry.” Another purpose of engineering education asserted by the AICE leadership was to produce a graduate who could “fit into the existing organization, work smoothly with his foreman and men, obtain their co-operation and get them on


his side of his work.”\textsuperscript{139} William Wickenden, the Director of Investigation and Coordination for the SPEE, suggested the purpose of education was to teach the future practitioners “how to learn.”\textsuperscript{140} “[T]he aim of undergraduate curricula should be to provide a broad type of training without much effort toward specialization,” was the general consensus by most engineering educators and members of the engineering societies by 1931. That same year, however, it was stated that “[n]o fewer than 78 different engineering curricula and ‘options’ [we]re offered by American engineering schools.”\textsuperscript{141} Civil engineering alone, offered more than twenty “different undergraduate curricula” along with “18 different ‘options.’”\textsuperscript{142}

Engineering education was perceived by engineering educators, especially the members of the SPEE, to be in a state of chaos.

In 1932, future engineers were warned by the members of a committee of the SPEE that a college program “can only lay the foundations for an engineering career to be built by experience,” which seems a brave statement considering no one really knew what was going on in the schools of engineering, including the engineering educators who issued the warning.\textsuperscript{143} According to this committee’s membership, it was up to the individual student to choose a program from the vast selection of “best educational facilities ... [or] an inferior college,” without help from the professional societies.\textsuperscript{144} The future practitioner was encouraged by members of the SPEE to “participate in the activities of his professional society, for in its meetings the young man will not only hear discussion of the latest ideas in his field but also will be able to form contacts with the leaders of his profession.”\textsuperscript{145} College, they asserted, was beneficial because it trained students to be careful observers and capable of reasoning, two attributes “which every man can

\begin{footnotesize}
\begin{enumerate}
\item[138] National Industrial Conference Board, iii.
\item[139] White, 83.
\item[140] Wickenden, “The Place of Electrical Engineering,” 705.
\item[141] Hammond, “Educating the Civil Engineer,” 1270.
\item[142] Hammond, “Educating the Civil Engineer,” 1270.
\item[143] Engineering Research Committee, 54.
\item[144] Engineering Research Committee, 54.
\item[145] Engineering Research Committee, 55.
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The engineering educators seemed to be the only ones who recognized the value of formal engineering education for the professionalization of engineering.

Leaders of the major professional societies generally regarded engineering education at its best supplemental to experience. Engineering education would be considered only as a substitute for experience if engineering prestige was upheld or successes directly related to formal education could be flaunted in front of the American public by the engineering societies. This attitude toward engineering education was held by leaders and members of the engineering societies from the formation of the societies until the 1930s. The first indicator that this attitude was changing occurred in 1930. In that year, the ASCE officially changed the “equivalency of the engineering degree from two to four years of professional practice.”

In contrast, engineering educators believed engineering education could be used to professionalize engineering. Therefore, the SPEE took the responsibility of investigating what they considered was “the biggest problem.”

In 1922, the SPEE launched an intensive investigation of engineering education, whose findings were documented in two volumes, and often referred to as the Wickenden Report. This report is still considered “the single most important study of the engineering profession.” Funded mostly by the Carnegie Foundation for the Advancement of Teaching, its purpose was to determine “the philosophy of engineering education which underlay its work, the sciences and preparation of its students, the curricula which should be provided for its students and the objectives to be aimed at in its training.” The SPEE hoped it could help unify the organizations representing engineering, especially since the SPEE’s headquarters were located in the Engineering Societies Building. However, the founder societies had

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146 Engineering Research Committee, 56.
147 Wisely, 105.
150 Rothstein, 79.
limited respect for the SPEE because its membership was predominately composed of “founders and directors of the schools [who] have been educators by profession and only occasionally and incidentally active practitioners of engineering.” The SPEE’s seven-year investigation reflected its efforts to elevate engineering to a profession by using engineering education as a vehicle to accomplish increased status, by controlling the location of engineering’s body of knowledge, the access to engineering education, the certification of graduates, and the requirements for practice. To achieve these goals, the SPEE suggested several strategies and many specific recommendations based on the Wickenden Report findings.

The following sections in this chapter describe the goals and many of the recommendations made by the SPEE, the professional societies’ responses to these recommendations, and the strategies enacted by the members of the SPEE and other engineering organizations for the purpose of professionalizing the occupation of engineering and engineering education.

Goals

Some engineers and engineering educators, and many scholars have compared engineering between the two world wars to the professions of medicine, law, and other professionalizing occupations such as dentistry. As early as 1892, some members of the engineering societies agreed that engineering’s status was “not what could be desired,” as evidenced by publications in their “scientific press.” The “professional etiquette among [engineering’s] membership” was compared by one member to “the older professions” and found to be greatly lacking. Thus, the goal of the engineering societies’ membership

152 Board of Investigation and Coordination, Society for the Promotion of Engineering Education, Bulletin No. 13, 650.
154 Porter, 487.
155 Porter, 487.
between 1919 and 1938 was to maintain and enhance the perceived prestige of the practicing engineer and engineering.

The members of the SPEE set two goals to be attained. The first was to neutralize the distinction between shop culture and school culture. The second goal was to use engineering education as a means to enhance the prestige of engineering, its practitioners, and engineering educators.

When the ECPD was created in 1932, uniting the five major national engineering societies, the SPEE, and the NCSBEE, mutual goals were set. The ECPD, consisting of twenty-one members, three each representing each of the seven organizations, set four goals to accomplish. These were to (1) “develop further means” for orientation to better screen future practitioners from accessing engineering’s body of knowledge and using it in practice; (2) “formulate criteria for colleges of engineering” to educate future practitioners; (3) “develop a program for the further personal and professional development” for graduates and those without formal education; and, (4) “develop methods” so future practitioners met “suitable standards” and could “receive corresponding professional recognition.”

Once goals were set, discussions followed regarding the strategies to employ in order to attain these goals. Members of the engineering societies and the SPEE first discussed ideas to imitate models of professionalization, which included status enhancement, exemplified by other occupations that had successfully professionalized. Several members from different societies over the years suggested the professions of medicine and law should be primary models because both appeared to be “well in hand” and their standings were “maintained by the legal requirement of a license or its equivalent before practice is allowed.”

Not all engineers agreed the professionalizing occupation of engineering should use medicine or law as its model. One popular argument was that medicine and law ministered to individual needs and the newer professions, such as school teaching and journalism, engaged in “constructive tasks of society ...

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156 Esther Lucile Brown, 55; “Engineers’ Council for Professional Development,” 515.
157 Porter, 488.
in which men work[ed] in groups and divide[d] responsibility functionally rather than as individuals.”\textsuperscript{159} Instead, engineers wanted “to solve large-scale societal problems with technological means.”\textsuperscript{160} Engineering, argued SPEE Director Wickenden, stood somewhere “between the old and the new in professional life.”\textsuperscript{161} Medicine was considered

... by law and tradition a caste; sharp, closed boundaries separate it from all other groups that touch on its functions. The profession of engineering is not a caste, but a vaguely bounded nucleus within a large body of technical workers.... Close these free paths of interchange between professional, executive, commercial, and producing groups, and in my opinion, the engineering profession quickly will sterilize itself.\textsuperscript{162}

Unlike medicine, law, and dentistry, engineering was not controlled by one dominant professional association.

Another engineer pointed out the differences between the education for other professions and for engineering. Future engineers were educated using the ribbon system type of instruction

... in which humanistic, general scientific and professional subjects are carried through the whole period of collegiate instruction. This ribbon system is in marked contrast to what may be termed the block system where the humanistic and general scientific courses are concentrated in the first block of the college course and the professional courses are confined to the second block [as approved for medicine and law].\textsuperscript{163}

Several members of the SPEE and other engineering societies agreed with Wickenden’s suggestion who promoted the use the British and German models of technical education for American engineers as an alternative to using medicine, law, or dentistry as a model.\textsuperscript{164} The British model divided education into areas of scientific qualifications, economic knowledge, and systematic and organized practical training. The German model consisted of a state-run “German Central Committee for Technical Education.”\textsuperscript{165}


\textsuperscript{160} Perrucci and Gerstl, \textit{Profession Without Community}, 85.

\textsuperscript{161} Wickenden, “Conference,” 564.

\textsuperscript{162} Wickenden, “Engineering Education Needs a ‘Second Mile,’” 472.

\textsuperscript{163} White, 75.

\textsuperscript{164} Wickenden, “Engineering Education and Its Future,” 386.

\textsuperscript{165} Wickenden, “Engineering Education and Its Future,” 386.
Others disagreed with the British and German models. Ultimately, engineers and engineering educators believed engineering was unique among the professions and therefore, no model existed for professionalizing engineering or for improving engineering education.

**Strategies**

Members of the SPEE agreed their mission would be to formulate a plan for solving the problem of engineering education being regarded by the members of the engineering societies as supplemental to experience. From 1916 through 1930, the SPEE’s efforts to solve the problem included the formation of a committee, a survey of the entire educational situation, and issuance of recommendations about improving education to increase the prestige of engineers, engineering educators, and engineering organizations. Individual engineering schools were left free to do as they chose throughout this period with little or no influence or direction from the professional societies or the state boards of examinations, registry, or licensing.

The SPEE received a Carnegie Foundation grant in 1922 to conduct a comprehensive investigation of engineering education. Although the first of the two volumes was not published until 1930, many of the SPEE’s findings and recommendations were presented at the professional societies’ meetings, and parts were published in their journals, as well as in the SPEE’s *Journal of Engineering Education*. The comprehensive investigation began in 1923 and concluded in 1929. Findings reported information about how many schools of engineering were operating, requirements used for admission, types of degrees offered, and requirements for engineering educators. These findings are described in the following sections as appropriate. The SPEE’s recommendations made in the Wickenden Report suggest various strategies focused in four main areas related to engineering’s body of knowledge: its location, its access by those learning and teaching it, the certification of graduates, and the requirements for practice. The SPEE’s

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166 White, 79-85.
members also reported findings and made recommendations regarding other areas of engineering education not relevant to this investigation, including educator salaries, engineering education outside the United States, and curricula content. The strategies selected by ECPD members to reach the mutual goal of the five major societies, the SPEE, and the NCSBEE are also delineated appropriately in the following sections.

**Location of Knowledge**

Between the two world wars, members of the SPEE focused their attention on two aspects of engineering education’s location. The first aspect was its location within a four-year curriculum and the other was the physical location of engineering education in institutions of postsecondary education. Even though most engineering educators seemed to have agreed that four years of undergraduate study were sufficient, they debated over how the knowledge should be organized within those four years. Some individuals, including most members of the SPEE, believed this period of study was too short and that adequate preparation for the profession of engineering should include internships in industry and post-baccalaureate study.

Although the content of the engineering curriculum was not a focus of this investigation, it should be noted that a large body of literature exists that testifies to the great difficulties the engineering profession faced in identifying what its body of knowledge should consist of, in reaching consensus about what its schools should teach, and in notifying industry what should be expected of its future employees. The main debate in engineering education during the 1920s was between dividing the curriculum functionally (into components of design, research, sales, etc.), or dividing it industrially (into branch specialties such as civil, mechanical, industrial, electrical, etc.). Regardless of which educational format was chosen, the question

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of how an engineering student would get the information and knowledge from the other format, and how best to measure the fit of education to the student’s wants and industry’s needs, caused even more discussion. No one could even agree on the purpose of engineering education.

Many engineering educators were satisfied with a four-year undergraduate program, even though “the objectives of undergraduate engineering education are often achieved at the expense of the general education of the student and at the expense of his professional specialization.” In 1922, the Thayer School’s five-year course and Columbia University’s six-year course were “the principal exceptions to the four-year plan.” These two programs were similar to professional education for medicine and law. Only slight modifications to improve the four-year plan, such as decreasing the number of subjects, decreasing the number of required credits, or breaking the course of study up by inserting work experience, were offered by engineering educators at various institutions. This combination of school and work internship was called the Cooperative Method or the Cooperative Plan. This program, an associative strategy, was defined as “a curriculum of predominantly engineering character, leading to a degree, which provides for the alternation at regularly scheduled intervals of periods of instruction in college and of supervised and correlated experience in industry,” and most often took students five or more years to complete. The SPEE investigated this plan, originated at the University of Cincinnati around 1900, and recommended that individual institutions adopt it if they felt the need to “more directly ... prepare students to adjust themselves promptly to the requirements of administration and operation.” The SPEE concluded,

169 Perrucci and Gerstl, Profession Without Community, 79.

170 Dunlap, “Preparing the Engineer,” 62.


173 Board of Investigation and Coordination, Bulletin No. 12, 559, 614.
however, “that all-resident curricula in engineering, though they are certainly open to improvement, are, in general, successful in accomplishing their purposes.”

Many other engineering educators believed a four-year program was not long enough. The SPEE offered one solution with which many agreed: encouraging engineering students to attend graduate school. The chairman of SPEE’s Committee on Education stated that “to stimulate the continuation of education after college” has the greatest possibility “of advancing the standards of professional achievement.” Post-graduate education in engineering was believed by some engineers and engineering educators as necessary because of the...

... continued rapid increase in scientific knowledge and the rapid increase in the diversity and complexity of the engineering applications and the engineering responsibilities [which] combine to make the four year engineering program a less and less adequate preparation for effective engineering work.

The question graduate study under the charge of engineering schools would answer is whether “the engineering profession [should] leave the post-college training entirely to chance, circumstance, and the industries.” The SPEE concluded in 1926 that “resident graduate work for advanced degrees should be undertaken only by engineering colleges with notable teachers and exceptional facilities” and “that the graduate student should seek out the best qualified master in his field of special interest and, in most instances, should migrate to some institution other than the one attended as an undergraduate for the sake of added breadth.” By 1935, the SPEE’s position had not changed. Director Wickenden asserted that a “5 or 6 year course for all students seems not only unwarranted and unwise, but highly desirable for a considerable minority, and virtually imperative for a selected few.” The SPEE recommended in 1940

174 Board of Investigation and Coordination, Bulletin No. 12, 613.
175 Dunlap, “Preparing the Engineer,” 61; Mead, 14; Wickenden, “Final Report,” 1069.
176 Bennett, “The Post College Education,” 310.
177 Bennett, “The Post College Education,” 310.
179 Board of Investigation and Coordination, “Preliminary Report, November 1926,” 117.
that “[s]ome of the advanced technical subject matter” located in the undergraduate program should be relocated to post-graduate work, but did not identify to which advanced technical subject matter this recommendation referred. Even after the start of World War II, graduate education in engineering was commonly viewed by the professional societies’ leadership, industry, some engineering educators, and practicing engineers negatively because “each added year defers by one year the students’ entrance upon engineering practice, where an essential and the most exacting part of engineering training must be obtained.”

The physical location of engineering’s body of knowledge in various types of postsecondary institutions also generated debate between the SPEE’s members and other engineering educators. Six types of engineering education were offered in at least four groups of schools. The types of engineering education were (1) the “usual all-residence course,” referred to previously as the ribbon system; (2) “the divided curriculum,” defined as two years of liberal arts or general education followed by two years of division-specific engineering education; (3) the Cooperative Method or Plan, defined above; (4) “evening courses,” defined as those engineering courses taken by any one on a part-time basis without prerequisites and regardless of subject matter; and, (6) “a combination of correspondence and residence work,” defined as engineering courses taken through the post in tandem with those courses taken on campus.

Engineering education was offered in “purely technical” institutes, universities, “land-grant colleges of agriculture and mechanical arts,” and a “multitude of technical schools of lower ranks including the manual training high schools,” vocational schools and both community and junior colleges.

Traditionally, engineering’s body of knowledge was located in separate schools or institutes. At least two engineering educators who were members of the SPEE encouraged other engineering educators to keep engineering education away from all other kinds of knowledge, other college distractions, and even


182 Hoover and Fish, 102.

183 Hammond, “Educating the Civil Engineer,” 1270.

184 Patterson, 5.
honors’ colleges. There was disagreement, however, about whether engineering education should be restricted to certain types of institutions and whether the number of institutions offering access to engineering’s body of knowledge should change. The SPEE’s investigation recommended that institutions, “if properly manned and organized,” offer correspondence work, extension courses, cooperative work and summer work programs. The SPEE recommended that “the colleges exert their influence to insure the inclusion of high school curricula of those subjects which are necessary preparation for engineering study” in order to avoid the necessity of post-baccalaureate education by “an earlier completion of preparatory studies,” including those of transfer students. In other words, if more of engineering’s body of knowledge was accessible in the high schools, preparatory schools, and programs from which engineering students transfer, they would be better prepared for employment upon graduation from an engineering college and less in need of further formal education, such as offered in post-graduate study.

Even though the SPEE’s investigation revealed that the situation regarding the location of engineering’s body of knowledge was “bad,” and it was “steadily growing worse through the multiplication of degree-granting colleges at the weakest end of the scale,” the SPEE concluded that “a briefer, more practical, more intense training than that of an engineering college, a training broader than that of a trade school, and quite distinct from that of an academic junior college,” was the “most immediate need.” In 1931, the Assistant Director of the SPEE’s investigation board estimated that there were at least “25 institutions that we [the members of the engineering profession] could very well dispense with” because they “not only have low standards but [...] give little or no promise of ever being anything but mediocrities,


188 Hammond, “Educating the Civil Engineer,” 1273; Wickenden, “Preliminary Report,” 54-55. For a well-devised argument for technical education of this type, see Spahr, 135-145.
or less.” Thus, the SPEE recommended increasing the number of technical institutes, encouraging the growth in the number of programs offered, and eliminating those of poorest quality. Members of the SPEE believed that these actions, composed of both closure and associative strategies, would “protect the name engineering from indiscriminate use.”

Of course, members of the SPEE only encouraged growth if the programs offered were of “exceptional strength” and discouraged the proliferation of low quality programs. The SPEE’s leaders believed there was already an “abundance of facilities for engineering education of collegiate type,” (more traditional four-year programs of undergraduate education), but a “relative dearth of facilities for vocation and technical education of shorter and more intensive type,” (those programs which emphasized experiential education). The tendency had been “for technical institutes to become engineering colleges” because of the value Americans were attributing to a college degree. By 1936, 160 colleges conferred engineering degrees “but scarcely more than 30 schools of post-secondary character” were training students for “the kinds of engineering work that require[d] prolonged scientific preparation.” These students had vocational aims, not necessarily professional, they usually could not afford a four-year college education, and they tended to be older, non-traditional aged students. The SPEE also suggested that a dozen or so institutions should be selected to “cultivate with whole-heartedness and singleness of purpose the higher intellectual pursuits of the profession,” and then limit the rest in number to around 150 because that number was enough to make engineering education “accessible to every worthy youth.” In 1939, the SPEE still

189 Hammond, “Educating the Civil Engineer,” 1269-1270.


193 Esther Lucile Brown, 24.

194 Esther Lucile Brown, 23.

195 Esther Lucile Brown, 25.

advocated that schools of engineering “could operate more efficiently if briefer and more directly practical forms of technological education were provided by other types of institutions.”

Many members of the SPEE and other engineering educators realized if the SPEE’s recommendations were adopted by all schools of engineering, the need for increased and enhanced articulation would intensify and the adoption of some minimum accreditation standards to identify the various programs and institutions would be necessary. Some engineering schools were first classified in 1896, but schools were grouped according to levels of entrance requirements, not ranked or accredited for meeting or exceeding certain pre-determined standards. Although a great deal of discussion occurred, and the SPEE’s fact-based recommendations were issued between 1919 and 1938, no standards were set regarding the location of engineering’s body of knowledge during this period. Furthermore, no strategies were employed to enhance the prestige of the professionalizing occupation or aid in the professionalizing process by way of setting accreditation standards for schools of engineering.

At a November 1933 meeting of the SPEE, a speech delivered by the SPEE’s Assistant Director, Harry P. Hammond, addressed another of the fears held by engineering educators and the membership of the engineering societies, that of accreditation.

Whatever our views as to the desirability of accrediting may be, we must recognize it as a condition to be dealt with and not merely as a theory. Accrediting of engineering colleges we already have with us, whether we approve of it or not. Engineering colleges are not only now recognized or approved by educational agencies--the several regional associations, associations of universities and colleges, and the like--but they are also recognized or approved by the profession through the national engineering societies and for legal purposes in many states by the state engineering licensing boards.

Our present problem, therefore, is not to determine whether there shall be accrediting, but whether the schools themselves, either individually or through this Society [the SPEE] as their common agency, or through its membership, in turn, in some

197 Committee on Aims and Scope of Engineering Education, 566.
other representative agency [like the ECPD], shall participate in determining the methods and procedures and the standards in accordance with which they shall be accredited. Because there had never before been a professional accrediting agency in the field of engineering, many engineering educators and members of the engineering societies “believed that an important function of the ECPD should be to compose a list of institutions which, after careful investigation, were found to be adequately prepared to offer sound and comprehensive instruction in the various major curriculums.”

As previously mentioned, schools of engineering had once been grouped into classifications by their admission criteria in 1896. Since then, several of the professional societies had attempted to rank or classify schools that offered courses or programs in their respective engineering divisions. These attempts were highly influenced by the perceived prestige of the institution in which the engineering’s body of knowledge was located, not the school of engineering or scientific institute itself. The SPEE surveyed engineers during its 1923-1929 investigation and asked if individual professional societies “should maintain and publish a list of approved institutions,” offering their respective curriculums. Over half of those surveyed said “yes” and that criteria should be based on graduation requirements and teacher quality. The SPEE recommended a “close cooperation among the five societies of engineers and with” the SPEE to identify “minimum qualifications for the recognition of an institution.” With the creation of the ECPD, engineering educators believed they would finally receive some much desired guidance from the engineering societies about how to best educate future engineers. But, the ECPD did “not propose to fix courses of study which must be completed as a prerequisite for some sort of trophy, degree, or recognition,” even though one of its original goals was to “formulate criteria for colleges of engineering” to

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201 Everitt, 107.
202 For an example, see White, 69-74.
203 Board of Investigation and Coordination, Bulletin No. 13, 655.
204 Board of Investigation and Coordination, Bulletin No. 13, 656.
205 Board of Investigation and Coordination, Bulletin No. 13, 657.
educate future practitioners. Instead, the ECPD spent several years trying to define an engineer and devise “a program of certification into the profession.”

During the first few years of its existence, the ECPD formed four standing committees, one each on Student Selection and Guidance, Engineering Schools, Professional Training, and Professional Recognition. The Committee of Professional Recognition was active between 1932 and 1938. Members of the committee drafted a plan of certification for professional engineers consisting of eight phases with the goal of closing practice to all non-ECPD certified professionals. The first five of these closure strategies included (1) the publishing of an annual roster of all ECPD-certified engineers; (2) issuance of a “certificate suitable for framing and display” to those certified; (3) notification by the ECPD informing the engineer he was certified; (4) the grandfathering in of all registered, licensed or certified engineers, members of specific membership grades of the various societies, and all those who had once met at least one of these provisions, prior to 1 January 1936; and, (5) the grandfathering in of members of specific grades of the various societies not included previously, and anyone registered, licensed, or certified under, or met the requirements of, the “model registration law” not previously included, prior to 1 January 1937. After 31 December 1936, individual application submission would be required. In this sixth phase, applications would be scrutinized by a bureau, set up by ECPD, that would review the applicants’ references and credentials, and might subject the applicant to an oral or written examination. Prior to 1 January 1938, the ECPD bureau might decide to “waive either the written or oral examination, or both, in the case of applicants of obvious fitness as evidenced by their records of performance.” The eighth phase of ECPD certification would become effective after 31 December 1937. At this time, all applicants

208 “The E. C. P. D. Program to Gain Recognition,” 786-787.
209 “The E. C. P. D. Program to Gain Recognition,” 786.
210 “The E. C. P. D. Program to Gain Recognition,” 786.
211 “The E. C. P. D. Program to Gain Recognition,” 787.
would be required to submit “a certified list of courses taken and books studied,” submit a thesis or published scholarly article, take an oral exam of applicant’s recent readings, post-college study, and/or personal growth, take a written exam on “economic and cultural subjects,” or, any combination of the above listed as deemed appropriate by the ECPD bureau.212 These strategies were the first closure strategies devised at a national level to protect engineering’s body of knowledge and control its use in practice.

The ECPD members did “accredit” schools of engineering between 1936 and 1938.213 The “annual reports of ECPD show only [that visitations were made and that] accreditations [were granted, but] ... no indication of the term of accreditation of any curriculum [was noted].”214 The first list of accredited schools of engineering, published in 1936, only included a pilot study of engineering schools located in the “New England and Middle Atlantic States,” which offered at least one curriculum in either chemical, civil, mechanical, metallurgy, or mining, or any combination of these.215 This work was performed by the ECPD’s Committee on Engineering Schools. Before any visitations took place, $100 fees were charged by the ECPD for the first curriculum an engineering school wanted accredited, and $50 for each additional curriculum at the same institution, with a cap of $400 per institution.216 Visiting committees from the ECPD consisted of two to nine members, and visitations took a day or two, both depending on the size of the engineering school and the number of curriculums to be evaluated.217

Accreditation took “one of several forms, namely, (1) to accredit; (2) to accredit provisionally for a period ranging from one to three years, with reappraisal stipulated at the expiration of the term of

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212 “The E. C. P. D. Program to Gain Recognition,” 787.
213 Although the assessment and evaluation process was called “accreditation,” by definition it was not (Orlans, et al., 2-3). No nationally accepted, pre-determined qualifications or standards had been set, therefore, meeting or exceeding these standards could not have been determined. Instead, determinations were made subjectively by those ECPD members conducting the visitations.
214 Everitt, 111-112.
215 Everitt, 108.
accrediting; (3) to accredit if and when certain changes have been effected; (4) to defer action; and, (5) not to accredit.”

Although confidentiality was kept between the institution and the ECPD, (a practice still invoked to a certain degree,) evidence shows that “679 curricula at 136 institutions” were assessed and evaluated between 1936 and 1938. Three-hundred, ninety-two curriculums (58 percent) of all curriculums reviewed at the schools of engineering visited were accredited without provisions, 107 (16 percent) were accredited for limited periods, 179 (26 percent) were not accredited, and one curriculum’s evaluation was deferred. Visitation teams accredited curriculums at “112 institutions, while 23 (17%) of the institutions submitting curricula” had none of their programs accredited.

Four problems were encountered with these initial accrediting efforts of the ECPD: the inability of the ECPD to maintain a national set of standards, how the ECPD visitation teams would accredit non-engineering division “specialized curricula,” how the ECPD visitation teams would evaluate cooperative and evening work, and how ECPD visitation teams would evaluate the articulation of transfer credits from non-accredited programs. By 1939, no graduate curricula had been accredited because “no satisfactory procedure” had been devised. Originally, accreditation expiration dates were not attached by ECPD members to the institutions’ names on the accreditation lists given to the state licensing boards by the ECPD. Soon, dates of expiration were listed to simplify the state licensing boards’ decisions of whether to certify an applicant based on graduation from an ECPD-accredited school.

The other two standing committees of the ECPD, the Student Selection and Guidance, and the Professional Training, spent the years between 1932 and 1938 devising strategies and listing goals to be
accomplished in the near future.\textsuperscript{225} No evidence delineated these goals or suggested which strategies were recommended and employed before 1938. The only evidence discovered regarding these committees’ actions were a few publications intended to educate the public, such as \textit{Engineering: A Career, A Culture}. In this pamphlet, the authors, who were members of both the ECPD and several engineering societies, celebrated what they perceived as engineers’ contributions to the creation of a technologically-advanced society. They warned future engineers that although engineering was a challenging career choice, it was well worth pursuing if the reader had the right kind of discipline and fortitude. They did not describe what they meant by discipline and fortitude. Representatives of these two standing committees also made numerous presentations at the professional societies’ meetings to keep members abreast of what the ECPD had done, and they chronicled the actions of ECPD members in the societies’ professional journals.

\textbf{Access to Engineering Education}

In 1902, most members of the various engineering societies believed that admission requirements to the engineering schools “greatly exceeded those of law and medicine schools.”\textsuperscript{226} By 1922, a member of the SPEE’s Board of Investigation and Coordination believed the engineering schools were “behind the times,” and perhaps should not be classified “as professional colleges at all.”\textsuperscript{227}

In 1924, the SPEE sponsored a conference with its Board of Investigation and Coordination, the executive secretaries of the national professional societies, and selected “educational councillors.”\textsuperscript{228} This associative strategy created “a medium for the study and discussion of problems affecting engineering

\textsuperscript{225} Esther Lucile Brown, 55-58.

\textsuperscript{226} Dunlap, “Engineering Schools Fall Short,” 224.


\textsuperscript{228} Wickenden, “Conference,” 562.
schools and engineering organizations under joint auspices.” The eighth item in a roster of twelve items designated as needful of study, was “the determination of aptitudes as a basis for admission to engineering colleges.” After a thorough investigation of entering students’ characteristics and educational achievement, the numbers of students admitted to various programs and institutions, graduation activity, and attrition rates, the SPEE concluded that

[t]here is ample evidence to show that preparation for engineering courses is seriously lacking in those elements of definiteness and thoroughness which are so essential in the training of the engineer. The fact that one student in every five admitted in the fall of 1924 could not meet the specified entrance requirements [which varied from one institution to another], which are not severe, and that one student in eight was conditioned in mathematics at entrance, is an indication of the unsatisfactory kind of preparation which many students receive. Furthermore, even in the case of students who meet formal requirements, the quality of preparation is far from satisfactory.

The Wickenden Report also stated the investigation found that for every one hundred students who began an engineering program, less than forty graduated. The SPEE questioned if American technical education was “at its best only semi-selective and semi-professional.”

Certain minimum standards in selecting and admitting applicants to engineering programs were suggested, including the identification of applicants determined unfit by engineering educators after consulting with the applicants’ high school teachers, assigning those admitted to guidance officers such as the Dean of Students at the colleges, and offering a “Freshman Week” of orientation to newly admitted engineering students. Yet, no nationally-accepted set of admission standards were recommended. Members of the SPEE and other engineering educators recommended several other closure strategies, including entrance exams, placement exams, raising admission standards, enforcing admission


231 Committee on Engineering Students and Graduates, Bulletin No. 1, 168.


233 Wickenden, A Comparative Study, 252.

234 Committee on Admissions and Eliminations, Bulletin No. 2, 180-183.
requirements, especially those related to math and science accomplishments, and requiring high schools
and preparatory schools to better generally educate their students, and specifically educate students about
the profession of engineering. The recommended closure strategies were either not employed or were
unsuccessful in raising standards of admission to the engineering schools. The problems faced by the
engineering profession between the world wars were still unsolved after World War II. The results of
studies conducted between 1935 and 1951 indicated there had been “little change in admission
requirements from those reported” by the SPEE in 1924 and 1925.

The SPEE recommended an associative strategy in 1926 to increase the likelihood of attracting
better qualified applicants. This was to enhance articulation between not only the high schools and
preparatory schools, but the transfer process from other institutions such as vocational schools, technical
institutes, community and junior colleges, and other schools where engineering’s body of knowledge was
located to the four-year schools of engineering. This recommendation was never enacted to full
satisfaction, and articulation is still a problem encountered today.

235 For entrance exams, see Board of Investigation and Coordination, “Preliminary Report, Nov. 1926,” 95, 97; and,
1929, vol. 1, Society for the Promotion of Engineering Education (Lancaster, Penn.: Lancaster Press, Inc., 1930), 741-
1925): 158-163. For raising standards and tightening admission requirements, especially abilities in math and science,
see Board of Investigation and Coordination, “Preliminary Report, Nov. 1926,” 94-97; Wickenden, A Comparative
Record 96, no. 2 (14 Jan. 1926): 73-74. For encouraging the raising of quality by the high schools and other
preparatory institutions, see Engineering Research Committee, 52; Hammond, “Educating the Civil Engineer,” 1271-
1272; Wickenden, “Engineering Education and Its Future,” 386; and, Wickenden, “Progress,” 74. For better educating
future students about the profession, see Board of Investigation and Coordination, “Preliminary Report, Nov. 1926,”
95-96; Hammond, “Educating the Civil Engineer,” 1271; Wickenden, “Preliminary Report,” 65; and, Wickenden,
“Progress,” 73-74.

236 Armsby, 75-77.

237 Armsby, 74; Jackson, Present Status, 130; Harry A. Jager and Henry H. Armsby, “Engineering and the High School

238 Board of Investigation and Coordination, “Preliminary Report, Nov. 1926,” 94, 96; Hammond, “Educating the Civil
Engineer,” 1269; Wickenden, “Preliminary Report,” 64.

239 Jackson, Present Status, 135; M. Kathleen Silva and Dhushy Sathianathan, “Strategies for Enhancing Articulation to
Session 13a1, San Juan, Puerto Rico.
Although the engineering organizations tried to limit access to study based on prospective students’ merit, access was de facto limited by race and gender. “Engineering has probably the largest percentage of white males among the major professions.”  

Evidence collected for this analysis suggests this situation did not occur by accident. All of the literature produced before 1938 and reviewed for this investigation referred to the student, the teacher, the practitioner, the professional engineer, and members of engineering’s professional organizations as a male or without reference to gender. No concern was apparent regarding the homogeneity of engineers. By the 1890s, many female and male students were going to college, including those from lower-middle and working class socioeconomic groups. These students could not get into the more prestigious shops for apprenticeship training because of their lack of influence. They should, however, have had access to engineering education, particularly at land-grant colleges.

In 1924, the SPEE conducted a survey of 4,079 engineering students, about twenty percent of the entire class admitted to all institutions. Over 96 percent were American-born and over 90 percent of their grandparents were born either on North American soil or in Northwestern European countries. Eighty-five percent of student applicants came from non-rural communities, and 40 percent of both their parents had completed high school. Engineering education was more expensive than other kinds of college education, and in general, more affordable for more majority students than non-majority students.

Throughout the Great Depression of the 1930s, members of the engineering profession “were in dire straits” because too many engineers were vying for too few jobs. During this period, “the industry also had a notoriously bad record of racial, religious and ethnic discrimination, which was to be alleviated only

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240 Rossides, 150. For an opposing view, see Evan, 109.


242 Committee on Engineering Students and Graduates, Bulletin No. 1, 188-189.


partially and slowly in subsequent periods." Engineering educators, desiring to place their graduates in industry, may have wanted to produce graduates who would be easily and quickly employable. If engineering graduates were having a difficult time finding jobs, members of the engineering societies may have perceived high unemployment as a threat to engineering’s status. This possible threat may have acted as a catalyst for the leaders of the engineering societies to focus more attention on engineering education in the colleges. Today, “[r]acial, ethnic, and female minorities have low representation in engineering” but gallant efforts have been underway to change this.

The SPEE’s recommendations also focused on engineering educators’ qualifications to teach engineering’s body of knowledge. As for students, many recommendations and strategies were proposed. One associative strategy was employed and regarded by both the SPEE and many engineering educators as being very successful. This was the SPEE’s Summer School for Engineering Teachers. The primary purpose of the SPEE-sponsored Summer School, established in 1927, was to offer “practical aid to the engineering teacher in solving the problems that confront him in the classroom.” Each summer, a different institution played hostess and a different session was “devoted to a particular course or division of the curriculum.” Activities included “lectures, model teaching exercises, laboratory and lecture demonstrations, seminars, and work carried out by” selected individuals. The SPEE and attending engineering educators considered the summer schools very successful and believed they filled “a definite need” as evidenced by increasing enrollments. In 1927, eighty-two engineering teachers attended, and by

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245 Ullman and Melman, 250.


1933, the last year this summer school program was offered, attendance had peaked at 187.\(^{251}\)

Considering there were at least 8,600 people teaching engineering at more than 140 institutions in the United States at that time, success may be too strong an assessment held by the SPEE members, yet, this was the very first attempt to raise the quality of engineering educators by an engineering association.\(^{252}\)

Several SPEE members were concerned about the quality of engineering teachers and proposed strategies to raise faculty quality. In 1928, “the selection, preparation, and development of the younger teachers in the engineering schools” was declared by the SPEE as one of the most “important problems confronting engineering education.”\(^{253}\) One SPEE member complained that “too often ... [members of] the teaching staff are selected for their engineering abilities and not for their teaching qualifications.”\(^{254}\) The Wickenden Report asserted that engineering teachers were too often imitating what and how they were taught. A proposed remedy was to give new teachers “formal instruction to the teaching art,” and to break them of the habit of over-using textbooks. Texts were notoriously difficult for the general reader because of the technical terminology, the level of difficulty, and the length.\(^{255}\) Engineering educators were encouraged to use “first-hand materials.”\(^{256}\) This process could then allow a

... senior grade of professorship that represents a career that will attract and hold men of distinguished scholarly attainments, responsible experience, creative capacity and notable teaching ability—a career that men will deliberately choose and for which they will strive and prepare rather than one into which men will drift in default of any positive decision.\(^{257}\)

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\(^{254}\) Bishop, 693.

\(^{255}\) James Harvey Robinson, The Humanizing of Knowledge, 2nd ed. (New York: George H. Doran, 1926), 77-78, 80, 84.

\(^{256}\) Wickenden, “The Place of Electrical Engineering,” 710.

\(^{257}\) Wickenden, “The Place of Electrical Engineering,” 710.
The SPEE investigation found that engineering educators were “too often overloaded and only half prepared,” and there were mismatches between large classes of students and teachers who were not “effective lecturer[s]” and had no training on “the art of giving instruction to large groups.” Wickenden proposed selecting ten or twelve institutions, noted for the high caliber of educators, and putting them “in an outstanding position so far as salaries and qualifications of personnel.” He believed this action might encourage engineering teachers to model the desired qualities and therefore enhance the status of all engineering educators. Close to 70 percent of all engineering educators graduated from an engineering college, and less than one-third taught at the same institution they graduated from. This finding contradicted the popular belief that many engineering educators had only been exposed, both as a student and an educator, to engineering education in one institution. Still, the best graduates and potential engineering educators left postsecondary education and found careers in industry. An increase in salary was believed necessary to draw talented engineers away from industry, return them to the classroom, and therefore raise the prestige of engineering education and of the engineering college.

Because the “real function” of the SPEE was “to develop teachers who can train engineers,” many recommendations for professionalizing engineering and engineering education involved teachers. The Wickenden Report found that there was “no adequate scheme of recruitments and training, heavy loading, limited time for research and professional contact, and an income scale which makes a sorry showing beside that of graduates in active life.” After investigating “Engineering Teaching Personnel,” the SPEE made the following recommendations which involved both closure and associative strategies: (1) encourage young teachers “to make and build up professional contacts and non-teaching activities, through association

258 Wickenden, A Comparative Study, 257.
259 Wickenden, A Comparative Study, 261.
260 Committee on Teaching Personnel, Bulletin No. 4, 274, 290.
261 Hammond, “Educating the Civil Engineer,” 1272.
262 Wickenden, A Comparative Study, 262.
with practicing engineers, industrial organizations and professional societies;” (2) promote research; (3) introduce “the younger teacher to the art and science of teaching;” (4) institute sabbaticals; (5) increase salaries; (6) raise the teachers’ status in professional societies by appointing them to prominent positions of key committees; (7) encourage experience in industry; and, (8) limit teaching loads to no more than fifteen hours per week. A 1939 study of engineering education recommended that the permanent teaching staff at all schools of engineering should be increased to more adequately care for students. None of the evidence discovered for this study suggested these recommendations were universally adopted by engineering schools nor were they accepted as minimum standards by the professional organizations. Also, no evidence was discovered that focused on engineering educators’ experience or academic credentials.

**Certification of Graduates**

Due to engineering students’ high attrition rate of 60 percent, the SPEE highly recommended postsecondary education personnel individually mentor engineering students through their educational experience in order to help students graduate and get an engineering job. Members of various societies could not agree, however, about what constituted the end of engineering education offered in the various schools of engineering. As pointed out previously, graduate work was basically discouraged by most engineering educators who agreed a four-year undergraduate education was sufficient. But what exactly marked the completion of a four-year undergraduate engineering education?

Prior to 1940, the leadership of engineering’s societies believed experience was more important for practice than a college degree. In 1892, one engineering educator stated that nothing prevented “the

268 Committee on Engineering Students and Graduates, Bulletin No. 3, 248; Wickenden, “Progress,” 74.
self-taught surveyor or mechanic not only from forging to the front, but from assuming the scholastic
title or degree which his neighbor has devoted years to obtain with considerable expenditure of money.”

A special committee of the SPEE reported its recommendations to the Society at the 1910 convention
regarding degree conferment. These recommendations included a Bachelor of Science in (division name
followed, i. e., Electrical, Civil, Mechanical) Engineering be awarded after the successful completion of a
four-year engineering course, a Master of Science in (division name) Engineering be awarded after one
completed year of graduate work after the bachelor’s degree, and the “professional degree, C. E., M. E.,
etc., should be given only to those graduates who present[ed] satisfactory evidence of professional work of
superior quality extending over not less than three years, and who submit[ed] a satisfactory thesis.”

Although many engineering educators believed these recommendations would be very effective, no
evidence was discovered that indicated that schools’ implementation of the recommendations were
monitored by the engineering organizations. Members of the engineering societies, however, were noted to
have had these professional degree titles associated with their names and references to these degrees were
made in the AICE’s membership requirements.

There was a lack of consensus on not only the degree title of a practitioner, but how much
practical experience would count toward an engineering degree. The relative worth of a degree and
experience varied among practitioners, society members of the various divisions of engineering, the
engineering educators, industry, and state requirements. For example, according to the ASCE constitution
prior to 1930, two years of professional practice was equivalent to an engineering degree. After 1930,

269 Porter, 490.

270 “Proceedings of the Meeting of Madison, 23-25 June 1910,” Bulletin of the Society for the Promotion of


272 Hoover and Fish, 420.

273 Wisely, 105.
four years of practice was considered equivalent.\footnote{Wisely, 105.} According to the 1940 AIME membership requirements, a junior member “must be qualified by education or experience to hold a subordinate position in engineering mining, metallurgical, geological, or chemical work.”\footnote{Hoover and Fish, 418.} How qualification was determined was not described. In 1940, the ASME junior membership requirements stated a degree from “a school of engineering of accepted standing” was equivalent to practice in which the applicant exhibited similar attainments.\footnote{Hoover and Fish, 419.} How evaluations were made was not described. Junior membership requirements, called Associate member rank by the AIEE in 1940, did not include any equivalency to an engineering degree. Instead, applicants could not be older that twenty-one years and had to be either “an electrical engineer by profession,” a “teacher of electrical subjects,” or “a person who is qualified to fill a subordinate position in engineering work, or who is identified, in a responsible capacity, with an electrical enterprise.”\footnote{Hoover and Fish, 419.} The AICE’s junior membership requirements of 1940 included applicants must be less than thirty years of age and hold a Bachelor of Science degree in Chemical Engineering, or a Bachelor of Science degree in Chemistry, Electrical Engineering, Civil Engineering, Mechanical Engineering, or a Bachelor of Arts degree in Chemistry and one year of experience, or “be not less than 21 years of age and have had five years’ experience in chemical technology.”\footnote{Hoover and Fish, 421.}

Upon completion of the SPEE’s 1923-1929 investigation of engineering education, the investigators announced that nine different degrees were being offered, under diverse titles, from various institutions.\footnote{Wickenden and Hammond, Bulletin No. 7, 363.} Forty-nine of these institutions did not even publish course requirements for attaining the degrees in engineering they offered.\footnote{Wickenden and Hammond, Bulletin No. 7, 363.} Sixty-nine institutions were granting degrees based on practical

\begin{footnotes}
\item[274] Wisely, 105.
\item[275] Hoover and Fish, 418.
\item[276] Hoover and Fish, 419.
\item[277] Hoover and Fish, 419.
\item[278] Hoover and Fish, 421.
\item[279] Wickenden and Hammond, Bulletin No. 7, 363.
\item[280] Wickenden and Hammond, Bulletin No. 7, 363.
\end{footnotes}
experience, with or without the submission of a thesis. The SPEE’s investigators concluded that the situation was “not a satisfactory one, particularly when compared with that in other major professions.” Members of the SPEE determined that the value placed by industry and the American public on an engineering degree was solely based on the perceived status of the institution which granted the degree. The SPEE recommended all institutions offering engineering education and degrees in engineering attain a greater level of uniformity of course requirements and degree titles. In 1924, the SPEE had advised the engineering societies to recognize “graduation from an engineering college in the requirements for admission” to their membership. Twelve years later, an article in an engineering journal indicated little had changed regarding the variety of degree titles and requirements for graduation. The article’s author suggested the establishment of “a thorough training in general academic and engineering knowledge that [would] lead to the single degree of Bachelor in Engineering for all undergraduate students of engineering.” Regardless of division specialty. Degree titles and types remained varied from institution to institution between 1919 and 1938. The equivalence of their value to years of practice was not agreed upon either, as evidenced by the variety of professional society membership requirements. Uniformity was never attained between the two world wars. In 1939, the SPEE also recommended that engineering schools “should not limit their aim to preparing young men for professional registration and practice.”

281 Wickenden and Hammond, Bulletin No. 7, 364.
283 Wickenden and Hammond, Bulletin No. 7, 367.
284 Hoover and Fish, 3.
286 “Engineering Education,” 5, 23.
287 “Engineering Education,” 5, 23.
288 Committee on Aims and Scope of Engineering Curricula, 565.
in course requirements, degree titles, and character and skill qualifications necessary for graduation.
The SPEE argued that the engineering degree did “not indicate whether or not the holder [could] satisfactorily apply his learning in practice,” and was “valuable [only] according to the reputation of the institution that grant[ed] it.”

No evidence of actions taken by the societies’ leaders was discovered.

Between 1919 and 1938, two other suggestions were made regarding marking the completion of study and were discussed in various engineering journals. In 1929, a SPEE member suggested that a comprehensive examination be administered by all schools of engineering, which would force students to weave together their “learning as an entity, instead of leaving it as the collection of discrete deposits from many disjointed subjects of study that the piecemeal system commonly achieves.”

An engineering educator suggested in 1931 that there should be nationally-recognized educational credentials for those students who successfully complete engineering programs offered by “technical institutions as well as all other institutions offering less than four years of post-secondary work.”

Neither of these strategies were employed at a national level before 1938. However, in 1936 the ECPD did plan to use a comprehensive examination, beginning in 1938, as one option to measure skills and knowledge attained by a future practitioner in order to secure the professional societies’ formal recognition to practice and eligibility for membership.

Requirements for Practice

In 1920, the NCSBEE appointed a Committee on Accredited Engineering Schools that listed all regionally accredited institutions offering engineering education. Schools of engineering were considered “accredited” by the Committee if they were located in regionally accredited postsecondary institutions. The Committee recommended to the NCSBEE at its annual conference which of these “accredited” schools

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289 Hoover and Fish, 3.

290 Jackson, “Needed,” 418.

291 Spahr, 144.
were considered acceptable to the Committee by meeting individual “state acts [which] authorize[d]
state boards of examiners.” 292 The real significance of this work was that it modeled “a foundation for the
standardization of registration,” even though the license to practice was “no trustworthy index of the
minimum qualifications of the holder,” that the engineering societies could use as a pattern when they
formed the ECPD in 1932. 293 By 1940, all but six of the forty-eight states had state licensing laws, but
historians who investigated engineering’s state laws remarked there was “no uniformity among these laws
or in the strictness with which they [we]re applied.” 294

Most of the state laws required either evidence of “adequate and satisfactory engineering
experience,” the passing of a written engineering examination, graduation from a school of engineering
recognized by that state, or any combination of these three. 295 Many of these laws were based on the model
law of 1929, a piece of legislation delineating prerequisites engineers must accomplish to practice, that the
ASCE designed and tried to establish as early as 1897. 296 The state laws were inconsistently upheld and
enforced by state board examiners. As a result, according to historians, there were registered and/or
licensed practicing engineers who were incompetent, and there were unregistered, unlicensed, practicing
engineers who were highly skilled. 297 In 1930, approximately 20,000 people were licensed to practice
engineering representing about 9 percent of all engineers. 298 By 1940, 25 percent, or 65,000 individuals,
were licensed engineers. 299 Because of the certification and approval of incompetent practitioners, the
professional societies did not value nor support either the NCSBEE or its work. 300 In 1932, the NCSBEE

292 Esther Lucile Brown, 51.
293 Esther Lucile Brown, 53; Hoover and Fish, 3.
294 Hoover and Fish, 3.
295 Armsby, 71.
297 Calvert, The Mechanical Engineer, 127; Rothstein, 84.
298 Rothstein, 85.
299 Rothstein, 85.
300 Rothstein, 85.
was invited by the five major engineering societies and the SPEE to join the ECPD. This was an indication that the perceptions held by leaders of the societies toward the NCSBEE may have changed.

Influential members of the professional societies, including those of the ECPD, the engineering educators, and industry campaigned for complete support from engineering’s organizations for “the most constructive and forward looking program ... presented for advancing the status and recognition of the engineering profession.” Potential supporters among the societies’ membership were reminded by the supporters of the ECPD of the individual states’ “potentiality for evil,” industry’s complaints about the quality of applicants, and the American press’ practice of “blaming many of our [society’s] present ills upon the engineer.” ECPD supporters also asked the societies’ members to recall the lack of logic exercised by the colleges in granting various degrees using a multitude of criteria and standards, the great diversity of college admission requirements, the lack of uniform admission standards for professional society membership, “discrepant designations for membership grades,” and the lack of logic apparent between the professional societies who “give their stamp of membership to men who the State Registration Boards cannot admit into the profession” and those men who have been granted a “professional degree, when the profession holds and the law declares ... are not yet engineers and must undergo additional training through apprenticeship before they can use the professional degree.”

Although the early years of the ECPD were presented in the engineering journals as a picture of harmonious association, evidence shows this was not the case. Differences in ideology and about the means to achieve goals plagued the ECPD and even forced the formation of a rival association, the National Society of Professional Engineers (NSPE), in 1934. The NSPE, which limited its membership to only those who held state licenses, favored strong licensing laws, encouraged limiting student enrollment in schools of engineering, and opposed most of the ideology the leaders of the other engineering societies held.

301 “Engineers’ Council for Professional Development Discussed,” 932.
302 “Engineers’ Council for Professional Development Discussed,” 932.
303 “Engineers’ Council for Professional Development Discussed,” 933.
By 1939, the ECPD, ignoring the years of ground-breaking work performed by the SPEE, was taking most of the credit for the “awakening among [the professional societies’ members of] ... the professional needs of engineering education.” Addressing these needs would “result in improvement of staff and facilities, and ... have a stimulating influence on other institutions,” not to mention the protection and rise of prestige associated with the engineering profession. The engineering societies, composed primarily of practicing engineers, gave little credit to the members of the SPEE, who were engineering educators, for advances in engineering education, for helping unify six engineering organizations, and for helping create the ECPD. By 1938, the ECPD had accepted the responsibility to control the practice of engineers and accredit schools of engineering in the United States.

Summary of Associations’ Actions

The SPEE, although considered a professional association of engineering, was an association of engineering educators, not engineers. Engineers, who comprised the vast majority of membership of the ASME, the ASCE, the AICE, the AIEE, and the AIME, did little to improve engineering education. The societies’ leadership focused on improving the quality of their own membership and enhancing the prestige of both engineers and engineering. With the creation of the ECPD in 1932, the professionalizing ideals of uniformity, standardization, and accreditation, were set down on paper and generally agreed to by all parties involved, at least in principle. By 1938, members of the engineering societies, engineers, and engineering educators had a plan to regulate the practice of engineering’s body of knowledge. However,

304 Layton, The Revolt, 237-239.
305 Jackson, Present Status, 141.
306 Jackson, Present Status, 141.
strategies to control the location of engineering’s education, its access, and the certification of graduates were not addressed.
Chapter 4

COMPARISON OF STRATEGIES, THEIR EFFECTIVENESS, AND THEIR EFFECTS ON JOURNALISM EDUCATION AND ENGINEERING EDUCATION

In this chapter, the types of strategies journalism’s professional associations and engineering’s professional organizations selected and employed to professionalize their respective occupations and bodies of knowledge are described. The number of strategies put into effect, the length of time the respective associations’ declared the strategies were successful or failed, and where the strategies were aimed, are described and compared. The effectiveness of the employed strategies are analyzed and compared. Tables summarize the enacted strategies and their effects on the location of the professional education, access to the bodies of knowledge, the marks signifying completion of professional education, and the requirements of practice for both journalism and engineering. A section follows which describes and analyzes the gatekeeping effects of the strategies on journalism’s and engineering’s bodies of knowledge. A brief comparison between journalism education and engineering education for the twenty-year period between the world wars is made. The findings of this study are summarized at the end of the chapter.

Unifying Journalism’s Professional Associations

A professional association and its accrediting agency use associative and closure strategies to monopolize their body of knowledge. While associative strategies attempt to assimilate other organized interests to neutralize them, closure strategies repel other organized interests and allow the professional association’s accrediting agency to effectively gatekeep the profession’s body of knowledge. By using these concepts as tools for analyzing strategies, a formal organization approach of the process model can be used to concentrate upon strategies used to attain the goals set by the professional association and its accrediting agency for professionalizing the formal education of the professionalizing occupation.
Specific strategies and their effects on journalism’s professional education are described and analyzed below and are summarized in accompanying tables. Determining the degree of effectiveness achieved by journalism associations is impossible without investigating documentary evidence from every school, department, and group of courses representing journalism education that was generated between the years of 1919 and 1938. Nevertheless, I determined effectiveness indirectly from the evidence discovered during this investigation.

I used the following scale to identify grades of strategy effectiveness on the professionalizing occupation’s body of knowledge: (1) very effective, (2) somewhat effective, (3) very limited, (4) not effective, and (5) effect unknown. I defined these terms as follows: very effective—all accredited and most non-accredited courses, departments, and schools offering journalism education were affected by the strategy; somewhat effective—all or some accredited and some non-accredited courses, departments, and schools offering journalism education were affected by the strategy; very limited—all accredited but no non-accredited courses, departments, and schools offering journalism education were affected by the strategy; not effective—neither accredited nor non-accredited courses, departments, and schools offering journalism education were affected by the strategy; and, effect unknown—effects of the strategy could not be determined because the evidence generated between 1919 and 1938 and collected for this study was insufficient.

Members of journalism’s professional associations attempted five strategies between 1919 and 1938 to professionalize journalism education. These focused on: (1) creating the Council on Education for Journalism (CEJ) in 1924; (2) creating the National Joint Committee of Schools of Journalism and Newspaper Groups in 1930; (3) gaining the assistance of the Carnegie Foundation for the Advancement of Teaching; (4) merging the American Association of Teachers of Journalism (AATJ) with the American Association of Schools and Departments of Journalism (AASDJ); and (5) the elimination of courses and departments of journalism. The first two strategies were not only successful, but the CEJ and the National Joint Committee established goals, and selected and employed strategies to professionalize journalism and journalism education within one year of their creation, 1924 and 1930, respectively.
The associations’ several attempts to use the associative strategy of gaining the assistance of the Carnegie Foundation for the Advancement of Teaching proved unsuccessful. Members of the AASDJ and the CEJ approached members of the Carnegie Foundation in order to engage its assistance and support, both with man-power and financing. Between 1919 and 1938, journalism’s associations were unable to get the Carnegie Foundation’s help. Therefore, members of the journalism associations conducted all surveys described in this investigation of journalism education themselves. Members of journalism’s associations must have been disappointed because the Carnegie Foundation had supported medicine, with the famous 1910 Flexner Report, and engineering, with several reports including the Wickenden Report of 1930/1934. Medicine and engineering were perceived as model professions the journalism associations’ membership hoped to emulate. The effects of attempting to enact this strategy were indeterminable.

The fourth associative strategy proposed a merger of the AATJ and the AASDJ memberships. Although many of the associations’ members considered the strategy unsuccessful, the failure of this strategy may have ultimately led to success. This failure provided an impetus to the CEJ to focus its attention on the work of National Joint Committee. In 1939, the CEJ merged with the National Joint Committee and created the National Council on Professional Education for Journalism (NCPEJ), a forerunner of the American Council on Education for Journalism (1945), that later evolved into the Accrediting Council on Education for Journalism Education and Mass Communications (1987), today’s accrediting agency for journalism education. Another consequence related to the failed merger that led the CEJ to focus on the work of the National Joint Committee was the AATJ’s and the AASDJ’s retention of the words “and Departments” in the name of the AASDJ. Therefore, those journalism education programs not located in separate professional schools continued to be eligible for AASDJ membership. The closure strategy to remove “and Departments” from AASDJ’s name was proposed in 1934, 1935, and 1936, and was not enacted prior to 1938. The effects of attempting to enact these three strategies were indeterminable.

1 George B. Armstead, “The Report of the Committee on Schools of Journalism to the ASNE,” Journalism Quarterly 7, no. 2 (June 1930): 142-143.
An important goal of the professional associations of journalism was to convince all newspaper owners, publishers, and editors of the value of journalism education, which was believed by journalism educators to be more valuable than practical experience. It is in pursuit of attaining this goal that these five strategies, four associative and one closure, were proposed. Only two associative strategies were implemented.

Table 1. Associations’ Strategies to Professionalize Journalism Education

<table>
<thead>
<tr>
<th>Recommended Strategy</th>
<th>Strategy Type</th>
<th>Enacted</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>create the Council on Education for Journalism (CEJ)</td>
<td>associative</td>
<td>yes</td>
<td>very effective</td>
</tr>
<tr>
<td>create the National Joint Committee of Schools of Journalism and Newspaper Groups</td>
<td>associative</td>
<td>yes</td>
<td>very effective</td>
</tr>
<tr>
<td>gain assistance of the Carnegie Foundation for the Advancement of Teaching</td>
<td>associative</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>merge the American Association of Teachers of Journalism (AATJ) and the American Association of Schools and Departments of Journalism (AASDJ)</td>
<td>associative</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>eliminate “and Departments” from AASDJ’s name</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

In addition to the failure of the closure strategy to eliminate departments of journalism from AASDJ membership, the journalism associations were unable to completely control access to journalism’s body of knowledge. Most of the closure strategies employed by the leaders and members of journalism’s associations were in the form of standards which all schools of journalism desiring AASDJ accreditation were expected to meet or exceed. These standards attempted to restrict the location of journalism education, limit the access to those individuals learning and teaching journalism education, mark mastery of professional education, and determine who would be approved by the associations’ membership to practice with journalism’s body of knowledge.
Unifying Engineering’s Professional Associations

Although twenty-five recommendations to improve the quality of engineering education were discovered and analyzed in this study, all made by individuals and engineering’s many professional organizations between 1919 and 1938, only eight strategies were actually employed at a national level. The operating mechanism of a ninth strategy was established between 1919 and 1938. All of the many recommendations made and the few strategies employed were targeted at attaining the same goal--raising the prestige of engineers, engineering education, and the engineering profession. Few of these recommendations and strategies were initiated by the leadership of engineering’s professional societies. All implemented strategies were reactions to the desires and activities of engineering educators, industry, and state legislature. The Society for the Promotion of Engineering Education (SPEE) was the most influential association in professionalizing engineering education during the period under investigation because its members initiated and implemented the two key associative strategies and guided the establishment and operation of a third strategy which had a major impact on engineering education accreditation for the following seventy years.

As with journalism’s associations and education, determining the degree of effectiveness achieved by the engineering organizations is impossible without investigating documentary evidence generated between the years of 1919 and 1938 from every school of engineering, and each high school, preparatory school, technical institute, and junior and community college that offered engineering education. Nevertheless, I determined effectiveness indirectly from the evidence discovered during this investigation.

I used the same effectiveness scale for engineering’s associations’ strategies to professionalize their body of knowledge as journalism’s. These terms are defined as follows: very effective--all accredited and most non-accredited courses, departments, and schools offering engineering education were affected by the strategy; somewhat effective--all or some accredited and some non-accredited courses, departments, and schools offering engineering education were affected by the strategy; very limited--all accredited but no non-accredited courses, departments, and schools offering engineering education were affected by the strategy; not effective--neither accredited nor non-accredited courses, departments, and schools offering engineering education were affected by the strategy; and, effect unknown--effects of the strategy could not
be determined because the evidence generated between 1919 and 1938 and collected for this study was insufficient. Strategies recommended and enacted and their effects on engineering’s professional education are described and analyzed below, and are summarized in accompanying tables.

One associative strategy implemented was the creation of the Engineers’ Council for Professional Development (ECPD). William Wickenden, the Director of the SPEE’s comprehensive, seven-year investigation, first suggested the idea of a council representing all engineering professional organizations and all practicing engineers in 1924, but the idea of uniting the profession of engineering was not new. Many engineers and engineering educators suggested a unification of professional organizations and engineers across disciplines throughout the history of engineering in the United States. The need for a single national authority was clearly apparent to engineering educators and many engineers and highly recommended by the leadership of the SPEE with the 1930 publication of the first volume of the SPEE’s comprehensive investigation. Threats to the profession perceived by members and leadership of engineering’s professional societies included the Great Depression, Hoover’s failure, and the growing power of industry, engineering educators, state licensing boards, and the SPEE. Perception of these threats contributed to a sense of guilt and the belief that engineering was losing prestige. All of these factors converged around 1930 and led the leaders of the engineering societies to recognize the need for, and participation in, the ECPD. Because the mission and purpose of the ECPD was to protect and raise the prestige of all engineers and the engineering profession, the professional societies were more accepting of a single association to oversee engineering education at that time more than any other time in their previous histories.

Table 2. Organizations’ Strategies to Professionalize Engineering Education

<table>
<thead>
<tr>
<th>Recommended Strategy</th>
<th>Strategy Type</th>
<th>Enacted</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>create the Engineers’ Council for Professional Development (ECPD)</td>
<td>associative</td>
<td>yes</td>
<td>effect unknown</td>
</tr>
</tbody>
</table>

Location of Education

The location of the professional body of knowledge is one focus common to both journalism’s and engineering’s associations. Two types of physical location received attention from members of the journalism and engineering associations. One type was the physical location of professional knowledge within a postsecondary institution. For example, the knowledge could be housed in a separate school of professional education or in a liberal arts college. The second type of physical location was the geographical location of the institution offering professional education, especially in relation to other institutions offering the same professional education. Another type of location that received the attention of professional associations’ was the professional education’s containment within a four-year undergraduate program.

Journalism

Journalism’s professional associations set standards regarding the location of journalism education. Closure strategies were aimed at eliminating all journalism education programs outside regionally accredited colleges and universities, poor quality schools of journalism located in regionally accredited colleges and universities, schools in geographical areas the associations’ leadership deemed to be too congested in relation to jobs available to graduates, journalism courses offered outside the school of journalism, and courses and departments of journalism, including those already accredited by the AASDJ. Non-accredited journalism programs were not effectively removed from non-regionally accredited institutions. Journalism education was not effectively removed from English and other departments, correspondence schools, high schools, vocational institutions, night schools and those institutions that only offered part-time study, and placed in AASDJ accredited schools of journalism. This is evidenced by the increasing number of schools offering journalism education between the two world wars. One indicator that the CEJ was effective in holding journalism education accountable to the standards restricting location was the fact that several members of the AATJ, especially those who were from schools of journalism with Class C accreditation, and other journalism educators, believed their schools of journalism were the object
of discrimination because of their smaller size and proximity to larger, Class A and Class B AASDJ accredited schools of journalism as early as 1933. In 1944, several journalism educators established a rival association, the American Society of Journalism School Administrators.3 An indicator of the lack of effectiveness from the collected evidence is found in the 1945 report of a 1940 study conducted by the NCPEJ, which stated that there were too many of the poorer quality schools. This evidence suggests the closure strategy aimed at eliminating the poorer quality schools of journalism was not as effective as members of the NCPEJ wished. For schools of journalism desiring and attaining AASDJ accreditation, restricting the location of journalism education was very successful. As mentioned above, the journalism associations were unable to limit AASDJ accreditation to only schools of journalism, eliminating the departments of journalism education. Evidence shows that some journalism programs did transform into schools of journalism and received accreditation.

Table 3. Summary of Strategies and their Effectiveness on Location of Journalism Education

<table>
<thead>
<tr>
<th>Recommended Strategy</th>
<th>Strategy Type</th>
<th>Enacted</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>eliminate programs outside regionally accredited postsecondary institutions</td>
<td>closure</td>
<td>yes</td>
<td>very limited</td>
</tr>
<tr>
<td>eliminate all courses offered outside accredited schools of journalism</td>
<td>closure</td>
<td>yes</td>
<td>not effective</td>
</tr>
<tr>
<td>eliminate smaller schools of journalism</td>
<td>closure</td>
<td>yes</td>
<td>somewhat effective</td>
</tr>
<tr>
<td>eliminate schools in geographical areas perceived too congested in relation to job</td>
<td>closure</td>
<td>yes</td>
<td>somewhat effective</td>
</tr>
<tr>
<td>availability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eliminate poor quality programs within postsecondary institutions</td>
<td>closure</td>
<td>yes</td>
<td>very limited</td>
</tr>
<tr>
<td>eliminate all courses and departments of journalism, leaving only schools of</td>
<td>closure</td>
<td>yes</td>
<td>somewhat effective</td>
</tr>
<tr>
<td>journalism</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

By the mid-1930s, the professional associations wanted evidence of the CEJ’s successes in applying its strategies. In 1936, the CEJ, then renamed the National Council on Education for Journalism (NCEJ), reported that “the general impression that schools of journalism were ‘flooding the market’” was unsubstantiated by fact.4 Two years later, this belief held by journalism associations’ members was

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3 Emery and McKerns, 1; Lawrence W. Murphy, Compilation, 47.

challenged by newspaper editors, industry representatives, and the general public. The leaders of the journalism associations conducted surveys to find facts that would confirm that journalism programs deemed unfit to provide journalism education had been eliminated. In 1937, the AASDJ leadership formally acknowledged the existence of journalism education in institutions that offered programs consisting of less than four years, but it also declared these programs were not approved, and until all of the CEJ’s accreditation standards were met or exceeded, they would not be accredited. By 1940, there were 542 schools of journalism in operation. Only thirty-two were accredited with Class A standing. The closure strategies employed were not very effective, except for those schools of journalism that desired accreditation.

**Engineering**

Only one strategy was employed to restrict the location of engineering education. This was to confine engineering education to four years of undergraduate study. The small amount of evidence collected in this investigation indirectly suggests there was some desire among the members to confine engineering education to four years of postsecondary work. This is suggested by the lack of encouragement to offer post-graduate work to students. There was little evidence however, indicating the effectiveness of this closure strategy to confine engineering education to four years of undergraduate course study. The SPEE membership recommended expanding the physical location of engineering’s body of knowledge to all institutions. The SPEE encouraged high schools, technical institutes, and community and junior colleges to teach engineering, and to increase the number of courses offered, especially mathematics and science courses. These two associative strategies, expanding the physical locations in which engineering education was offered, were very successful. The number and types of institutions offering engineering education increased. Evidence reviewed showed that in 1893, approximately one hundred

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6 Sutton, 106.
engineering schools were in operation and in 1940, there were 147. In 1927, six institutions offered evening courses leading to engineering degrees and by 1929, at least twenty-two did so. In 1936, seven technical institute programs were accredited and by 1957, 109 programs in thirty-five technical institutions were accredited. Meanwhile, the engineering societies took no direct interest in engineering education between 1919 and 1938 and gave no attention to articulation issues.

Articulation could have been an important issue for three reasons. The first reason why articulation should have garnered attention from professionalizing occupations is the growth of a college-bound population that was more mobile. This growth in size was accompanied by the growth in number of community and junior colleges and the increasing value of a college degree. Secondly, because accreditation standards are indicators of a quality educational program, effective articulation between accredited engineering programs could only enhance the quality of engineering education. The third reason articulation could have been an important issue for professionalizing occupations is articulation was addressed by medicine and law. Professionalizing occupations following the pattern set by these professions would have paid attention to articulation issues. Members of the engineering societies remained convinced engineering education was accomplished primarily through practical experience.

Although three additional closure strategies were recommended by the SPEE, including restricting engineering education to a separate school, eliminating the poorest quality programs, and limiting engineering education to specialized accredited programs in regionally accredited institutions, none were implemented before 1938. Evidence indicating the effects of these recommendations was insufficient to determine effectiveness. This evidence included discussions of implementation and possible benefits.

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7 Armsby, 171.


9 Everitt, 112.
Table 4. Summary of Strategies and their Effectiveness on Location of Engineering Education

<table>
<thead>
<tr>
<th>Recommended Strategy</th>
<th>Strategy Type</th>
<th>Enacted</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>confine to four years of undergraduate study</td>
<td>closure</td>
<td>yes</td>
<td>effect unknown</td>
</tr>
<tr>
<td>encourage growth of number of technical</td>
<td>associative</td>
<td>yes</td>
<td>very effective</td>
</tr>
<tr>
<td>institutes and other educational institutions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>encourage growth in number of programs</td>
<td>associative</td>
<td>yes</td>
<td>very effective</td>
</tr>
<tr>
<td>confine to separate school</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>eliminate poorest quality programs</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>limit to accredited schools only</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

Access to Education

Both journalism’s and engineering’s professional associations made recommendations and implemented strategies regarding the access to their bodies of knowledge. Both who would learn and who would teach their respective professional educational programs were targeted.

Journalism

From 1919 to 1924, individuals representing the member institutions of the AASDJ set standards regarding who would be admitted to schools to learn journalism education and who would be allowed to teach journalism education. In 1924, the responsibility of setting and raising standards was given to the members of CEJ. The number of schools of journalism comprising the Class A accredited member institutions of the AASDJ and the Class B institutions recognized by the AASDJ consistently rose in the years between the world wars. (See Appendix D for numbers of accredited Class A and Class B schools of journalism.) In 1919, twenty-four Class A, and nine Class B schools, a total of thirty-three schools were accredited. By 1938, the total number of accredited Class A and Class B schools doubled to sixty-six, thirty-two Class A and thirty-four Class B schools. Beginning in 1926, the only difference between these two classes was “A” schools applied for and were accepted to AASDJ membership. Even after the 1926 amendment was adopted requiring that Class A schools of journalism be members of the AASDJ, the institutional membership of the AASDJ increased from eighteen in 1926 to thirty-two in 1938. This
evidence suggests as schools attempted to meet standards set regarding access of students and educators to journalism education, quality, as defined by journalism’s associations’ leadership, improved.

By setting standards for accreditation, the CEJ advocated that all teachers of journalism education should pursue graduate work, conduct and publish research in journalism, obtain a Master of Arts in Journalism degree, and then earn a Doctorate of Philosophy in Journalism degree. By 1935, the AATJ no longer supported this stance. Although it is unlikely every journalism educator teaching in a school of journalism eventually earned both a Master’s and Doctorate in Journalism, this strategy was moderately successful because an increasing number of schools of journalism received accreditation between the world wars, suggesting that more schools met these accreditation standards.

Based on this same evidence, the closure strategies of granting academic credit for practical experience under the supervision of journalism educators and journalism knowledge being confined to the junior and senior years can also be considered somewhat effective. Indirectly, the evidence also suggests because of specific laboratory and library materials required, journalism educators at the accredited schools had better access to teaching resources.

Members of the CEJ also set a standard for the number of course credits a journalism degree candidate must take out of the 120 credits required for the Bachelor of Arts degree to receive the degree designation of “in Journalism.” Schools of journalism offering a Bachelor of Arts in Journalism degree that received either Class A or Class B accreditation met this standard, so this strategy was very effective. There is no way, however, to determine how many non-accredited schools of journalism offered journalism education in Bachelor of Arts degree programs that did not consist of 120 credits, or met the required number of journalism course credits within the journalism degree program. The definition of degree-granting programs, the location of journalism courses, and the title of the journalism degree offered were greatly varied among non-accredited schools of journalism. Because of the increasing number of schools accredited between the two world wars, it is probable that some schools of journalism strived to meet accreditation standards by granting the Bachelor of Arts in Journalism degree to students who completed the required number of journalism courses in a 120-credit program.
Table 5. Summary of Strategies and their Effectiveness on Access to Journalism Education

<table>
<thead>
<tr>
<th>Recommended Strategy</th>
<th>Strategy Type</th>
<th>Enacted</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>raise student admission standards</td>
<td>closure</td>
<td>yes</td>
<td>somewhat effective</td>
</tr>
<tr>
<td>raise teacher standards</td>
<td>closure</td>
<td>yes</td>
<td>somewhat effective</td>
</tr>
<tr>
<td>give academic credit for experience only under supervision of journalism educator</td>
<td>closure</td>
<td>yes</td>
<td>somewhat effective</td>
</tr>
<tr>
<td>confine journalism knowledge to junior and senior years</td>
<td>closure</td>
<td>yes</td>
<td>somewhat effective</td>
</tr>
<tr>
<td>require specific laboratory and library materials</td>
<td>closure</td>
<td>yes</td>
<td>somewhat effective</td>
</tr>
<tr>
<td>require a minimum of 120 credits for a Bachelor of Arts in Journalism degree</td>
<td>closure</td>
<td>yes</td>
<td>somewhat effective</td>
</tr>
</tbody>
</table>

The effects of raising the standards for both the students and teachers of journalism were visible to practicing newspaper men as early as 1931. A journalism educator reported in the afternoon session of the AATJ convention “that the traditional unfavorable attitude ... toward products of the schools is gradually changing.”

**Engineering**

Of the seven recommendations made to restrict the access of both students and engineering educators to engineering’s body of knowledge, only one strategy was enacted. Recommendations not enacted included improving the quality of preparation for applicants, setting admission standards, administering placement and entrance examinations, enhancing articulation, raising teacher standards, and formally recognizing outstanding educators. The effects of these recommendations for engineering education could not be determined due to insufficient evidence. The evidence examined consisted of justification for the recommendations and discussions among individuals regarding possible benefits. Evidence also shows some schools of engineering enacted some of these strategies with varying success, but no evidence was discovered that indicated the overall effects upon all engineering education in the United States prior to 1939.

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The Summer School for Engineering Teachers, an associative strategy, was initiated by members of the SPEE in 1927 to increase the communication and coordination of all teachers of engineering education across engineering divisions, types of institutions, and the breadth of the country, as well as raising the quality of the educators’ teaching methods by exposing each to what the SPEE identified as best practices. The Summer School program was in place less than one year after the SPEE made the recommendation to begin such a program. The educational activities sponsored by the Summer School were aimed at improving engineering educator quality and were held each summer at a different school of engineering between 1927 and 1933. This strategy was considered successful by members of the SPEE. Attendance rose each year, and much publicity about the program’s activities appeared in engineering’s professional journals. The Summer School’s success contributed to the professional societies’ leaders’ belief that the SPEE was gaining power and authority over engineering education, and recognition by members of industry. These perceptions helped convince the leadership and members of the engineering societies that the SPEE was a threat to their own prestige and authority.

Table 6. Summary of Strategies and their Effectiveness on Access to Engineering Education

<table>
<thead>
<tr>
<th>Recommended Strategy</th>
<th>Strategy Type</th>
<th>Enacted</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>improve quality of preparation for applicants</td>
<td>associative</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>set standards of admission (especially for math and science aptitudes)</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>administer entrance and placement examinations</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>enhance articulation</td>
<td>associative</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>raise teacher selection and teaching quality standards</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>formally recognize outstanding educators</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>create Summer School program</td>
<td>associative</td>
<td>yes</td>
<td>somewhat effective</td>
</tr>
</tbody>
</table>

Completion of Education

Journalism’s and engineering’s professional associations made efforts to mark students’ completion of professional education in preparation for professional practice. Titles of degrees,
equivalency of practical work experience to professional education, exit examinations, and graduate work were all targeted with recommendations.

**Journalism**

Three closure strategies were recommended and two were employed by journalism’s associations to limit the marks signaling to potential employers and the general public that a mastering of journalism education was attained. The two strategies selected by the CEJ’s members focused on degrees and graduate school eligibility. Accrediting standards set by the AASDJ and the CEJ stated the degree marking the end of journalism education in undergraduate study would be the Bachelor of Arts in Journalism degree. All schools of journalism accredited with Class A or Class B designations granted this degree, therefore, the strategy can be considered very successful, indicated by the growth in the number of accredited schools of journalism between the two world wars. Indirectly, evidence suggests non-accredited schools of journalism desiring accreditation offered Bachelor of Arts in Journalism degrees and met the related accreditation standards. This closure strategy, therefore, was determined to be somewhat effective. The AASDJ members were helpful in making this strategy effective by defeating one AASDJ member institution representative’s 1927 proposal to accept a Bachelor of Science in Journalism degree as equivalent to the Bachelor of Arts in Journalism degree. The third recommended strategy required graduate work of all school of journalism graduates before each was allowed to practice. While the members of journalism’s associations surveyed graduate programs in 1926 and set standards for schools of journalism to attain accreditation, few changes to graduate education were made between 1919 and 1938. Evidence collected for this study was insufficient to determine the level of effectiveness of this recommendation. Evidence included surveys conducted to gather information about current practice and a few discussions about the ramifications of setting standards regarding graduate work.
Table 7. Summary of Strategies and their Effectiveness on Completion of Journalism Education

<table>
<thead>
<tr>
<th>Recommended Strategy</th>
<th>Strategy Type</th>
<th>Enacted</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>establish Bachelor of Arts in Journalism degree</td>
<td>closure</td>
<td>yes</td>
<td>somewhat effective</td>
</tr>
<tr>
<td>establish Bachelor of Science in Journalism degree</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>require graduate course work</td>
<td>closure</td>
<td>yes</td>
<td>effect unknown</td>
</tr>
</tbody>
</table>

**Engineering**

The Wickenden Report indicated there were nine different degrees offered by schools of engineering and the titles of the degrees were also varied. Some engineering schools based degree attainment purely on students’ practical experiences. Others granted degrees on unknown criteria because no course requirements were published by the schools of engineering.11 No strategies were employed and no general guidelines were agreed upon to mark adequate completion or mastery of engineering education by engineering’s professional organizations during the period between the two world wars.

Five strategies were, however, recommended. These strategies included discouraging graduate work, establishing a universal degree title, determining the equivalency of the engineering degree and practical experience, administering comprehensive examinations to students prior to graduation, and granting educational credentials to graduates of non-accredited, four-year engineering programs. Evidence reviewed for this study was insufficient to determine the effects of these recommendations. Evidence consisted primarily of justifications for the recommendations and a few discussions of possible benefits.

Table 8. Summary of Strategies and their Effectiveness on Completion of Engineering Education

<table>
<thead>
<tr>
<th>Recommended Strategy</th>
<th>Strategy Type</th>
<th>Enacted</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>discourage graduate course work</td>
<td>associative</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>establish universal degree title</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>determine equivalency of degree and practical experience</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>administer comprehensive examinations</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>grant educational credential for non-accredited, four-year engineering program</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

Requirements for Practice

Both journalism’s and engineering’s associations made recommendations and implemented strategies to restrict individuals deemed unfit from practice. By allowing only qualified individuals to practice, journalism’s and engineering’s associations’ members believed their prestige and the prestige of their professionalizing occupations would increase.

Journalism

The AASDJ and the CEJ implemented only one closure strategy to limit access to practice. The First Amendment was believed by the members of journalism’s professional associations to severely limit their actions to restrict practice by those individuals the associations’ members believed unfit. Identification cards were designed in 1928. These cards were to be carried by graduates of accredited schools of journalism and presented to future employers upon job application. The evidence collected during this investigation indicates few schools of journalism, with the exception of the University of Wisconsin (Madison), consistently presented an identification card to each of their graduates. By 1936, the Chair of the National Joint Committee urged all accredited schools of journalism to reinstate the distribution of the cards to their graduates. (See Appendix E for a scanned photocopy of the University of Wisconsin (Madison)'s 1936 identification card.) This strategy was determined to be somewhat effective, although no evidence was discovered that indicated any non-accredited schools of journalism instituted the use of an identification card and the consistency of use by accredited schools of journalism was indeterminable.

One other closure strategy was proposed to limit access to practice of journalism but no action was taken. This strategy, proposed in 1930 by an associate editor of the Ganette Newspapers, was for the journalism associations to create an Institute, similar to one established by the professionalizing occupation of accounting. Future practitioners would be tested, graded, and granted appropriate membership titles
which would indicate to future employers and the general public the level of qualifications the future practitioner had achieved.

One associative strategy was enacted by the CEJ and the National Joint Committee between the world wars. Members tried to set standards to assure graduates would have the knowledge and qualities future employees needed and desired. Indirectly, evidence indicates that a mismatch existed between the qualities future employers considered desirable in journalism job applicants and the qualities instilled by journalism educators in future practitioners. Editors were looking for humility in applicants, according to an editor who made the point in 1933, but educators were not teaching it, or students were not learning it. Yet, members of the AASDJ disagreed with the editor and reaffirmed their belief that journalism education was serving the needs of the job market by producing highly skilled and qualified future practitioners. No changes were made in journalism education to address this issue and no investigations to further study this point were planned or attempted by the members of the journalism associations before 1939.

Table 9. Summary of Strategies and their Effectiveness on Journalism Practice

<table>
<thead>
<tr>
<th>Recommended Strategy</th>
<th>Strategy Type</th>
<th>Enacted</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>issue identification cards</td>
<td>closure</td>
<td>yes</td>
<td>somewhat effective</td>
</tr>
<tr>
<td>establish American Institute of Journalism</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>produce graduates who meet needs and desires of newspaper editors</td>
<td>associative</td>
<td>yes</td>
<td>effect unknown</td>
</tr>
</tbody>
</table>

**Engineering**

Six strategies were recommended and two were enacted by engineering’s professional organizations regarding the practice of engineering. Beginning in 1920, the National Council of State Boards of Engineering Examiners (NCSBEE) issued licenses to those engineers perceived fit for practice. This closure strategy may have been somewhat effective in that some engineers unfit for practice were not certified by the NCSBEE. It was also true that many incompetent engineers were licensed. In 1936, the

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ECPD had planned to certify engineers for practice, but this strategy was not implemented before 1939. The NCSBEE also required many engineers to pass examinations prior to licensing, but evidence indicates, as mentioned above, this strategy did not effectively restrict incompetent engineers from practice. The ECPD planned to require of many applicants for certified practice the passing of either a written or oral examination, but the effectiveness of this plan was not evident prior to 1939. The ECPD also planned to issue certificates to individuals approved to practice, and require future practitioners to submit a list of courses taken, books studies, and either a thesis or published scholarly article. Evidence was insufficient to determine the effectiveness of these plans prior to 1939. The evidence consisted primarily of the ECPD’s detailed plan and numerous discussions by individuals of the possible benefits of the plan once enacted.

Table 10. Summary of Strategies and their Effectiveness on Engineering Practice

<table>
<thead>
<tr>
<th>Recommended Strategy</th>
<th>Strategy Type</th>
<th>Enacted</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>issue license to practice</td>
<td>closure</td>
<td>yes</td>
<td>effect unknown</td>
</tr>
<tr>
<td>administer examination</td>
<td>closure</td>
<td>yes</td>
<td>effect unknown</td>
</tr>
<tr>
<td>publish list of names of those ECPD-certified</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>issue ECPD certificates</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>require submission of list of courses taken and books studied</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>require submission of thesis or published scholarly article</td>
<td>closure</td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

Although the ECPD’s strategies were not fully employed before 1939, its detailed plans were in place. These plans, all closure strategies at the national level, focused on restricting from practice engineers not meeting the ECPD’s professional standards. If implemented, these standards would also have dictated standards of professional association membership eligibility, and therefore protected the prestige of ECPD-certified members. Under the standards, initial certification requirements would have been ineffective until 1937 because most trained or educated engineers prior to 1937 were grandfathered in. But beginning that year, requirements were planned to further restrict membership of those who qualified previously. Again in 1938, the planned standards raised the bar even higher for engineers desiring association membership. Active assessment and evaluation of engineering schools, which began in 1935, complemented the ECPD’s attempt to close practice of engineering to those individuals the ECPD
perceived unfit. During the last two years under investigation, the ECPD actively attended to accreditation and its related problems. If successful, the prestige of engineers and the engineering profession might have increased.

The only associative strategy enacted between the two world wars and proven successful was the creation of the ECPD. The association of the five major engineering societies, the SPEE, and the NCSBEE was the most important action undertaken by the engineering organizations. For the first time, mutual goals were set, accreditation of all engineering programs began, and direction to the engineering educators of the schools of engineering would be given.

**Gatekeeping the Body of Knowledge**

Gatekeeping is a type of power exerted by a professional association’s accrediting agency to protect and control the location of, the access to, and the mastery of professional education. Gatekeeping powers also protect the body of knowledge used in practice from those practitioners deemed unfit.

**Journalism**

The quality of accredited schools of journalism improved due to consistent raising of standards. The professional associations benefited from the gatekeeping efforts in that by 1939, the federal government of the United States declared journalism a profession. The main long-term effect of gatekeeping activities on journalism’s body of knowledge between the world wars was the evolution of the CEJ with other journalism-related associations to become the Accrediting Council on Education for Journalism and Mass Communications (ACEJMC).

Eighteen strategies, both closure and associative, were employed by the AATJ and the AASDJ between 1919 and 1938 and analyzed in this study. These initial strategies were often modified and were all targeted toward four main areas related to journalism’s body of knowledge. These four areas are location, access, completion, and practice. Almost all of the fifteen closure strategies employed took the
form of standards for accrediting schools of journalism. Only three associative strategies were used. Two were the creation of the CEJ and the creation of the NCPEJ. The third associative strategy was the producing of graduates who met the needs and desires of the newspaper editors. This finding is consistent with the literature that describes closure and associative strategies. The initial purposes of the associative strategies were to gain influence, respect, and power in order to increase the professionalizing occupation’s perceived prestige. The most important accomplishment of the associative-to-closure strategy action was the creation of the CEJ and the National Joint Committee which together became, in 1939, the NCPEJ, and evolved into the ACEJMC, the accrediting agency for all schools of journalism.

The story of journalism’s transformation from an occupation in 1919 to a recognized profession in 1939 represents a textbook case of attempted professionalization as described by scholars, except in the area of restricting practice of those deemed unfit by the professional associations. Journalism followed the pattern originally modeled by medicine and law. What is most noteworthy is the number of accomplishments within the twenty years between the two world wars. Most of the important goals determined by the AATJ and the AASDJ, were set in place by 1919 and, strategies were initially implemented within a year or two. As portrayed in this history, the most important and active organizations in journalism during the period under study were the AASDJ and the CEJ. The AATJ set the original goal of raising standards to achieve professionalization and created the AASDJ. Its own role, however, in gatekeeping journalism’s body of knowledge was small. The cooperation and contributions of the American Society of Newspaper Editors (ASNE) and other professional associations related to journalism are also noteworthy because these organizations worked together and eventually created the ACEJMC.

The evidence collected indicates that the members of the journalism associations planned and implemented strategies to professionalize journalism education. The AASDJ and the CEJ membership consistently raised their accreditation standards for journalism education, increased the quality of the instructors in the accredited schools, and to some degree, enhanced articulation between the high schools

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and other institutions to the accredited four-year journalism programs. Journalism associations were successful in instituting a Bachelor of Arts in Journalism degree in accredited schools of journalism which indicated the completion of access to journalism’s body of knowledge by including the designation “in Journalism” in the degree’s title. Graduate work in journalism became valued by some editors and many journalism educators. Many editors and newspaper owners came to recognize the value of the journalism degree, often as more valuable than experience.\textsuperscript{14} Journalism’s associations never instituted licensing, certification, or registration of practicing newspaper employees. The First Amendment of the United States Constitution was the most significant obstacle journalism associations faced in controlling practice. The Freedom of the Press was a revered right not to be infringed, especially by the press itself. Journalism’s associations, however, were very proactive in corresponding with industry, the placement of school of journalism graduates, and working with other journalism-related associations to raise the prestige of journalism graduates, journalism education, and the profession.

Between the years of 1919 and 1938, most members of the AATJ and the AASDJ believed the occupation of journalism had professionalized.\textsuperscript{15} They believed this was accomplished through setting and enforcing high standards and continuously raising the bar for all accredited schools of journalism. Journalism education was adapted between the two world wars by journalism educators and journalism’s professional associations to meet the American public’s needs with what was believed by many as high quality performances by journalism’s graduates. Many newspaper owners, publishers, and editors believed the journalism schools were producing highly qualified graduates, and often preferred graduates over those applicants who did not hold baccalaureate degrees. In 1937, the American press was noted by one newspaper as “getting better ... in that a higher quality of personnel is coming into writing and editing. An important element in this connection is the development of professional standards.”\textsuperscript{16} Most goals set by the leaders of journalism’s associations for their accredited schools were attained very quickly, evidenced by

\textsuperscript{14} Porter and Luxon, 3.

\textsuperscript{15} Converse, 44-48.

the increasing number of accredited schools of journalism between the two world wars. These achievements helped create an environment in which journalism’s professional associations’ believed they had the authority to define journalism. Their definition was in agreement with what other journalism-related associations, organizations, and industry expected or demanded. Journalism’s professional associations were unable to restrict journalism education to separate schools of journalism. They could not reduce the numbers of practitioners they deemed ill-prepared or substandard from the field of practice.

**Engineering**

No evidence was discovered that indicated schools of engineering improved the quality of graduates, engineering educators, or facilities between 1919 and 1935 because no standards were set by engineering’s professional organizations. Although pre-determined, nationally-accepted standards were not in place, some level of criteria was instituted for schools of engineering by the ECPD in 1935. Quality may have improved in some of the schools of engineering by 1938, because accreditation without provisions (the highest form of engineering accreditation) was likely desired by some engineering educators for their engineering programs. The members of the engineering organizations and engineering educators benefited from gatekeeping efforts because the creation of the ECPD in 1932 provided a united leadership and direction, across disciplines. The main long-term effect of gatekeeping activities on engineering’s body of knowledge between the world wars was the creation of the ECPD, which later evolved into the Accreditation Board for Engineering and Technology (ABET).

Members of the engineering societies greatly changed their focus during the period under study. Beginning in 1919, the members of the societies focused their attention on raising the standards of engineering society membership. Around 1930, members’ attention shifted dramatically because they feared that the prestige of engineering was significantly diminishing. At this time, the societies were given the opportunity to join forces with the SPEE and the NCSBEE to create the ECPD. The goal of each engineering society was to increase the prestige of engineers and the profession. Although this goal did not change, the type of strategy employed by members to attain the goal did.
Engineering societies shifted from a closure strategy (restricting access to membership and practice) to an associative strategy (forming an association to monitor engineering education). This is significant. No where in the literature reviewed for this study was there information, either based on empirical evidence or theory, that indicated the possibility of replacing a successful closure strategy. No where in the reviewed literature were suggestions that a professional (or a professionalizing occupation’s) association which had been very successful in reaching its goal by employing a closure strategy, choose to replace it with an associative strategy in order to retain its prior accomplishment. Even more significant is this replacement of strategies was undertaken to achieve the same goal. This replacement of a closure strategy with an associative strategy occurred within an extremely short period of time. In 1920, the occupation of engineering was well respected. Members of professionalizing occupations, such as journalism, regarded engineering and engineering education as prestigious as medicine and medical education, and law and its professional education. By 1930, engineering prestige was so threatened, the professional societies of engineering adopted an associative strategy, that of establishing the ECPD.

Between 1919 and 1938, the SPEE and the state boards, along with industry had suggested seven associative strategies and eighteen closure strategies be used to achieve recommended goals. The SPEE advocated goals related to the location of engineering’s body of knowledge, its access, the certification of graduates, and requirements for practice. The state boards set standards and responded to individual state laws with the goal of regulating the practice of engineers in their respective states, but this closure strategy was ineffective because incompetent engineers were certified and non-certified engineers who were highly skilled and qualified practiced anyway. Industry often participated in associative strategies, such as the Cooperative Plan of engineering education, which was designed to raise the quality of future employees. Quite often, industry’s only contribution was to act as a feedback mechanism for the SPEE.

Between the two world wars, the professional engineering organizations and the engineering educators made little progress in professionalizing engineering education. Engineering education became more congested within the four-year curricula, which contributed to a student attrition rate of 60 percent. More poorly prepared students were admitted to engineering programs than to other professional programs
such as medicine, law, dentistry, and architecture. The SPEE encouraged growth in the number and types of institutions offering engineering education curricula. The articulation problems caused by this uncontrolled growth were not addressed effectively by the SPEE nor by the leadership of the engineering societies. Teachers of engineering education were ill-prepared, overworked, and lacked proper training to teach. No consensus was reached by engineering educators on the appropriate title and degree designation conferred upon graduates of engineering programs, and graduate work was valued inconsistently among industry, the engineering societies, and the engineering educators. The number of practicing engineers increased between 1919 and 1938. Experience was considered at least as valuable as a formal education by industry and the engineering societies. The state and circumstance of engineering education appears to have worsened between 1919 and 1938.

Summary

Several differences are apparent in the professionalization processes of journalism education and engineering education between the world wars. Journalism’s professional associations were more successful than engineering’s professional organizations in gatekeeping their body of knowledge with respect to location, access, and marks of completion. Engineering’s professional organizations, however, were more successful in gatekeeping access to knowledge as used in practice. Journalism’s associations employed fifteen closure and two associative strategies. Engineering’s professional organizations employed one closure and seven associative strategies. Journalism’s AASDJ, CEJ, and NCPEJ accredited their schools of journalism during the entire twenty-year period under study, while engineering’s ECPD accrediting activities did not begin until 1935, and by definition, were not truly accrediting. By 1940, only thirty-two of 542 schools of journalism, or 6 percent, had received Class A accreditation, compared to 118 of 155 schools of engineering, or 76 percent, which had been accredited by the ECPD.18

17 Committee on Engineering Students and Graduates, Bulletin No. 1, 168.
18 Sutton, 106. These numbers are not completely comparable because journalism’s Class A accreditation was the highest form of accreditation. Other schools of journalism had Class B accreditation which was equivalent to Class A
Journalism’s and engineering’s professional associations had some things in common. For example, both encouraged their practitioners to join their respective professional associations and not unions. Both journalism’s and engineering’s professional associations made active efforts to avoid negative press regarding their professionalizing occupations. Members of journalism’s associations dealt with the press differently than members of the engineering organizations. The professional associations of journalism fought negative remarks from the press with facts, as the leadership of the journalism associations defined the facts. Engineering’s professional organizations fought negative press by ignoring the uncomplimentary comments and focusing the public’s attention on engineering’s many successes. Perhaps the least surprising commonality shared by members of both engineering’s and journalism’s professional associations was the primary goal of enhancing the prestige of their respective professions. This investigation provided empirical evidence which confirmed that the main goal of professional associations is to protect and/or enhance the prestige for both the professionals and the profession.¹⁹ Engineering educators and journalism educators also shared the belief that by professionalizing their respective bodies of knowledge through gatekeeping efforts, the prestige of the educator, the graduate, and the profession would increase.

In summary, members of the professionalizing occupation of journalism and journalism educators selected as their model for professional education the efforts of medicine, law and engineering. Members of the professionalizing occupation of engineering and engineering educators, because of their belief that engineering was unique, selected no model to professionalize the occupation or its education. The finding

¹⁹ Constitution of the AASDJ, 1917; Constitution of the American Conference of Teachers of Journalism (later known as the AATJ), 1912; “Engineers’ Council for Professional Development,” 515; and, “The Origin of the Society,” 3-4.
that engineering organizations did not select a model profession to emulate either for engineering practitioners or engineering education contradicts the scholarly literature examined in preparation for this study.\textsuperscript{20}

The evidence analyzed for this investigation provides mixed support for scholars’ assertions that members of a professionalizing occupation assign great importance to the role education plays in their professionalizing efforts. Journalism’s professional associations did consider the professionalization of journalism education as highly important. Except for the SPEE, engineering education only became an important issue to the members of engineering’s professional societies in the late 1930s. Most members of engineering’s organizations viewed engineering education as less valuable than practical experience and gave little attention to professionalizing engineering education. The evidence of disregard by the professional organizations of protecting engineering’s body of knowledge contradicts historians’ and sociologists’ assertions about the role postsecondary education plays in professionalizing an occupation.\textsuperscript{21}

One other interesting finding that contradicts the scholarly literature on strategies used to aid in the professionalization process is the engineering professional organizations’ replacement of what had been an effective closure strategy with an associative strategy. In addition, the members of engineering’s professional organizations had never before employed the selected associative strategy. Based on his investigation of journalists and educational and vocational counselors in Sweden, Staffan Selander asserted that when an effective closure strategy is weakened by environmental factors it may be replaced by an associative strategy.\textsuperscript{22} Such seems the case for the major engineering organizations around 1930, when leadership of the organizations decided to form the ECPD. However, Selander does not indicate this type of substitution may be made while the original goal remains the same and the closure strategy once employed had proven successful for nearly a century. Instead, Selander infers that a closure strategy may

\textsuperscript{20} Brubacher, 65; Brubacher and Rudy, 208; Sanders, 11; Selden, Accreditation: A Struggle, 57-62; and, Young, 3-4.

\textsuperscript{21} This is the partial list of scholars, whose works I consulted in preparation for this investigation, that have attempted to define professionalism by indicating the gatekeeping of the body of knowledge is essential and important: Barber; Ben-David; Bledstein; Bogue and Saunders; Caplow; Calvert, “The Search;” Carr-Saunders and Wilson; Diner; Freidson, Professionalism Reborn; Geiger; Goode; Greenwood; Gross and Osterman; Haber, The Quest; Hatch; Johnson; Magali Sarfatti Larson; Merton; Moore with Rosenblum; Newell; Parsons; Pavalko; Ritzer; Selander; Turner and Hodge; Wiebe; Wilensky; and, Logan Wilson.
be employed and quickly replaced with an associative strategy by members of an occupation or profession when they realize the closure strategy will be ineffective due to the surrounding circumstances.

These contradictions need further investigation, as discussed in Chapter Five, along with other areas related to this study that I believe need further investigation. Also in Chapter Five, conclusions of this study and implications for practice and research are delineated.

22 Selander, 143.
Chapter 5

CONCLUSIONS AND IMPLICATIONS

The twenty-year period of time between the two world wars was selected for this study for several reasons. The signing of the Treaty of Versailles, President Wilson’s creation of the Committee on Public Information, and Hoover’s emergence as the leader of the engineering profession were each a watershed event related to this investigation. According to William David Sloan, a journalism education historian, journalism educators faced four major challenges between the two world wars.

(1) They had to establish programs in journalism education that were both practical enough for the profession they were trying to serve and scholarly enough to reside in academia.

(2) They had to recruit into their ranks people who were skilled and experienced in the profession but were also committed to teaching and to the concept of journalism education.

(3) They had to develop a curriculum that would go beyond the teaching of basic reporting, writing, and editing courses.

(4) They had to produce a literature of journalism education—a body of material from which journalism teachers could choose course material and upon which the discipline of journalism education could build.¹

As described in Chapter Three of this study, engineering educators and professional association members perceived several threats to their prestige which seemed to converge in 1930. These threats included union popularity, Hoover’s failure, and the Great Depression. The high esteem, power, and pride association members held previously quickly diminished between 1920 and 1930. By 1939, the second world war was beginning, the Depression was coming to an end, and the United States government had identified both journalism and engineering as professions. These newly recognized professions would have both old and

¹ Sloan, 25.
new challenges to face by the end of World War II. For these reasons, the period of time between 1919 and 1938 was selected for this study.

This goals-based evaluation measured how effectively professional associations attained their objectives. By using the formal organization approach of the process model of professionalization, I examined, described, and analyzed documents to identify the actions taken by journalism’s and engineering’s associations to initiate and maintain specific strategies employed by their respective accrediting agencies. The analysis focused on the location of, the access to, the completion of, and the practice with journalism’s and engineering’s bodies of knowledge in order to answer what the associations hoped to gain, which strategies were selected and their effectiveness, and the effects on journalism’s and engineering’s professional education programs.

This final chapter includes conclusions based on the findings of this study and suggestions for how the conclusions can be applied to current and future practices. In addition, suggestions for further research are presented.

**Main Conclusions**

This investigation led to seven conclusions: (1) close coordination at the national level leads to desired, mutual goals to be attained more quickly; (2) accreditation needs support of united professional associations at the national level; (3) journalism made more progress toward national accrediting between 1919 and 1938 than engineering; (4) uncontrolled growth of professional education leads to articulation problems; (5) between the two world wars, members of journalism’s associations were proactively setting goals at the national level while members of engineering’s associations were reacting to their environment when setting goals at the national level; (6) controlling access to practice may be more important than controlling the location of, access to, and completion of professional education; and, (7) neither journalism nor engineering fully professionalized between 1919 and 1938 if, as scholars assert, successful closure of the body of knowledge indicates professional status.
National Coordination Fosters Goal Attainment

Close coordination of professional associations sharing the same body of knowledge at the national level leads to mutually desired goals being reached more quickly. Journalism associations were more coordinated than the engineering associations between the world wars. This may explain why more national goals were set and strategies were implemented more quickly by members of journalism’s associations than by members of engineering’s associations. The American Association of Teachers of Journalism (AATJ), the American Association of Schools and Departments of Journalism (AASDJ), and the Council on Education for Journalism (CEJ) recommended twenty-three strategies and enacted eighteen. Although the Society for the Promotion of Engineering Education (SPEE) recommended twenty-five strategies, only seven were implemented. Of these seven, two were very effective. The uncontrolled expansion of the location of engineering education, however, caused an articulation problem. Engineering societies focused attention primarily on non-educational matters, especially prestige of the practitioners and the profession of engineering. Although engineering societies shared the same prestige goal, they did not work together or with engineering educators to attain this goal until 1932. Once the engineering organizations united by creating the Engineers’ Council for Professional Development (ECPD), the goal remained the same. National strategies to achieve this goal were only selected and planned for full implementation in 1938. Once unification occurred, the engineering organizations became more effective in setting goals and probably in enacting strategies to attain them.

Unity Needed for Accreditation

Accreditation of professional schools needs support of professional associations united at the national level and is most effective when a group of members are charged with the primary responsibility to assess and evaluate the schools against set standards. Although both journalism and engineering associations initiated classification of their respective schools of professional education before 1919, neither actually accredited their schools until the associations included educators united at the national level and recognized professional education as an important component of professionalizing the respective
occupations. Accreditation, “the process whereby an organization or agency recognizes a college or university or a program of study as having met certain pre-determined qualifications or standards,” informally began in 1917 and formally in 1924 for journalism and informally in 1935 for engineering.\(^2\)

Journalism standards, accepted universally by the AASDJ and the CEJ memberships, were used to evaluate every school of journalism which applied for accreditation or AASDJ membership. Lists of those schools receiving accreditation were published nationally and this provided models for non-accredited schools to emulate. Engineering school standards were not pre-determined, not nationally accepted, nor consistently upheld at every visited school of engineering in the country. Rather, each school was subjectively judged by the various ECPD members making the visitations. Also, during the period under investigation, there was no sense of accountability for those schools of engineering not accredited, nor a model school upheld for others. Accredited schools of journalism, especially Class A schools, were considered the model schools for all other schools of journalism to emulate. Accountability for those schools not accredited with Class A or Class B status was upheld by the absence on published lists of those institutions’ names and by ineligibility for AASDJ membership.

**Progress Toward Accreditation**

Many educators of the professionalizing occupations wanted their professional schools to reflect national leadership, guidance, and direction. This conclusion is supported by the evidence of the creation of professional associations whose memberships primarily consisted of professional educators, the recommendation for unity of the associations, and the creation of specialized accrediting agencies. Examples include the AATJ, the AASDJ, and the SPEE. These educators desired formal recognition for their schools by achieving nationally-accepted goals set through accreditation. Journalism educators wanted their schools of journalism accredited by the AASDJ and the CEJ, and later the National Council on Professional Education for Journalism (NCPEJ), throughout the twenty years under study. Qualifying

standards were set and consistently raised at the national level, and available on request for each school and department of journalism in the country. Once the educators believed their school of journalism met those published standards, an application was submitted to the CEJ for accreditation. If standards appeared to be met or exceeded, the CEJ visitation members were dispatched to the institution for a first-hand appraisal of the school of journalism’s accomplishments. If the visitation team believed all standards were met or exceeded, the CEJ recommended the school of journalism’s application for approval by the AASDJ, and possible AASDJ membership.

Unlike the journalism educators, the engineering educators who requested guidance were presented with recommendations via the Wickenden Report, and were left on their own by the professional societies to act in whatever ways the educators desired. Even when “accreditation” began in 1935, no list of pre-determined, nationally-accepted standards was issued to the engineering educators for adoption. Instead, the accreditation visits were more like classification visits to determine which schools of engineering, in the view of the ECPD visitors, provided adequate facilities, offered students comprehensive curriculums, and employed qualified teachers. These classifications were based on criteria deemed important by visitation members, not nationally-approved standards to be met or exceeded by all schools of engineering.

Since 1938, both journalism and engineering education programs have been reviewed for accreditation by their respective agencies. In 1947-1948, thirty-five schools of journalism were accredited with journalism’s highest form of accreditation and by 1958, forty-five schools received accreditation. In 1965, forty-seven schools offering journalism education were accredited, and in 1987, the number of schools increased to eighty-nine. Currently, 108 schools of journalism are accredited by the Accrediting Council on Education for Journalism and Mass Communications (ACEJMC). According to the ACEJMC’s website, only one school of journalism located outside the United States has received ACEJMC

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3 Moeller, 119-120.
4 Emery and McKerns, 72.
accreditation. In 1952, 149 schools of engineering were accredited by the ECPD, and by 1957, this number increased to 153. By 1990, over 400 institutions had received the Accreditation Board for Engineering and Technology (ABET) accreditation for at least one of their engineering education programs. Although ABET does not accredit schools of engineering outside the United States, it does recognize schools of engineering in eight foreign countries as “substantially equivalent.” Although accreditation is very costly, most institutions of postsecondary education and their professional degree programs highly desire accreditation.

Problems of Articulation

The leadership of journalism’s associations had few difficulties enhancing articulation for two reasons. One reason articulation did not become a primary concern of the members of journalism’s associations was the first two years of college education did not include journalism’s professional education. Instead, the first two years required a general, liberal arts education while the second two years included journalism’s professional education. As long as applicants to a school of journalism had received a high school diploma or its equivalent, were admitted to a regionally accredited college or university, and successfully completed two years of general education or its equivalent, they were admitted to the accredited schools of journalism. The second reason articulation was not problematic for the members of journalism’s associations is they took care to accredit only four-year schools of journalism, not community and junior colleges, high schools and vocational schools, or correspondence schools. The leaders of the journalism associations actively and publicly discouraged the growth in numbers of non-four-year programs of journalism education and those four-year programs deemed unlikely to ever be accredited.

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6 This school of journalism is in Chile and received accreditation in 1998.
7 Armsby, 73; Everitt, 108.
8 Benmark, 176. For a complete list of ABET-accredited programs, see the ABET’s website, (http://www.abet.org/accreditation/accredit.htm).
9 These countries include Colombia, Iceland, Korea, Kuwait, Mexico, The Netherlands, Saudi Arabia, and Turkey.
Students transferring from these non-accredited schools were not easily admitted to accredited schools of journalism. Because of the efforts by the memberships of the journalism associations to convince newspaper editors and owners to hire only graduates from accredited schools of journalism, many individuals who aspired to become journalists were strongly encouraged to acquire an accredited journalism education and discouraged to do anything else. This was evidenced by the increasing number of schools and departments of journalism that attained accreditation between the two world wars. After World War II, the number of junior and community colleges rose dramatically. Further investigation of articulation between these colleges and the schools of journalism is suggested.

Between 1919 and 1938, the members of the engineering associations did not address articulation issues. Because engineering education was not valued more than practical experience, very little attention was paid by members of the engineering societies to education. Moreover, little attention, in comparison to journalism’s associations membership, was given by engineering educators to articulation. The engineering educators, especially the members of the SPEE, encouraged the growth in the number and types of institutions offering engineering education. High schools, preparatory schools, vocational schools, technical institutes, and junior and community colleges were all encouraged to offer engineering education to any person who desired to someday practice engineering. Without engineering education standards, without formal engineering school accreditation, and without national leadership, guidance, or direction, there was no articulation of engineering education. During the period under study, no evidence was discovered that suggested any attention was given to articulation. This problem is suspected to have magnified after 1938, because today, the members of engineering’s organizations and engineering educators are dealing with many articulation issues, such as standardizing entrance requirements, measuring student outcomes, and determining credit-transfer equivalencies. It is suggested further research focus on how members of the engineering organizations and engineering educators attempted to address articulation issues since 1938.
Proactive vs. Reaction Response to Environment

The members of journalism’s professional associations were proactive while members of engineering’s organizations were reactive. Between the world wars, journalism educators raised the prestige of journalism education in relation to experience. By the end of the 1930s, many editors preferred hiring employees who had been college educated, especially if the applicant held a Bachelor of Arts in Journalism degree. Engineering educators did not appear to have affected the prestige level of formal education for the engineering profession. The members of the engineering associations, especially those of the discipline-related societies, believed prestige had been lost for the profession during the 1920s. This belief, coupled with the fears instilled by the Depression, the popularity of unions, the perceived failure of United States President Hoover, and the confusion held by engineering educators who believed they lacked guidance and direction, all led to a perceived crisis situation for engineering’s professional associations’ memberships. Members of the engineering organizations believed a solution to this perceived crisis was the creation of, and participation in, the ECPD. This solution was a reaction rather than a preventative action.

Practice May be More Important than Education

Controlling access to practice may be more important to raise prestige for the profession than controlling access to the profession’s education. The united membership of the engineering organizations, in the form of the ECPD, focused all of its energy on just one aspect—the requirements for practice. In 1893, engineering educators who formed the SPEE agreed their mission was to promote “the highest ideals in the conduct of engineering education with respect to administration, curriculum, and teaching work, and the maintenance of a high professional standard among its members.”

Requirements for practice had not been a major subject investigated by those involved in the Wickenden Report. The SPEE did not make any

one of its twenty-five recommendations directed to practice, except as members of the ECPD. Did the
SPEE members change their mission, and not put it in writing? Did they decide requirements for practice
were more important than the location of, access to, and the completion of engineering education? Or, did
they realize to achieve their goals for professionalizing engineering education, they first had to establish the
ECPD to unify national leadership? Evidence collected for this study was insufficient to make a
determination. Collected evidence, however, indirectly suggests that because engineering and engineers
have historically been perceived by members of the American public as more prestigious than journalism
and journalists, there may be something very important here. Perhaps the requirements for practice have a
tighter association with perceived prestige than requirements for education. It may be that enforcing high
standards to enter practice and policing practitioners are the most important aspects of attaining
professional status and enhancing prestige for the profession, and are prerequisites to enhancing prestige for
professional education. This requires further investigation. Also, because the members of the engineering
societies did not seem to associate occupational prestige with its body of knowledge, perceived prestige
may not be as closely related to professional education as is believed by many scholars. This possibility
also requires further investigation.

One of the major differences between journalism and engineering practice is their relationship
with legal, health, and safety issues. Through licensing, which “went hand in hand with ... the growth of
professional accreditation,” the American public can be protected.11 “A more personal aspect is the fact it
lends status to those who are licensed, and helps to raise standards of performance as well as earnings.”12
Beginning in Wyoming in 1907, the licensing, registration, or credentialing of engineers is a legality based
in the power of the State for the protection of health, life, safety, and property.13 By 1970, all fifty states
and the District of Columbia had laws to license or register

... those engineers whose work may affect life, health, or property, or who offer their
services to the public. Generally, registration requirements include graduation from an

11 Orlans, et al., 1.
12 Juvenal L. Angel, Directory of Professional and Occupational Licensing in the United States (New York: World
13 Armsby, 70-71.
accredited engineering curriculum, plus at least 4 years of experience and the passing of a State examination. Examining boards may accept a longer period of experience as a substitute for a college degree.\textsuperscript{14}

The risks of engineering failures far outweigh the risks of journalism failures. If a bridge or skyscraper is poorly designed and constructed, people may be physically and emotionally injured, or die. If a story or report is poorly designed and constructed, people may be emotionally injured, but physical injury or death is unlikely. When an engineering failure occurs, the memory lingers in the public mind. For example, engineering disasters associated with the Titanic, the Hindenburg, Three Mile Island, Chernobyl, and the Challenger are still topics of conversation. Journalism’s failures are given little attention in long-term memory. If surveyed, how many Americans could remember what year Dewey did \textit{not} beat Truman for the American presidency? Did the fact that Geraldo Rivera found nothing in Capone’s vault have a devastating affect on the American public? Although reporters, editors, and newspaper owners have been sued for their journalistic failures, engineering failures carry more severe consequences affecting the health and lives of Americans.

The six common elements, or principles, of all professional licensing laws which guard against abuses include (1) the Board; (2) education and other entry standards; (3) grandfathering; (4) a code of conduct; (5) discipline; and, (6) unauthorized practice.\textsuperscript{15} Licensure is more restrictive than registration or certification.\textsuperscript{16} According to Harold Orlans, the grandfathering in of exempted practitioners has “been one way around the opposition of the old guard to higher professional standards.”\textsuperscript{17} Licensing and registration is the road that engineering took, while journalism took another path--college degrees. Although the college degree can be an indicator of achieved competence to perform, the meaning of a degree “is not the same as licensing or voluntary certification.”\textsuperscript{18} Instead, degrees “serve as prerequisites for admission to

\textsuperscript{14} Angel, 73.

\textsuperscript{15} Jerry W. Miller, “Credentials for Health Administration,” in \textit{Selected Papers of the Commission on Education for Health Administration}, vol. 2 (Ann Arbor, Mich.: Health Administration Press, 1975), 261-262; Rubin, 36-37.

\textsuperscript{16} Rubin, 47.

\textsuperscript{17} Orlans, et al., 11.

\textsuperscript{18} Harris and Troutt, 36-37.
graduate study, entrance into some professions, and the right to take licensing examinations for some occupations." 19 College degrees “convey no standard meaning beyond general statements of intellectual interests and time spent in study.” 20 The professionalizing occupation’s relation to health, safety, and life issues may be reflected in its prestige, the status of its practitioners, and the status of the professionalizing occupation’s education programs. This possible correlation requires further investigation.

**Neither Journalism Nor Engineering Fully Professionalized by 1938**

If successful closure of the body of knowledge indicates professional status, neither journalism nor engineering professionalized between 1919 and 1938. Members of journalism’s associations appear to have been more successful in implementing strategies to gatekeep journalism’s body of knowledge between the two world wars than members of engineering’s organizations. Although only 6 percent of all schools of journalism were Class A accredited by 1940, compared with 76 percent of all schools of engineering, the standards used were very high and consistently applied to all schools of journalism. 21 Standards for schools of engineering were much lower, not pre-determined nor nationally accepted, were inconsistently applied, and, because there was no model school or program for comparison, members of the ECPD’s visitation teams made personal judgments in deciding which and how well whichever standards used were met or exceeded. The purpose of “accrediting” schools of engineering was to provide the ECPD a list of institutions’ names whose graduates received “certain advantages” from enacted state licensing laws, to enhance the practitioners’ and the profession’s prestige, and “to be a stimulus to the best development of engineering education.” 22 What constituted the best development for schools of engineering was not agreed upon before 1939. Because of this evidence, it is concluded that journalism’s associations were

19 Harris and Troutt, 30.
20 Harris and Troutt, 39.
21 Sutton, 106. See Chapter 4, footnote no. 18.
22 Everitt, 107.
more successful than engineering’s associations in professionalizing and gatekeeping their respective professional education.

The members of journalism’s associations acted as the scholars of the professionalizing process. Members of journalism’s associations set goals and enacted strategies to attain these goals. Closure strategies, preferred over associative strategies, were implemented. The process of admitting institutions as members in the AASDJ provides one example of a closure strategy. To become a member institution, the school or department of journalism had to be accredited. In areas where closure strategies would not work from the beginning, the members of the journalism associations implemented associative strategies. For example, in order to help convince editors to hire only journalism school graduates, the AASDJ and the CEJ created the National Joint Committee of Newspaper Groups and Schools of Journalism. This associative strategy gave newspaper editors a first-hand view of how journalism education could produce graduates who were better qualified to be journalists than individuals who had not been college educated. This associative strategy was replaced with a closure strategy as soon as possible. For example, the CEJ, then renamed the National Council on Education for Journalism (NCEJ), merged with the National Joint Council, creating the National Council on Professional Education for Journalism (NCPEJ). The NCPEJ set standards and held schools of journalism accountable to meet or exceed the set standards in order to receive accreditation and national recognition. A non-accredited school of journalism could not be a member of the AASDJ. The NCPEJ evolved into the ACEJMC, today’s accrediting agency for all schools of journalism.

Unlike the members of the journalism associations, members of the engineering organizations did not set joint goals to professionalize their body of knowledge at the national level. Members did not even talk seriously about uniting and setting joint national goals until the 1932 creation of the ECPD. Members of the engineering organizations did not employ closure strategies to restrict access to their body of engineering knowledge. Instead, throughout the twenty years between the two world wars, engineering educators encouraged the growth in numbers of engineering schools and the spread of engineering’s body of knowledge to various types of institutions, including high schools, preparatory schools, vocational and technical institutes, and junior and community colleges. Leaders of the engineering societies took little
interest in engineering education because they valued practical experience as most important. The members of the engineering societies did, however, employ closure strategies to limit access to membership in their organizations. This strategy was enacted to prevent membership of those perceived by the societies’ members unfit for practice and to protect and raise the profession’s and the individual members’ prestige. This closure strategy was replaced by an associative strategy, the creation of the ECPD. According to Staffan Selander, the substitution of an associative for a closure strategy was not extraordinary because of the surrounding circumstances perceived by the members of the engineering societies weakened the effectiveness of the closure strategy. In engineering’s case, the Depression, union popularity, Hoover’s failure, and the growing power of the SPEE, all coupled with the loss of engineering’s prestige had changed the environment. However, the members’ action to replace this long-time successful closure strategy in favor of a then-untried, associative strategy to attain the same goal of protecting and enhancing prestige for the profession and its members, is unusual.

In addition, the majority of scholars who have studied the professionalizing process and defined the professions identified the successful closure of a professionalizing occupation’s body of knowledge as an essential attribute identifying a profession. By this definition, neither journalism nor engineering professionalized before 1938 despite the United States Department of Labor’s listing journalism and engineering as professions in their Dictionary of Occupational Titles. The fact that journalism’s professional education is based primarily in the social sciences while engineering’s is based in the applied sciences did not seem to matter in the professionalization process nor in the perceived achievement of professional status.

Implications

The findings and conclusions of this study suggest implications for current and future practice and research. These include what should be avoided and what should be nurtured to enhance the prestige of professional education, and what aspects of professionalism require more research to fit American standards into other cultures and transfer prestige.
Current and Future Practice

Four implications for practice surfaced from the findings of this study. These implications are related to professional education and accreditation and answer which actions or strategies should be nurtured or avoided to attain professional status and enhance the prestige of professional education.

The selection of strategies to attain goals is important, especially in relation to the environment. Closure strategies do seem to be related more closely with attaining goals quickly than associative strategies. In some environments, such as was the case for both journalism’s and engineering’s professional associations, associative strategies must first be implemented to create the best environment to ensure success of closure strategies. Journalism’s associations, probably because of the newness of their professional education and lack of history, tradition, and competing associations, had less difficulty enacting closure strategies where associative strategies had once been. Quite often, the initial strategy employed was a closure strategy. Historian Albert Alton Sutton asserted that the journalism associations’ failure to achieve for journalism and journalism education the same amount of prestige attributed to law, medicine, engineering, and dentistry and their respective bodies of knowledge, was because their “nation-wide efforts did not get under way until many years later than any of the other four professions.”

No evidence discovered during this investigation supported or challenged this assertion. The engineering associations, with their long histories and traditions, experienced a number of challenges from their environment and, once unified at the national level in 1932, employed no closure strategies to gatekeep their professional education and reached none of their goals to professionalize their body of knowledge prior to 1938.

Another important aspect a professional association should address is articulation. Articulation issues left unaddressed do not improve by themselves. They get worse with time. Articulation is most critical when the professionalizing occupations’ or profession’s body of knowledge is housed in a variety of institution types, and formal accreditation is not performed. Without articulation, students who transfer

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23 Sutton, 107.
from one institution to another may face difficulties such as having to repeat courses already
successfully completed or missing out on important content knowledge because it was assumed by
personnel at one institution students would learn this knowledge at another institution. Lack of articulation
may also cause problems for institutions. Without knowledge of what is being taught and learned at feeder
schools, efforts and expenses to educate transfer students may be unnecessarily and inefficiently spent.
Professional associations should help coordinate articulation efforts between institutions. If articulation is
simplified and enhanced between professional education programs claiming the same body of knowledge,
accreditation efforts to identify quality education are simplified and enhanced.

Associations should also keep the American public educated and informed. What professional
education can and should do, what to expect from practicing professionals, and how determinations are
made to accredit professional schools are important aspects of professionalism that should receive attention
from professional associations and college personnel, including faculty members and students.
Accreditation itself is rarely understood, even by administrators and educators in today’s colleges and
universities. Coordination and consistency of the actions by members and leaders of professional
associations at the national level are highly desirable because they provide leadership, guidance and
direction for the profession’s educators, and make educating the American public easier by reducing
conflicting information about the goals of the profession, professional education, and its practitioners.

Proactivity by members of the professional associations should be nurtured. Having to react to a
situation or a changing environment that has not been given previous attention and thought should be
avoided. Evidence which supports this conclusion includes the many accomplishments achieved by
journalism associations’ members in the twenty years between the two world wars which are chronicled in
this study as compared with those few accomplishments achieved by engineering organizations’ members.
Because the journalism associations chose to model their professionalization process after medicine’s,
some of the surprises were avoided. Engineering organizations selected no model to follow and therefore,
blazed their own trail. Perhaps if engineering had modeled its professionalization process after another

24 My belief in keeping all stakeholders informed is shared by others. For example, see William R Dill, “Specialized
profession’s, many of the problems engineering faced after World War II, such as those associated with articulation and accreditation, could have been avoided.

**Research**

Several implications for research also surfaced from the findings of this study. These implications are related to the differing experiences of journalism’s and engineering’s associations’ members and the effects of those experiences on their respective bodies of knowledge.

Members of journalism’s associations applied closure strategies to all four aspects (location, access, completion, and practice) of journalism’s professional education investigated in this study. Following the pattern of professionalization set by the American Medical Association (AMA) and its Council on Medical Education, these members addressed more than one aspect to enhance their perceived prestige and the prestige of their body of knowledge. The members of the engineering organizations did neither. They did not use a model for professional education and they focused primarily on professional practice rather than education. These findings imply (1) members of the engineering’s associations were apathetic toward the advantages suggested by the AMA’s experiences of enhancing prestige by closing access to professional education; (2) members of the engineering associations were convinced engineering was so unique, no comparison was possible, therefore, the same results could not be achieved in the same ways; or, (3) members of the engineering associations were aware of something that neither the members of journalism’s associations nor the scholars of the professionalizing process knew. Research on why engineering did not pattern its professionalization process on other successful models needs to be undertaken.

The members of journalism’s associations followed the pattern modeled by the AMA and its Council on Medical Education. Journalists of the 1920s and 1930s, like physicians and surgeons before the 1910 publication of the Flexner Report, were considered unprofessional and stereotyped: just as physicians had been compared with charlatans and quacksalvers, journalists were compared with Phineas T. Barnum,
poets, and advertising agents. The AMA set goals, selected and enacted strategies to reach the goals, and initiated accreditation of its schools offering professional education. The AASDJ and the CEJ did the same things as the AMA and its Council. These actions suggest that journalists and journalism education might have been accorded the same level of prestige that practitioners of medicine and medical education received. This was (and is) not so. Further research needs to be conducted to help explain why different professions are perceived to have differing amounts of prestige attributed to their bodies of knowledge when restrictions on the location, access, and completion seem to be comparable.

The actions by the members of the engineering organizations between the two world wars suggest that the transference of prestige may be closely related to the effectiveness of closure strategies employed to restrict those practitioners deemed unfit by the members of professional associations from practice. This suggestion is implied by the evidence relating the actions of American engineering organizations’ leadership. These leaders, who had experience with engineering being perceived by many as highly prestigious, believed they were losing that level of prestige. They responded by focusing all of their attention on this one element related to their professional body of knowledge—that of practice. In other countries, accreditation-like responsibilities are in the charge of ministries of education which are controlled by state or federal governments. As Harold Orlans pointed out,

Authorities on accreditation often contrast European educational systems, in which standards are set by government ministries, with the distinctive American system in which they are set by private agencies. The contrast is often drawn in terms that suggest that the European system is rigid and most decidedly un-American while ours promotes freedom and variety. But if national standards are bad (in Europe), why are they good (in America), if set by private agencies? And, if these agencies promote set genuine standards, how can they promote variety rather than standardization?\footnote{Orlans, et. al., 3.}

Reasons for attribution of prestige is another area requiring further research. Engineering and engineering education is perceived as more prestigious than journalism and journalism education. This is as true today as it was between the two world wars. In 1936, an opinion survey was conducted to determine the relative prestige of twenty professions as judged by 587 college students.\footnote{Walter Coutu, “The Relative Prestige of Twenty Professions as Judged by Three Groups of Professional Students,” \textit{Social Forces} 14, no. 4 (May 1936): 522-529.} These college
students were studying either medicine, law, or engineering, and consistently ranked engineers higher than journalists. 27

Scholars have asserted different reasons for this situation and several argue that these reasons cannot be addressed to change the order of ranking for journalism and engineering. According to sociologist Theodore Caplow, after the first three steps of professionalization (establishing an association, selecting a name to distinguish the profession from the occupation, and adopting a code of ethics), the fourth step is gaining “public or governmental sanction to limit the chosen occupational title to persons who have met the requirements” for practice. 28 When this fourth step is undertaken, prerequisite training, the setting of standards, and establishing legal sanction are concurrent developments. Journalism has had less success in securing sanction than engineering. According to journalism historian Michael Schudson, journalism is “not among the respected professions” because

... the professions taken most seriously and regarded as most honorable are those with some evident connection to matters of ultimate concern--medicine treats life and death, law considers liberty and justice, the clergy deals with transcendental meaning. Respected professions are also those which deal with what the culture considers important and dignified subjects. 29

Schudson argued that “journalism is about politics,” and that political journalism is the only kind of journalism that the American public takes seriously. 30 But, because politics is considered undignified, even political journalism is not highly respected. Many people believe that journalism is entertainment, not news, and it is increasingly difficult to discriminate between mainstream and tabloid news, especially without regulating criteria. 31 Engineering, on the other hand, is believed by many people to create a safer, more efficient world. Engineers plan and coordinate transportation and communication systems, design

27 In Coutu’s study, 243 engineering students ranked engineering first and journalism sixteenth, 142 law students ranked engineering ninth and journalism thirteenth, and 202 medical students ranked engineering sixth and journalism fourteenth, out of twenty professions.

28 Caplow; Harris and Troutt, 46.


machines that make work safer and easier while creating more leisure time for people, and make possible the safe and abundant use of electricity and water. These theories support why engineering and engineering education is perceived as more prestigious than journalism and journalism education.

Evidence indicates engineering and engineering education, though, are not free of problems. A survey conducted in the Fall of 1991 of science majors at prestigious universities showed “science majors regarded their instruction as too competitive, with too few opportunities to ask questions, taught by professors who were relatively unresponsive, not dedicated, and not motivating.”32 The study found that low grades earned in the first two years of study were related to these factors and contributed to a high attrition rate. Another survey conducted in 1965 found that engineers who graduated in 1955 believed their engineering education was greatly lacking in the teaching of many skills necessary to be successful engineers.33 These skills included management practices, technical writing, public speaking, creative thinking, working with both individuals and with groups, and talking with people, among several other skills.34 Historian Robert Baum asserted “most engineering degree programs are modeled on science programs, with a focus on problem-solving skills and basic theoretical knowledge,” and “little effort is made to simulate ‘real’ employment situations, even in the technical courses.”35 A Committee on the Quality of Engineering Education found in 1982 that classes were over-enrolled, there were faculty shortages, laboratory equipment was either in short supply or obsolete, and there was insufficient space available to educate future engineers.36 The ABET’s 1985-1986 accreditation cycle granted only 28


34 ASEE, 218.


percent of programs visited with full, unprovisioned accreditation.\textsuperscript{37} At the same time, the “not-to-accredit” and “probationary” actions doubled to 21 percent.\textsuperscript{38} Traditionally, 55 percent of all programs visited achieved the maximum accreditation between 1935 and 1980.\textsuperscript{39} The facts all seem to indicate that the quality of engineering education has deteriorated over the last sixty years, yet, engineering and engineering education is still perceived as more prestigious than journalism and journalism education. Reasons why this seems so need to be identified through further research.

Findings of this investigation raise more questions than answers about the definition of a profession, the role of professional education in professionalizing an occupation, and the reasons for attribution of prestige. The analysis of the evidence collected for this study suggests neither journalism nor engineering professionalized between 1919 and 1938 as the United States Department of Labor and several scholars assert, if professionalization requires both the recognition of the importance of education’s role and the effective gatekeeping of the body of knowledge.\textsuperscript{40} This contradiction implies a need for a more accurate definition of a profession and a better definition of professional education and its role in the professionalization process.

\textbf{Suggestions for Further Research}

In addition to those suggestions made above, further research should be directed at several other areas related to this study. One suggestion is to continue this same study from 1938 to the present. Both the ACEJMC and the ABET are currently active and accrediting their respective schools of professional education. Criteria for accreditation has changed, the number and location of accredited institutions have

\textsuperscript{37} National Congress on Engineering Education (NCEE), Resolutions and Recommendations from the 10 October 1986 Meeting of the Program Review Committee, 1-10.

\textsuperscript{38} NCEE, 10.

\textsuperscript{39} NCEE, 10.

\textsuperscript{40} Abbott; Anderson; Barber; Ben-David; Bledstein; Bogue and Saunders; JoAnne Brown; Caplow; Calvert, “The Search;” Carr-Saunders and Wilson; Diner; Freidson, Professional Powers; Freidson, Professionalism Reborn; Geiger; Goode; Greenwood; Gross and Osterman; Haber, The Quest; Hatch; Haug, “Deprofessionalization;” Johnson; Magali
changed, and some of the same problems experienced by the members of journalism’s and engineering’s associations between the two world wars may be still challenging. Some of the problems faced by members of the professional associations may have been solved since 1938. New closure and associative strategies may have been implemented and others may have proved so successful, they are still being used.

Another area for future research includes recent changes in the accreditation process. Like many other professional accrediting agencies including those of teacher education and business, the ABET has recently changed its accreditation focus to evaluating student outcomes rather than the programs themselves. Will this make a difference in education practices? Will this change the quality of future practitioners? Will this change the perceived prestige and rankings of the professions?

Other suggestions for further study of the professions of journalism and engineering include historical research on the curriculum content of both journalism and engineering education, and how the contents of each may have been affected by accreditation standards over time. Case studies of individual schools of journalism and/or schools of engineering from the perspective of the professional educators of the schools would be valuable, especially in comparison with the findings presented in this study. These case studies might include schools within the same institution, or between institutional types, like research universities, multi-purpose universities, land-grant colleges, and private institutions. Comparisons could also be made within or between states, and/or regions in the United States. Each of these comparisons could be made for the same time period, 1919-1938, and confirm or challenge the findings and conclusions of this study.

Other suggestions for future research include investigations of professions and professionalizing occupations other than journalism and engineering. Between the wars, accountants, architects, business managers, dentists, forest rangers, librarians, recreation and park managers, school teachers, and social workers, all attempted to professionalize their occupations. Some of these occupations would be considered more successful than others in the attempts to professionalize, and are believed by the American

Sarfatti Larson; Lewin; MacDonald; Marshall; Merton; Moore with Rosenblum; Newell; Parsons; Pavalko; Ritzer; Rueschemeyer; Selander; Turner and Hodge; Wiebe; Wilensky, Logan Wilson, and Young.
public to have differing levels of prestige. Each of these professionalizing occupations would make an interesting comparison to journalism or engineering, and to each other. Each of the professionalizing occupations has identified a body of professional knowledge as its own, and each has some committee, council, or group of individuals who were charged with accrediting responsibilities between the two world wars. Each of these occupations also has an accrediting agency that is recognized today by the United States Department of Education. Specifically in the cases of librarians, school teachers, and social workers, gender of the practitioners becomes an issue of importance. Historically, women’s work was designated within the sphere of domesticity and valued less than men’s work. Work performed by women, even if the work had once been in the domain of men, is valued less than work performed by men. After 1900, more and more women entered the work force, performing jobs that had once been performed by men, like school teaching, library, and social work. The increasing “feminization” of these professionalizing occupations, including journalism, may be one of the “problems experienced” that denied maximum prestige attainment.41 Such studies might increase the understanding of the strategies used by members of a professional association’s who are charged with accrediting responsibilities. The goals of the members of professional associations, the strategies employed to attain the goals and their effectiveness, and the effects of the goals set and the strategies used on professional education, all require further investigation. Another occupation that may provide an interesting comparison is college teaching. These educators, although considered professionals, do not have an accrediting agency, they do not share a common body of knowledge, and each belongs to numerous and varied professional associations. College educators also have the primary responsibility to educate all future professionals, regardless of disciplines.

A final suggestion for future research includes studies related to both regional and specialized accreditation. Accreditation is understood by few individuals, even those employed by institutions of postsecondary education, and the body of scholarly literature devoted to the subject of accreditation is very small. This literature focuses primarily on who does the actual accrediting of a program or institution,

where and how the accreditation takes place, and how and why accreditation was created. The literature devoted to accreditation is also aging. For example, William Selden’s work on accreditation, although considered by many as classic, is nearly forty years old. Very little literature has been produced since the mid-1980s on accreditation and most of the sources available are based on the opinion of a faculty member or administrator who has been involved with one aspect of the accreditation process. Even less of this literature has been based on empirical evidence. There is a great need for historical analyses of both regional and specialized accreditation. There is a void in the body of literature describing and analyzing the interactions between accreditation and educators, accreditation and bodies of knowledge, and accreditation and professional practice in all disciplines, during all periods of time. Accreditation, professionalization, the growth of postsecondary education, and the desires for improving quality and enhancing prestige, have been garnering the attention of educators, scholars, and professionals in the United States throughout the twentieth century. There is no indication that any of these trends are slowing in their intensity as the twenty-first century begins.
Appendix A

LIST OF FREQUENTLY USED ACRONYMS

AASDJ- American Association of Schools and Departments of Journalism (1917).
AATJ- American Association of Teachers of Journalism, previously known as the American
       Conference of Teachers of Journalism (1912).
ABET- Accreditation Board for Engineering and Technology (1980), evolved from the ECPD.
ACEJ- American Council on Education for Journalism (1945), evolved from the NCPEJ.
ACEJMC- Accrediting Council on Education for Journalism and Mass Communications (1987),
       evolved from the ACEJ.
AEJ- Association for Education in Journalism (1950), evolved from the AATJ.
AEJMC- Association for Education in Journalism and Mass Communications (1983), evolved
       from the AEJ.
AICE- American Institute of Chemical Engineers (1908).
AIEEE- American Institute of Electrical Engineers (1884).
AIME- American Institute of Mining and Metallurgical Engineers (1871).
ANPA- American Newspaper Publishers Association (1887).
ASCE- American Society of Civil Engineers (1852).
ASME- American Society of Mechanical Engineers (1880).
ASNE- American Society of Newspaper Editors (1923).
CEJ- Council on Education for Journalism (1924).
ECPD- Engineers’ Council for Professional Development (1932), evolved from the AICE, the
       AIEEE, the AIME, the ASCE, the ASME, the NCSBEE, and the SPEE.
IDPA- Inland Daily Press Association (date unknown).
NEA- National Editorial Association (1885).
NCEJ- National Council on Education for Journalism (1931), evolved from the CEJ.
NCPEJ- National Council on Professional Education for Journalism (1939), evolved from the
       NCEJ and the National Joint Committee of Schools of Journalism and Newspaper
       Groups (1930).
SNPA- Southern Newspaper Publishers Association (1903).
SPEE- Society for the Promotion of Engineering Education (1893).
Appendix B

GENEALOGY OF JOURNALISM'S PROFESSIONAL ASSOCIATIONS

- AATJ (1912)
- AASDJ (1917)
- CEJ (1924)
- NCEJ (1931)
- ASNE (1923)
- NEA (1885)
- ANPA (1887)
- SNPA (1903)
- IDPA (unknown)
- AEJ (1950)
- AEJMC (1983)
- AASDJ
- NCPEJ (1939)
- ACEJ (1945)
- ACEJMC (1987)
- National Joint Committee of Schools of Journalism and Newspaper Groups (1930)
Appendix C

SUMMARY OF THE NATIONAL COUNCIL ON EDUCATION FOR JOURNALISM'S RESOLUTIONS PRESENTED TO THE NATIONAL JOINT COMMITTEE OF SCHOOLS OF JOURNALISM AND NEWSPAPER GROUPS, 1936

1. Graduates of non-Class A accredited schools should not be sent to work without at least one post-graduate year of study.

2. Only schools of journalism that conform to the regulations should be given Class A accreditation.

3. A Bachelor of Arts in Journalism degree should only be granted to students completing the standard four-year program or its full equivalent determined by examination.

4. Eighty percent of a journalism student’s sophomore year should consist of social science courses.

5. The second year may be placed under the authority and direction of the School of Journalism.

6. The third and fourth years should consist of advanced social science course work and specialized subjects in other than journalism, in addition to the regular journalism courses.

7. All courses taken should be recommended by the faculty in the School of Journalism.

8. The proficiency of writing should be determined through examination before graduation.

9. Students admitted to the professional school should bring more than minimum competence.

10. Prior to admission of the graduate courses, students should be evaluated on personal characteristics as well as mental ability and training.

11. Newspaper owners, editors, and publishers should conduct an aggressive campaign against weak schools.

12. Class A schools should be strengthened by adding to the senior faculty.

13. All Class A schools should be provisioned with suitable facilities and equipment.

14. Every school should have a well developed morgue, reading, and reference room for students’ use.

15. Every school should have a training and testing room for students to practice their skills using current events in controlled and supervised situations.

16. Every school should have a newspaper production laboratory.

17. Schools of Journalism should be sharply differentiated from non-professional schools.

18. Cultural study courses should not be accepted as equivalent to journalism’s professional courses.

19. Trade school attitudes toward techniques and skills are to be deplored.

20. Members of the press should be encouraged to make gifts and bequests to the schools.

21. Graduation from a School of Journalism should mean no less than graduation from a School of Medicine.
### Appendix D

#### NUMBER OF ACCREDITED SCHOOLS AND DEPARTMENTS OF JOURNALISM, 1919-1938¹

<table>
<thead>
<tr>
<th>YEAR</th>
<th>CLASS A</th>
<th>CLASS B</th>
<th>TOTAL</th>
<th>YEAR</th>
<th>CLASS A</th>
<th>CLASS B</th>
<th>TOTAL</th>
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<tbody>
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<td>1929</td>
<td>22</td>
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<tr>
<td>1928</td>
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<td>28</td>
<td>48</td>
<td>1938</td>
<td>32</td>
<td>34</td>
<td>66</td>
</tr>
</tbody>
</table>

* In 1926, new standards of accreditation went into effect therefore, schools and departments of journalism were reclassified according to the new standards. The most significant change stated that institutions desiring Class A standing were required to become AASDJ member institutions. Class A accredited schools not AASDJ members were reclassified to Class B standing.

¹ Lawrence W. Murphy, Compilation, 47.
Appendix E

UNIVERSITY OF WISCONSIN (MADISON)'S IDENTIFICATION CARD, 1936

In Conformity with the Standards of the American Association of Schools and Departments of Journalism.

was graduated from the School of Journalism, University of Wisconsin in

Inquiries concerning this graduate, made by mail or telegraph, will be answered promptly.

Director

School of Journalism, University of Wisconsin, Madison

American Association of Schools and Departments of Journalism

State Universities:
- Colorado
- Georgia
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Louisiana
- Michigan
- Minnesota
- Missouri
- Montana
- Nebraska
- Ohio
- Oklahoma
- Oregon
- Texas
- Washington
- Wisconsin

Other Universities:
- Boston
- Columbia
- Marquette
- Northwestern
- Rutgers
- Southern Calif.
- Stanford
- Syracuse
- Washington & Lee

State Colleges:
- Iowa
- Kansas
- Pennsylvania

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1 Hyde, Letter to AASDJ Member Schools, 29 May 1936, photocopy of attachment. This is a scanned photocopy of the front and back of the identification card attached to each letter.
Appendix F

GENEALOGY OF ENGINEERING'S PROFESSIONAL ORGANIZATIONS

ASCE (1852)

AIME (1871)

ASME (1880)

AIEE (1884)

SPEE (1893)

AICE (1908)

NCSBEE (1920)

ECPD (1932)

ABET (1980)

NSPE (1934)

Accreditation Board for Engineering and Technology (ABET). http://www.abet.org

Accrediting Council on Education for Journalism and Mass Communications (ACEJMC). http://www.ukans.edu/~acejmc


---. “Presidential Address: Medical Schools, Law Schools and Schools of Journalism.” *Journalism Quarterly* 8, no. 1 (Mar. 1931): 196-211.


Banner, Franklin, ed. “News Notes.” Journalism Quarterly 8, no. 2 (June 1931): 305-316.


Constitution of the American Association of Schools and Departments of Journalism (AASDJ), 1917.

Constitution of the American Association of Schools and Departments of Journalism (AASDJ), 1919.

Constitution of the American Association of Schools and Departments of Journalism (AASDJ), 1921.

Constitution of the American Association of Schools and Departments of Journalism (AASDJ), 1938.
Constitution of the American Conference of Teachers of Journalism [later known as the American Association of Teachers of Journalism (AATJ)], 1912.


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National Congress on Engineering Education (NCEE). Resolutions and Recommendations from the 10 October 1986 Meeting of the Program Review Committee, 1-10.


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Traynor, Mimi. E-mail to author. 17 Nov. 1999.


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Wilson, Woodrow. President’s Address. “School and College.” In Proceedings of the Association of Colleges and Preparatory Schools of the Middle States and Maryland, 73-89. Philadelphia: Middle States Association of Colleges and Schools, 1907.


Mary Kathleen Silva received her Doctor of Philosophy degree in Higher Education from The Pennsylvania State University (University Park). Her emphasis is in accreditation, articulation, and assessment, and her minor is in United States History. She received her Bachelor of Arts degree in Social Science with distinction from San Jose State University in 1992 and her Master of Arts degree in Curriculum and Instruction, Secondary Education, from California State University, Stanislaus in 1996. She has earned two professional clear teaching credentials, one in Social Science (1993), and one in English (1994). She has taught at both the high school and college levels.

Her recent scholarly activities and experiences include peer review process reading for the American Society for Engineering Education (ASEE), the American Educational Research Association (AERA), the American Association of Colleges for Teacher Education (AACTE), the Frontiers in Education (FIE), and the Association for the Study of Higher Education (ASHE). She is a member of the educational honor society, Pi Lambda Theta, Alpha Kappa Chapter, and she has been the an officer in the Higher Education Student Association (HESA) at The Pennsylvania State University since 1998. Kathleen was selected to participate in a pilot study of electronic dissertation submission and her dissertation is available on-line (http://etda.libraries.psu.edu/).

Kathleen is currently the Coordinator of the NSF-sponsored Engineering Coalition of Schools for Excellence in Education and Leadership (ECSEL)’s Articulation 2000 Project which is designed to help two- and four-year schools prepare for engineering accreditation under ABET’s Engineering Criteria 2000, which focuses on student learning outcomes. She has been awarded a postdoctoral scholar’s position at The Pennsylvania State University for Summer 2000 to continue her work with ECSEL’s Articulation 2000 Project.


With her interest in higher education and United States history, and her skills, qualifications, and experience with accreditation, articulation, and assessment, Kathleen hopes to work as a consultant for either a regional or specialized accrediting agency or as an accreditation liaison administrator at a postsecondary institution in California.