Visionary of Control: The Efficiency, Expertise, and Exclusion of Alexander James Inglis

Heidi Tilney Kramer
University of South Florida

Follow this and additional works at: https://scholarcommons.usf.edu/etd
Part of the American Studies Commons

Scholar Commons Citation

This Thesis is brought to you for free and open access by the Graduate School at Scholar Commons. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Scholar Commons. For more information, please contact scholarcommons@usf.edu.
Visionary of Control: The Efficiency, Expertise, and Exclusion of Alexander James Inglis

by

Heidi Tilney Kramer

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts
Department of Humanities and Cultural Studies
College of Arts and Sciences
University of South Florida

Major Professor: Daniel M. Belgrad, Ph.D.
Robert E. Snyder, Ph.D.
Elaine Y. Smith, Ph.D.

Date of Approval:
July 9, 2010

Keywords: Dewey, secondary, education, Conant, Cubberley

Copyright © 2010, Heidi Tilney Kramer
Table of Contents

Abstract.................................................................................................................................................. ii

Introduction........................................................................................................................................1

Chapter 1: Formulating the Problems in American Secondary Education.................................10

Chapter 2: Transformation of Secondary Education in the United States.................................26

Chapter 3: Legacy of Alexander James Inglis..........................................................................40

Conclusion........................................................................................................................................51

Notes ...............................................................................................................................................55

Bibliography..................................................................................................................................61

About the Author
Visionary of Control: The Efficiency, Expertise, and Exclusion of

Alexander James Inglis

Heidi Tilney Kramer

Abstract

Alexander James Inglis was the key contributor to changes enacted in education during the Progressive era. He instituted an administrative and curricular hierarchy in order to create social organization during a chaotic time in American history, thus advancing professionalism in teaching and systematizing a future workforce - teaching previously had no standards, and throngs of immigrants overwhelmed the school system. While necessary at the time, this system of centralization, homogenization, and sorting continues to result in exclusion in secondary education and middle schools. Categorization is Inglis’ hallmark in his work in education, following Frederick W. Taylor’s managerial practices, and he influenced Ellwood P. Cubberley and James B. Conant. Using John Dewey’s words - but with different meanings and purposes – Inglis and his associates reworked education in a way that made the state responsible for choosing academic or vocational training for pupils despite family objections. Michel Foucault reveals the control techniques used by schools: the examination, normalizing judgment, and hierarchical observation. These parallel Inglis’ categorizing standards.
Introduction

Alexander James Inglis was a proponent of efficiency and expertise in the Progressive era. He was largely responsible for creating the structure under which newly created high schools would conduct themselves. Though his name is not heard often in academic circles today, he was influential in many ways. Inglis not only increased the mandatory age for compulsory school attendance by reinventing secondary education, he made suggestions for middle schools, such as implementing sorting long before high school. He generated “organizing principles upon which to construct a new, responsive social institution.”¹ These “organizing principles” led to increased efficiency and expertise both in the classroom and in control over it. This system also initiated the categorization of students and academic classes according to “intelligence,” thus paradoxically expanding exclusionist policies in order to promote “democracy.” Inglis discusses the importance of promoting certain students over others, in effect, to guarantee the continuation of the republic:

The American democracy depends for its existence and success on the social consciousness and social cooperation of its citizens. Unless the school can make a significant contribution to the development of social consciousness and social cooperation it must fail in one of its most important purposes. In the endeavor to make that contribution great responsibility must rest on the secondary school wherein is trained that somewhat select group of individuals who must ultimately exert the greatest influence on our social and civic life.²
Inglis was a major figure in using education to encourage the intellectual elite to fulfill their duties to protect the country’s democratic ideals, yet there is little scholarship about the man who devoted himself to changing American education. The only major study of Inglis is William G. Wraga’s *Progressive Pioneer: Alexander James Inglis* (1879-1924) and *American Education*, a portrayal of Inglis as an unsung American hero of the Progressive era. Praised by some, but ignored by most, Inglis’ methods of categorization imprinted on the school system the class stratification which was also taking place in society at large.

The industrialization, immigration, and urbanization that disrupted America after the Civil War provided a legitimate impetus for Inglis’ attempt to bring standardization to American education. Nineteenth-century American school systems were locally based and there was little interaction between them; in addition, no regulation of the teaching profession existed. Robert H. Wiebe calls the whole of America during the nineteenth century, “a society of island communities.” During the 1880s and 1890s, an emergence of social scientists as professional problem solvers launched alternative plans which brought cohesive administrative and curricular changes to education. As cities filled with people new to America’s shores, many suggested plans which would aid society. Among them was Danish immigrant, Jacob Riis, who became an expert on urban reform at the turn of the century. He proposed the three-step process of language training, craft training, and model tenements, yet this did not provide the extensive overhaul educational leaders wished. Their plan involved using the school system as the ideal place in which to socialize mass society.
Scholars place the Progressive era within distinct dates and in different contexts. The benchmark dates are from 1901, with Teddy Roosevelt’s ascendency to the presidency, until the United States entered World War I. Robert H. Wiebe places it between 1877 and 1920, and sees it as a time when society broke down and formed a new system around “the regulative, hierarchical needs of urban-industrial life.” Glenn Porter suggests in *The Rise of Big Business 1860-1920* that the Gilded Age was “one of the most critical periods in American history.” It was the many problems during this era which advanced solutions in the period which followed. The education system provides a way to analyze the whole society. Changes in education during the Progressive era are illustrative of what occurred in all professions of the day - and these changes had far-reaching effects on American society. After Reconstruction (1877), the United States quickly industrialized in railroads, meat-packing, iron and steel, manufactured goods, etc. Under laissez-faire, this rapid growth resulted in safety concerns, sanitary problems, slums, and crime. Natural resources – coal, lumber, oil, precious metals, minerals – were exploited along with human resources. Independent, small businesses were taken over by monopolies. Trusts provided hegemony over disorganized business dealings, but came with costs - competitive and human. The government, finally, had to step in to control and order through the courts, Congress, and state legislatures. It is this historical context which brought the education system under scrutiny.

As business expanded, times became more desperate for workers. In 1877, workers opposing wage cuts ignited the Great Railroad Strike. Over the next few decades, membership in national movements, such as the Knights of Labor and the American Federation of Labor, rose dramatically. The slump in crop prices during the
final two decades of the nineteenth century made it more difficult to own land. In the 1880s, cattle barons in the west fenced off large tracts of grazing land with barbed-wire, edging out small farmers and ranchers. The number of women in the workforce increased as some struggled for suffrage. The last decade brought an economic depression which hurt small business, as railway and steel workers staged strikes in Chicago and Pittsburgh (Pullman and Homestead).  

By 1910, Ford introduced the symbol of dehumanization in his Highland Park, Michigan, facility: assembly-line production. “Taylorism (the scientific study of management and production) plus Fordism equaled Americanism,” was the German phrase of the day. Worker dissatisfaction was not the only indication of serious social problems.

Competition for employment in over-crowded cities exacerbated an already dangerous situation. From 1916 through the 1920s, Southern African Americans moved north in unprecedented numbers to find jobs and escape Southern repression and racism. Asian and European immigrant workers settled in large cities in the United States, which increased racial and ethnic tensions. At the turn of the century, immigrants in the United States composed thirty-percent of the population in major cities. Many ‘native’ Americans from the first wave of immigration felt that incentives and penalties were needed to inculcate American values in the new citizens. In 1919, nationwide race riots resulted in hundreds injured and dead.

Schools of the late-nineteenth century were charged with acculturating and assimilating the children of southern and eastern European immigrants whose numbers surged in the 1890s. The compulsory school laws passed between 1870 and 1890 required educating children who would normally have been in the workforce; the
increasingly overwhelmed schools were given the additional task of “preparing a heterogeneous population of children to function in the complex and fluid urban industrial society that was emerging.”  

In fact, it became imperative to industrialists and the nation’s economy to find the right type of workers to fill jobs. Twelve-percent of whites could not read, compared with fifty-percent of African Americans. Between 1880 and 1900, American public schools dramatically increased from eight-hundred to six-thousand. College enrollment grew from 52,000 in 1870 to 157,000 in 1890, and professors increasingly had doctorates.

Many immigrant workers were suspicious of anything meant to assimilate their offspring into the mainstream. Some wanted their children alongside them in the workforce, but many were convinced that school attendance might provide a better life. In 1904, the National Child Labor Committee was formed to fight employment of young children. Investigative “muckrakers” - the expose journalists of the time - aroused the country’s social “conscience” through the press. Photographs of immigrant worker slums and the children who resided there at once shocked, repulsed, and solicited sympathy from the public.

As different types of people were pitted against one another in the 1890s, the Doctrine of Social Darwinism fueled debate. Approximately forty years earlier, in 1851, the British philosopher and sociologist Herbert Spencer (1820-1903) applied Darwin’s theories to society and first coined the phrase, “survival of the fittest,” as part of his philosophy of “Social Darwinism.” In order to justify European colonization and domination, as well as Western hegemony and the unequal distribution of power and wealth, he appropriated pieces of Darwin’s theory of natural selection. As Jacob Riis
pointed out in *How the Other Half Lives*, Spencer’s “philosophy” afforded an excuse for the wealthy and powerful to neglect those less fortunate, since it was ‘nature’s way’ that the ‘most fit’ survive. 16 Darwin began to use the term himself interchangeably with “natural selection” in the 5th edition of *Origin of Species*, published in 1869, despite objections by naturalist Alfred Wallace and others. 17 Francis Galton, an English scientist and a cousin of Charles Darwin, coined the term, “eugenics” to describe the notion that the ‘unfit’ – the mentally and physically handicapped, the poverty-stricken, the criminal, etc. – are so due to heredity. Galton and others believed in perfecting the human race by “getting rid of its ‘undesirables’ while also multiplying its ‘desirables.’ ” 18

This idea that some races, ethnicities, and types of individuals (women, for example) were inferior led men, like Edward L. Thorndike (1874-1949) and G. Stanley Hall (1844-1924), prominent in Progressive educational reform, to devise tests to measure an individual’s “fitness.” Hall was the first person in the United States to receive a Ph.D. in psychology (1878). After going to Germany for post-graduate study, he returned eager to lead American experimental psychology; in 1881, he accepted a lectureship in pedagogy and philosophy at Harvard. Hall was a Social Darwinist who felt that social reforms might retard natural social progress. 19 Hall surrounded himself with eugenicists of the day, including E. A. Ross and J. F. Bobbitt. Bobbitt despaired in Hall’s *Pedagogical Seminary* in 1909 that little could be done for the child of “worm eaten stock.” 20 Hall taught L. H. Terman, H. H. Goddard, J. McKeen Cattell, and John Dewey. “All except Dewey were strong advocates of eugenics throughout their careers.” 21 Hall initiated the American child study movement, and worked with the National Education Association, creating instructional booklets for teachers on how to observe children
properly. He founded the American Journal of Psychology in 1887, and organized the American Psychological Association in 1892, becoming its first president. These are all signposts in the maturation of the field. While arguments flared over the potential of certain individuals, theories were formed by many educators which advanced disparity between races, ethnicities, classes, and genders.

Many Americans were terrified of the changes facing society, including the newly industrialized landscape; however, the aspiration of the people was increasingly changing from one of virtuous self-sufficiency to new, capitalist system workers bent on becoming part of a new consumer culture. Michael McGerr quotes the economist Richard T. Ely who stated: “the wanton luxury of our period…is not merely the rich who stand condemned, but the disposition which is found in all social classes…the disease is, indeed, widespread.” The rising middle class refused to become thwarted; indeed, this “‘new’ middle class of managers, bureaucrats, and professionals and the ‘old’ middle class of petty proprietors, despite differences in occupation, shared important bonds.” The lower and middle classes aspired to have the same luxuries as the ‘upper ten.’

Woodrow Wilson, President of the United States from 1913 to 1921, had much to say about America’s changing workforce. He wrote, “Princeton in the Nation’s Service,” as a professor in 1896. Wilson eventually became president of Princeton University (1902), where he severely enforced academic standards, added administrative departments, and took control of faculty nominations from the trustees for himself. In 1904, Wilson “led the faculty in instituting the most significant curricular reform in American higher education in the twentieth century.” He revolutionized the teaching system a year later, made the university non-sectarian, and added buildings for
instruction, a gymnasium, over two-hundred acres of prime real estate, and Lake Carnegie. An argument between Wilson and other colleagues over the placement of the graduate college prompted Wilson to accept the Democratic nomination for the New Jersey governorship. He was elected, and this became a stepping stone to the White House. The Democrats found in Wilson a man of high standards and impeccable character which their party needed. Although Wilson was nicknamed the “schoolmaster in politics,” he had this to say: “Our problem is not merely to help the students to adjust themselves to world life…our problem is to make them as unlike their fathers as we can.”

In this tumultuous age, measurement, organization, and categorization became the keys to imposing order on perceived chaos. Frederick Winslow Taylor came up with the idea of scientific management – studying and compiling data in order to problem-solve - to control workers in factories and other American institutions, including education. Taylorism in education emphasized the benefits of streamlining the classroom; placing trained, administrative experts in the school system; and reworking pedagogy as a way to ensure an effective labor force in a rapidly changing world. As class warfare seemed to loom on the horizon, Alexander James Inglis sought to protect the nation by instituting changes in the education system.

This thesis seeks to address Inglis’ place in American education, and aims to establish him as the primary architect of the education system of today. By building on the theories of Frederick W. Taylor and changing the meaning of John Dewey’s words, Inglis – who influenced Ellwood P. Cubberley, education administration leader, and James B. Conant, Harvard president – became the key designer of changes enacted in
education during the Progressive era. He instituted an administrative and curricular hierarchy in order to create social organization during a chaotic time in American history, thus advancing professionalism in teaching and systematizing a future workforce.
Chapter 1: Formulating the Problems in American Secondary Education

Educational reformers tried to shape American schools in transformation, but they disagreed about what exactly should be implemented. Many academics felt all should be guaranteed a college preparatory high school education, while others thought secondary schools should offer a range of subjects to accommodate all types; still others felt there should be a division between academic and terminal students (those not going on to college after high school), the latter often being judged according to ethnic, social, and economic status.

One of the major thinkers in education was John Dewey. Clearly, Dewey did not intend for his words to promote the expertise movement. Dewey felt that his college-level students ought to be trained as experts in pedagogy and become specialists in education; therefore, it is possible to trace ‘scientific expertise’ in the classroom back to him. 29 One finds, however, that this attribution is not exactly accurate, because his words were misdirected by social organizers of the era. John Dewey had founded his experimental University Elementary School at the University of Chicago before the turn of the century (1896), but, in 1902, Dewey’s school was renamed the Laboratory School and essentially taken over by university administrators; in addition, the university added another primary and two secondary schools - one high school with a vocational curriculum, and the other college-preparatory. The new primary school was specifically designed to be a
“demonstration/teacher training” school, which was not what Dewey felt an elementary school ought to be. Not long after the administration changed the name and spirit of his school, Dewey left Chicago. An “unfortunate, almost tragic, dispute” with President Harper prompted Dewey to accept an appointment at Columbia University in 1904. Dewey was, and is, seen as the father of progressive education, but he “did not…always agree with what was said or done in his name and at times scolded some of his followers for their presumed misinterpretation of his ideas.”

Dewey did not like the idea of categorizing people according to their race, ethnicity, intelligence, gender, or class. He argued against Colgate University President George B. Cutten’s remarks that intelligence tests must be used in order for America to sustain a democratic government. Cutten believed the tests should be used to identify the “‘intellectual aristocracy’ from which the nation’s rulers must be selected.” Cutten was for a caste system in America, and felt that democracy for all was “out of the question.” Dewey was against tests and vocational programs which slotted individuals into categories. He wanted education to be inclusive, and bridge all levels of education, “so that it shall be demonstrated to the eye that there is no lower and higher, but simply education.” Dewey wanted elementary and secondary educators to have at their disposal the same skills, knowledge, and training as higher education. Dewey felt that pedagogy must be a “separate department which would train its students to be specialists in education.” He attempted to blend views of psychology and philosophy, and he “argued that philosophy did not need a special methodology, since it is an expanded or more comprehensive psychology.” The philosophy of Dewey was “more a point of view than an integrated assemblage of empirically grounded facts and principles. It was
an outlook on human nature, one that depicted humans as actively striving to explore and to master their world rather than passively reacting to forces impinging upon them from the outside.”

Dewey bemoaned the fact that household and farm-related tasks were missing from the well-to-do lives of city children, and he was annoyed that the atmosphere of traditional classrooms made it a school crime for one child to help another in his task. Dewey felt that providing a child with the proper tools, motives, and participation “instead of a servile dependency” would allow the individual to succeed. The active engagement of students with their materials was the key to Dewey’s plan for the classroom setting.

Dewey advocated, for example, that pupils engage in cooking as a way of learning chemistry and measurements, shop-work to learn construction basics and geometry, and the fundamentals of wool carding and spinning in order to teach historical relevance of clothing. The latter was done in conjunction with the difficult task of processing cotton; in this way, the children learned why their ancestors preferred to wear wool. These tasks are not for the sake of vocational training, but to allow the brain and hands to work with materials, thus engaging the whole person. As part of the fundamental layout for his school, actual laboratories and workshops were available to encourage students’ curiosity. Dewey also planned gardens, and included extensive outdoor activities in forests and fields. Other objectives include aesthetics and exercise, thus connecting lessons to a child’s real-life experience. Dewey felt that if material for a child was not “translated into life-terms,” the child would see the material as purely symbolic and become unmotivated; further, the child’s reasoning powers would not be properly
developed. Dewey’s student-teacher ratio was small – eight or ten in a class – allowing for individual attention. Many have implied that just about any teaching method will produce good results with so low a number in class, yet Dewey’s general respect for his students must have contributed to their success.

Dewey did not believe that a student should have to sit at a desk all day long, and he objected to cramped desks which were nailed to the floor. His ideal classroom was openly linked to other rooms to allow for interaction between students, teachers, and equipment. When setting up his classrooms, he had trouble finding suitable desks and chairs to accommodate the educational, hygienic, and artistic needs of the children. One school supply store dealer said: “I am afraid we may not have what you want. You want something at which the children may work; these are all for listening.” Dewey remarked that this “tells the story of traditional education.” Dewey wanted the students to have space in which to work, and he used the term “hygienic” to mean a type of environment (as opposed to others who used it to mean ‘health’ or ‘purity of race’). As part of administrative duty, he felt the schools should not resemble “drab factory-like structures, spruced up with castle-like turrets, and busts of Julius Caesar.” He wanted well-lit, clean, climate-controlled, well-ventilated spaces with good quality equipment and room for children to play.

Dewey believed in an integrated curriculum, which to him meant incorporating practical and technical studies as a way of revitalizing and challenging traditional education. He did not believe in separating the vocational from the academic, and felt that incorporating social, manual, and industrial activities would help all youth in their quest to earn a living and become useful citizens. Dewey grappled with the issues of the day;
after all, he was living in an age that extolled efficiency and expertise. He dreamed of a cohesive education which led an individual from pre-primary through the university level, yet he was aware of the effect of the technical revolution on education. He did not want students “sitting through” academics which bored them, nor did he wish for students to be in the workforce ‘watching the clock.’ He felt that students should have “a broad understanding of the nature of industry and technology, a respect for the dignity of work, and an awareness of the social implications of change…insights into the nature of the economic system…the roles of management and labor unions.” 48 Yet Dewey never wished for students to be either on an academic or a vocational track. 49 He also felt that anyone should have the right to achieve one’s potential no matter their gender or ethnicity. 50

The difference between Dewey and Inglis is that the former wished for students to understand and be a part of the “collective,” and for the position of the working man to be elevated in society; while the latter wanted to train groups of students for the needs of industry. Dewey spoke of “a laboratory of applied psychology” and of incorporating the psychological with “sociological principles.” 51 One can see how these vague expressions could be interpreted in many ways. Dewey believed in engaging the mind of a pupil as well as his hands, but statements of this kind could easily lead to systematized testing of students for society’s sake. Although Dewey used the word ‘democracy’ to mean a collective effort which appreciated the unique qualities of an individual, others meant for the ideal of ‘democracy’ to minimize one’s own expression in the name of a greater good; ‘democracy” in the latter meaning indicated rote patriotism and subjugation of the individual.
Many attribute modern education to Dewey, yet it was men like Inglis who used Dewey’s words, if not his principles, to institute long-lasting changes. When Dewey left Chicago, many of his associates, whom he had appointed, left with him; he never again directly worked in pre-collegiate education. In 1909, Charles H. Judd was appointed to lead Chicago’s Lab School toward educational testing. Like-minded educators, including David Snedden, were enacting the same measures. In the 1931 issue of *Eugenics* magazine, Snedden cast the only vote against women’s right to work. A nationally recognized leader in the social efficiency movement, he felt that married women should not be in the workforce, even as teachers. Yet long before 1931, Snedden was influencing policy. In 1916, he was the first to propose replacing a part of the traditional curriculum with vocational blocks. These blocks or “peths,” as Snedden called them, were tiny units which, for example, represented a single spelling word. The peths were to be organized into “strands” representing “adult life performance practices.” A school subject like ‘health conservation’ might take fifty or one-hundred peths, but in order for a student to sufficiently learn to be a good homemaker or farmer, 200 to 500 peths would be needed. A “lotment” was “the amount of work that can be accomplished, or the ground considered, by learners of modal characteristics (as related to the activity covered) in sixty clock hours.” Herbert M. Kliebard calls Snedden’s vision “a caricature of Taylor[ism].” Snedden and Charles Prosser (another advocate of trade-training), were attacked by Dewey, who felt that, “such a narrow interpretation of industrial education [is] ‘theory gone mad.’”

Snedden’s vision coincided with the “Smith-Hughes Act” (also known as the Act for Vocational Education), which, with the major support of business groups and even
organized labor since 1906, was finally signed into law by President Wilson “on the grounds of national defense” in 1917. Under the United States Federal Board for Vocational Education, millions of federal dollars went to the newly created Departments of Agriculture, Labor, Education, Commerce, and others. The Board was to initiate reports and studies, and administer funds granted to the states to train and pay directors, teachers, and supervisors for industrial trade subjects, including home economics and agriculture.

Yet the school system still desperately needed an overhaul. In 1892, a team known as the “Committee of Ten” (officially called the Committee on Secondary School Studies), was organized by the National Education Association to determine the best standard curriculum. Theirs was the first attempt to standardize curriculum across America. Harvard University president Charles W. Eliot was chair of this committee composed predominantly of educators – many were college or university presidents.

Their report, issued in 1893, advocated eight years of elementary education to be followed by four years of secondary education. Four separate curricula were designed for high schools: two defined as following a classical trend, and two a more contemporary track. Basic courses such as one sees today – history, English, science, foreign languages (language was included in only three out of the four new disciplines), and mathematics – were included. In essence, these new tracks – the Classical, the Latin-Scientific, the Modern Language, and the English - facilitated college matriculation with no vocational training given to the student not planning to attend college. Having had the benefit of four years of weighty study from high school coursework, it was thought that the brain of the terminal student would be developed. It was decided that for “strong and effective mental
training,” fewer subjects would be studied over a longer time period. 60 This system had two advantages over future plans: (1) all students were still offered mainly traditional, academic lessons, and (2) these students were tracked, but not tested. This report was the first successful nationwide change proposed by centralized education reformers. As it was implemented, it began to shift power from local governing bodies to state and national school boards, and paved the way for more reforms to come.

Education in the U.S. was in the process of change. By 1900, nearly all states in the North and West had compulsory school attendance laws, whereas in 1871, this rule existed in only six states. 61 Not only did this group introduce standardized curricula and issue a decree that all should attend high school, the “Committee of Ten” also helped standardize admissions requirements for colleges and universities; moreover, the group recommended that teachers be more highly trained. In addition, “colleges and universities should assist in training teachers [and] universities should establish training courses [for secondary school teachers].” Many conferences were held after the initial meeting to instituting said changes. One of the members who served on the Latin panel was Julius Sachs, head of the Collegiate Institute for Boys in New York City. He was one of Inglis’ professors. 62

Issued by the Department of the Interior Bureau of Education, in 1918, was the “Cardinal Principles of Secondary Education,” (another National Education Association report). Purportedly an extension of the “Committee of Ten’s” report, and contrary to its insistence otherwise, the committee’s conclusion was that very few were worthy of advanced education. There was a distinct shift from the idea of universal education (which included abstract thinking), to a moralistic, separatist curriculum. Inglis was a
member of this committee, and his independent work, *The Principles of Secondary Education*, came out in the same year. The committee recommended that high schools focus on: health, command of fundamental processes, worthy home membership, vocation, civic education, worthy use of leisure, and ethical character. These would come to be known as “the Seven Cardinal Principles.”

It behooves one to understand the definitions and ramifications of these principles. “Health” meant literally maintaining one’s physical and mental condition through effective physical activity and proper health instruction, which involved training in sanitation and hygiene, and the provision of proper equipment and safe environs. “Command of fundamental processes” encompassed oral and written instruction, mathematics, and reading. English language was emphasized to inculcate patriotism. “Worthy home membership” insisted that the home be viewed “as a fundamental social institution” representing wider considerations, which included advancing the learning of housekeeping for girls, even for those planning to enter college or the workforce. It was believed that women would eventually become homemakers, even if they expressed other goals. The committee recognized that many women wanted to pursue the professions, but saw the necessity of keeping family pursuits as their main goal – women had the important job of caring for children and keeping the home for working men. Boys were encouraged to appreciate a well-run home, and to understand fundamentals of household budgeting, food values, and sanitation; mainly, the duty of boys was to be in the workforce. This delineation of gender was to have dire consequences for women. “Vocational” education enlightened students as to their own aptitudes and capacities, and was emphatically recommended, hence the onslaught of excessive testing and measuring.
“Civic” education required learning “loyalty to ideals of civic righteousness,” and encouraged volunteerism. “Worthy use of leisure” fostered extra-curricular interests, and recreational activities organized by the school. “Ethical character” was listed as a paramount objective of secondary education.

The report concludes that these ideas must not be presented in a single ethics course, but integrated into the curriculum. Promoting democracy through one’s work was an “ideal [which] demands that human activities be placed upon a high level of efficiency.” Of utmost importance to the commission appeared to be keeping girls and boys in prescribed roles, and preaching values, yet the overriding goal was to bring all secondary schools in line with the main goal of reorganization - i.e., standardization.

In addition to this report, Inglis also directed a separate account issued called “Moral Values in Secondary Education,” which focused exclusively on ethics in the reorganization of secondary education. Specifically, it called for teaching students to voluntarily participate in group activities for the sake of the common good. This imperative was to be taught in each subject in order to enhance students’ understanding of democracy. This treatise encompasses a full range of ethical notions, including sex hygiene as part of physical education (as long as it is not too prominently featured in front of the youth), and the stressing of human welfare’s dependence on the efficient, trained, moral, scientifically adept homemaker.

Of particular note was the idea that vocational training was a new place to learn the proper spirit under which all tasks should be performed. Qualities such as “accuracy, promptness, a sense of responsibility, self-control…teamwork…[and an] ability to get
along with their fellows” were noted. The idea of seeing both the employer and employee as society’s servants was presented, along with the importance of staying in school as long as possible due to the demand for educated persons who would replace the “self-made” man of yore. In speeches to students who would be future laborers, teachers were asked to “compare the deadening effect of ditch digging or of routine ‘efficiency’ in a specialized process in the factory with the opportunity offered to the employer or superintendent to work his mind vigorously…pupils are keenly interested in the point that brains are developed by overcoming obstacles.” 68 The strategists chose to prepare the bulk of American students for their roles in life by way of inspirational rhetoric.

Between the 1892 “Report of the Committee of Ten,” which advocated ‘learning from,’ and the 1918 “Cardinal Principles,” which advanced ‘being taught to,’ questions arise as to why this extreme intensification occurred. Surely, the First World War played a part. The war was influential in many ways, including combining patriotic duty with work, and encouraging militarization of public schooling. Although the situation in Europe in 1915 helped to boost the United States economy, war mobilization caused widespread rationing in the following years. In 1918 and 1919, an epidemic of influenza killed 500,000 Americans. When the war ended, extensive strikes had partially paralyzed the economy, regulations were being instituted in the workplace, and rioters were in the streets. 69 The “Morals in Secondary Education” report stated: “The war has at last brought home to us the failure of our individualistic methods to solve the problems which call for collective action…We shall be challenged as a nation to prove that efficiency is no monopoly of autocratic governments, but that self-governing democracies too can learn to work together effectively.” 70
The changes between the 1892 report and the one in 1918 are also an acknowledgement of a new and different high school demographic, one which “has been modified by the entrance of large numbers of pupils of widely varying capacities, aptitudes, social heredity, and destinies in life.” This difference was a primary cause for reworking secondary education, and included the introduction of aptitude and intelligence testing. Another cause was the changing job market, which brought about “significant changes as the substitution of the factory system for the domestic system of industry…the use of machinery in place of manual labor…the high specialization of processes with a corresponding subdivision of labor…the breakdown of the apprentice system…the withdrawal of the father and sometimes the mother from home occupations to the factory or store…and increased urbanization.” The authors also mentioned the “important changes [which] have taken place in community life, in the church, [and] in the State.” 71

There were many more children to be educated – “the total number of students going from a half million in 1900 to nearly a million in 1910.” 72 But fewer were graduating: “At present only about one-third of the pupils who enter the first year of elementary school reach the four-year high school, and only about one in nine is graduated.” Because the new educational psychology emphasized “differences in capacities and attitudes,” a reworking of “general values” was necessary, along with teacher responsibility for revising methods to the “laws of learning and the application of knowledge to the activities of life,” as opposed to traditional scientific investigation in study. 73 Vocational guidance led not only to testing, but to ability grouping and differentiated curriculum.
One of the main reasons given for the reorganization was combating problems, which arose in order to fulfill duties as a citizen, a worker, and as an independent person with more leisure time. The authors stated that said difficulties “call for a degree of intelligence and efficiency.” This report, begun three years before final publication, was the result of a 1911 National Education Association committee report regarding “the articulation of the high school and college,” which “urged the modification of college entrance requirements” so that secondary schools might better prepare its students for higher education. In fact, the result was standardization for college entrance among even specialty schools, such as law and medical schools. 74

Recommendations by the framers included not only increasing the number of teachers in the school, but the institution of directors who would be in charge of certain principles. Working under the principal would be Curriculum directors, a Citizenship director, and a director of Preparation for Leisure. The latter was to make sure pupils developed proper outside interests in musical organizations, art classes and clubs, and the school library, so that they would have correct interests in later life. The Health director was instructed to “find out whether the pupils are having excessive social activities outside of school, and devise means for gaining the cooperation of parents in the proper regulation of work and recreation.” 75

The authors stated the leading reason for the reorganization: “American democracy depends in no small measure upon adequate provision for specialization in many fields.” 76 It was felt that students must be aided in determining the quite literal course their lives would take, so vocational and educational goals were to be selected through “a system of educational supervision or guidance.” Differentiated curricula
would separate the vocational programs from the educational elite. Programs such as agricultural, business, clerical, industrial, fine-arts, and household-arts curricula were added. To accommodate various types of students, subjects were to vary widely. For instance, it was thought that chemistry should be vocational or domestic in nature, thus “[emphasizing] different phases in agricultural, commercial, industrial, and household-arts curriculums.” Provisions would be made for students of lesser and greater ability, and even for slow or rapid progress by pupils. 77 Further, it was recommended that “curriculums must be organized at appropriate stages and the work of pupils progressively differentiated.” 78

It was important to society to keep children attending through high school in order to socialize them properly. 79 The plan that “every normal boy and girl will be encouraged to remain in school to the age of eighteen on full time if possible” came to fruition. 80 In this way, school organizers would have ample time to enact “the constants [which] should contribute definitely to unification [and] the curriculum variables to specialization.” This idea of ‘unification’ is far-reaching, especially psychologically. The way to unification was as follows: “participation of pupils in common activities…such as athletic games, social activities, and the government of the school.” 81 Friendships formed between pupils with widely differing goals would learn what they have in common, and this bonding would, in turn, help prepare for life in a democracy. This was more than sentimentalism, for “employers and employees must be able to understand one another and recognize common interests.” 82 This was a good way to prevent class warfare. In fact, the authors even issued a warning:
It is only as the pupil sees his vocation in relation to his citizenship and his citizenship in the light of his vocation that he will be prepared for effective membership in an industrial democracy. Consequently, this commission enters its protest against any and all plans, however well intentioned, which are in danger of divorcing vocation and social-civic education. It stands squarely for the infusion of vocation with the spirit of service and for the vitalization of culture by genuine contact with the world’s work.  

Certainly, there was cause for instituting these significant changes in the education of the United States. The country was in desperate need for organization during the Progressive era. The children of immigrant workers in overcrowded cities provided the impetus for socialization in schools. Workers were needed to fill jobs in the country’s defense sector. There was a growing fear of instability among the people as two of the nation’s presidents were assassinated, and industrial requirements threatened the class order. These key moments changed education forever, but perhaps no report or committee has had the immense staying power of the “Cardinal Principles.” The same seven principles, paraphrased, were used in the “Life Adjustment Education” of the 1940s and early 1950s. In fact, “generations of prospective teachers memorized these aims and wrote them down on tests. Practically all statements of aims that appeared as late as the 1950s sustained the ideology of those in the report.”

In addition to Inglis’ significant influence on the “Cardinal Principles” report, the more thorough blueprint for socialization by the high school came in his Principles of Secondary Education. The substantive contribution this book made to administrative education continues today. Due in large part to Inglis’ ideology, Dewey’s conception of “thinking and doing” was overtaken by the Taylorite ideal of separating “thinking from doing,” allowing for a controllable system. Identifying the problems of, and
implementing changes to, a disconnected system of schools in order to establish a single, reliable method of indoctrination was a challenge which Inglis handled remarkably well. Through his guiding work, secondary education became the managerial institution it remains.
Chapter 2: Transformation of Secondary Education in the United States

“Whatever exists at all exists in some amount. To know it thoroughly involves knowing its quantity as well as its quality.”

- E.L. Thorndike

This quotation suggests the role measurement played in Progressive era education. Inglis and his contemporaries (Thorndike, Yerkes, Terman, etc.) devoted themselves to charting potential performances by testing and calculating aspects of students and their lives. In order to replace existing education with a standardized, scientifically-organized system, Inglis worked to establish the organized and effective Prussian school system in America, particularly in secondary schools. Professionalism dictated a newly enforced hierarchy as efficiency was instituted in education.

Michel Foucault, the twentieth-century philosopher, developed a way of understanding the means by which people create social power through control of discourses – knowledge, an instrument of power, constructs social power. Foucault’s analysis helps to explain the idea of “professionalism” which was developing in the late nineteenth century, as each discipline sought definition. What are often accepted as truisms in modern human sciences (social, psychological, and biological) are merely expressions of ethical or political values of various interested social groups.

Foucault examines the histories of mental illness, modern medicine, and the prison system from the perspective of language, knowledge, and power. His method of
analysis and social critique is also beneficial when seeking to understand another
disciplinary system, namely education. Control of learning by professional educators
makes education an object of purportedly scientific disciplines, which at once dominate
subjects and extend a form of controlled knowledge. In Discipline and Punish: The Birth
of the Prison (1975), Foucault argues that punishment is the model of control for society,
and that this model extends from the prison to hospitals, factories, and schools. Power, he
argues, comes from rhetoric and imposing precise norms. He examines the three primary
techniques of control: the examination, normalizing judgment, and hierarchical
observation. Reporting of deviant behavior is in place from lower to higher levels in an
attempt to normalize standards. 88

These methods of control, standardization, and power exist in academic
institutions, e.g., national standards for admission to and continuance in educational
programs, and certification and training for teachers. Foucault offers an analytical angle
on Taylor and Inglis. He unveiled, many years after the fact, the primary control
techniques put in place during the Progressive period which gave the school system its
power. As the nineteenth century was coming to a close, Foucault explains in Power,
there came a shift in punishment – from punishing what an individual did to being alert to
what an individual might do. This gave rise to the control of future behavior of
individuals, and was enlisted by “a vast series of institutions…including pedagogic
institutions such as the school.” This new form of power controlled the behavior of
individuals in a “disciplinary society,” resulting in social control and constant
supervision. 89 The work of Frederick Winslow Taylor is a fine example of using power
over subordinates to effect change.
Frederick Winslow Taylor wished to shape the American public by implementing time/motion studies to many areas of life, including the school. His need to observe, test, and chart one’s performance became the “norm” in certain factory circles. Taylor’s Principles of Scientific Management, published in 1911, was seminal to the theory and practice of management in the workplace. Taylor’s first piece, Shop Management (1903), analyzed his research at the Midvale Steel Company. Taylor began work there as an ordinary employee, but when he was promoted to supervisor, he started pressuring workers to increase output. Taylor’s primary principles were: (1) Each worker must have a clearly defined task, (2) The worker must have the correct conditions and tools with which to complete the task, (3) High pay for successful completion of task, and (4) Penalty for not completing task. To supplement and support these basic rules, Taylor enacted strong measuring and supervisory devices to keep workers on target. Those who did not work the hardest were discarded. This was easy to do, because one of the net effects of revamping the factory was making workers expendable. Any worker could fill any other worker’s simplified job; therefore, former American craftsmen became “cogs” in the process of production.

The three components to Taylor’s organizational plan for the factory are: homogenization, centralization, and sorting. Taylor’s plan usurped power from the top as well as from workers by creating a new central core: the planning department. This department was not to be tampered with by employer or worker, and it was in charge of all decisions in the factory. The authority of this centralized structure was predicated on its ‘scientific’ basis; “scientific management” was a discourse in the Foucauldian sense. The old “chain of command” system was no longer adequate, in part because it allowed
room for undirected choice. Under Taylor’s system, a foreman did not assign tasks or make hiring and firing decisions. These were handled by the “instruction card clerk” and the “disciplinarian.” All authority came through the planning department. Traditional hierarchy was only “maintained for the surveillance of the work.”

Taylor attempted to enforce a common work ethic as well. He thought that men should be trained in the “habit of doing what is right.” He felt that only through hard work would one find well-being and morality. An example of Taylorism as applied to morality took place in the southwest coal towns. In an effort to defend against “threatening heterogeneity,” Colorado Fuel and Iron officials took control of the local schools, and instituted other limiting structures in order to “better control [employees] and provide a ‘healthy’ environment for their operations.” The aim of the company’s Sociological Department was to create a “smiling and tractable…‘Americanized’ and homogenous work force.” The chief of the department, R. W. Corwin stated: “Sociology is not a passing fancy or a matter of sentiment…It is a science and a necessity.” The philosophy “had definite roots in the scientific management of the industrial East.”

Such measures extended scientific management into the moral and educational spheres.

Examining the relationship between Taylor’s ideas and those of Inglis is imperative to understanding education and its organization, because bureaucracy came to rule the school system. As Samuel Haber explains:

Scientific management prescribed the centralization of authority and the close supervision of all tasks. As applied to the schools, it increased the authority of the administrator and limited the freedom of the teacher. In the midst of the efficiency craze, the new profession of public school administrator took form.
Standardized operating procedures were dictated from above with no input from teacher and student. The equivalent of Taylor’s “planning room boss” in the factories would become the school superintendent, a central authority figure whose job it was to make workers effective and consistent. Thus, Taylor’s plan that efficiency should rule all of human activity came to pass in education: The schedule of the school day was planned; curriculum was streamlined and categorized; students were measured and segregated; standardized testing was implemented; and supervision became the norm. Educators were shocked when one of Taylor’s closest disciples, giving a report on university organization, called the teacher a “producer,” suggested teachers use standardized lecture notes, and invented a new unit of measure called a “student hour,” which marked administrative efficiency. Inglis was to the schools what Taylor was to the factory – he created the professional discourse for education.

For unknown reasons, Inglis’ early path had abruptly changed direction. Inglis began as a classicist who had written Latin textbooks. He entered Teachers College at Columbia University to advance his teaching credentials in ancient and modern languages; however, he emerged repudiating academic traditionalism. Inglis’ primary work, *Principles of Secondary Education*, written in 1918 and edited by Ellwood P. Cubberley, advanced the same three approaches Taylor instituted – homogenization, centralization, and sorting – as methods which would ensure students’ preparation “for efficient participation in social-civic life.” Inglis summarized his intentions:

Many important functions are therein involved, e.g., means of adjusting the individual and his social environment, the development of a ‘social mind’ and social cohesion among groups of individuals, the adjustment of individual differences to the differentiated needs of society, control of the factor of
selection in secondary education, educational, moral, social, and vocational
guidance.\textsuperscript{97}

Presented with an increasingly heterogeneous population, Inglis realized the importance
of a cohesive mentality among students who would become workers.

Inglis amassed a large amount of scientific data in order to assist the schools in
implementing homogenization. This function aimed to integrate students into the social
system. One facet involved addressing the affects of puberty on student behavior. The
work of G. Stanley Hall and others was used to investigate how the mental traits of
adolescent students affected their training. Another study addressed the impact of
economic status on students (Van Denburg’s study), and categorized occupations of
fathers.\textsuperscript{98} Using Van Denburg and King, Inglis reported on students’ interest in different
vocations.\textsuperscript{99} He used Ayres’ \textit{Laggards in Our Schools} to examine the many reasons for
retardation (a child who lags behind the average in grade level) and acceleration (a child
who excels above the average in grade level), and the ways in which these variations
affected high school graduation rates.\textsuperscript{100} In addition to age, other factors, like home
conditions – poverty, students beginning their education late, etc. - were examined for
their role in the “elimination” of the student (that is, the reason why a child did not
graduate).\textsuperscript{101} Inglis stated that: “nothing is more certain than that the older the school
pupil becomes the stronger is the force of those economic and social influences which
ultimately will remove him from the school.” Students tended to stay in school until the
compulsory attendance age of fourteen was reached, but then left in great numbers.\textsuperscript{102}
These studies were important in defining student populations.
In regard to homogenization, Inglis stated that changes in the home made the school responsible for inculcating moral-social behavior. In many cases, the parents were away from home at jobs; urban settings made family activities more difficult; there was more divorce; religion was no longer a big part of family life; there were differences between parents born in another country, and the children born in America; children did not get “occupational stimuli” in the home due to labor-saving devices; often parents themselves were not well educated. Therefore, it became part of the domain of the education system to teach morality and social responsibility to the collective.

Inglis stressed the importance of learning a “development of like-mindedness, of unity in thought, habits, ideals, and standards, requisite for social cohesion and social solidarity.” Unity was important, particularly in a democracy; this was necessary due to heterogeneity of the country’s population, increased common knowledge, diversity of industrial jobs and living conditions, and the fact that formerly integrating agencies, like the churches, had a diminished role. Inglis felt that there were certain reasons why institutions did not have as much influence as in years past. For instance, many churches had split into different denominations, and there was a separation between church and state. As people began finding income in places other than their hometowns, the church was no longer the center of the community. Moreover, people did not say prayers at home as they once did, and the influence of clergy was no longer as pronounced. The school, therefore, became the leader in teaching communal ideas of social conscience and social responsibility, so that this would be habitual to all. Common ideals were needed to unite the people in this new industrial democracy.
The necessity to unite pupils led to curriculum reform. The school curriculum, according to Inglis, ought to encourage the four efficiencies: physical, mental, moral, and aesthetic. He explained that “certain reforms are desirable in the studies of seventh and eighth grades,” including elimination of useless material, reduction of review work, and the inclusion of material more suited to the lives the children will eventually lead.

There are three major points for creating unified, efficient members of American society:

(a) an ability effectively to execute the formal and informal duties of citizenship and carry the burden of political responsibility; (b) an ability to produce and labor sufficiently to carry one’s own economic load; (c) an ability to utilize one’s leisure time and act in an individual capacity without interfering with the interests of others or of society at large.

It is these which became the guiding force behind the changing curricula, organization, and philosophy of the public school system, as civic-minded, socio-moral training was used to enforce homogenization.

Inglis stressed that homogenization was to be dictated by a central authority. Centralization in curricula and hierarchical control came in fashioning the American system after the Prussian. While this system was more rigid, the graduates of its higher schools were considered as advanced as sophomores in American colleges. Inglis attributed this to longer time spent in school, but also to the “efficiency of instruction.”

When speaking of the Prussian and French systems, the features Inglis highlighted were the division of classes, and centralized State educational administration and control.

In addition, he admired the idea of separate vocational education. Inglis addressed the Board of Education in England giving grants as a way to bring “the secondary schools under its supervision and to some extent under its control,” because the schools “[had to]
meet the requirements and submit to the supervision of the national authorities.” He said that this method had been quite successful in the United States. 115 Thus, this new control provided not only for solidarity and social cohesion in students, but also enforced national standards.

Inglis felt that, in order to maintain social solidarity and bring homogeneity to the heterogeneous population, students had to be sorted according to ability. This would guarantee development of the “highest social efficiency out of the raw material (students) available,” and provide for industrial concerns due to instituting “differentiated education.” It was imperative to identify aptitudes and interests. 116 The new vocational track trained the non-professional classes to play their part in the economy, and vocational guidance would be there to assist them. 117 In addition, education had to guarantee the finest education for those few who would continue into higher institutions. Inglis felt that special consideration must be given to “those pupils whose preparation for the attainment of the ultimate aims of education may be extended over a longer period of time than that of the great majority.” 118 These students – theoretically the ‘best and the brightest’ – needed more extensive and intensive preparation for social-civic activities. They were to have no vocational activities. For them, “different forms of preparation for different modes of leisure are possible and justified…a somewhat higher selection of pupils is common, at least with reference to social and economic status.” 119 Inglis included a report which described the Prussian system:

Boys intended for the learned professions are educated in the classical courses of the ‘Gymnasia,’ while those intended for business life pass the corresponding period in the study of science and modern languages in the ‘Real Schools’…our High School should…prepare one group for the university, where they would
enter upon professional study; it should prepare another group for active business life. 120

This was a key to Inglis’ interest, and later to Cubberley and Conant, because Prussian ideology was implemented in American high schools.

Demands would become more rigorous as education proceeded, and capacities of individuals had to be great enough for a productive return on investment. The Prussian system provided the order needed. Inglis pointed out that “individuals differ widely in mental traits” and that “in so far as those differences are due to the limits of capacity set by nature and to rates of development also determined by nature,” all ought not be allowed to continue into higher education. It was, therefore, the foremost duty of secondary schools to “weed out” those not academically gifted, in order to further assist those for whom the higher stages of education were created. Inglis was not for assisting those not well-suited for the task of higher education. 121 There was to be selection first by elimination, then by differentiation. 122 Inglis explained:

It is clear that, as education demands more and more capacity, with certain individuals the limits of their capacity are reached, or, what is more common, the point is approached at which given possible amounts of training produce results incommensurate with the amount of teaching and learning energy expended, and the point of diminishing returns is reached. No amount of training can ever equalize the abilities of individuals whose native capacities differ to any marked degree. 123

Efficiency could only be achieved through categorization, since output had to outweigh input. Inglis felt that the efficiency of the system relied upon not wasting training time and cost on those from whom a return on investment would not be guaranteed.
Therefore, Inglis charted individual differences among secondary school pupils, indicating that there might be a difference between races. He quoted M. J. Mayo, and introduced the idea that “social heredity” (meaning a student’s home life and cultural customs) might have been responsible for the differences in scores between native whites and African Americans. Inglis also charted percentages of “native and foreign stock,” gave a breakdown of years and countries from which immigrant parents of the new children arrived, and discussed the problems with second-generation students who had no wish to become “Americanized.” There were also studies which said that girls’ thinking processes and interests were different than boys’. Inglis charted mathematical abilities between the two groups. He also compared differences in lung function and head circumference.

A practice from the Massachusetts secondary schools was that “higher education should be provided for girls.” Inglis mentioned that in the Prussian school system, there were three nearly separate divisions: 1) schools for girls and boys of the common people, or the “people’s school,” 2) higher schools for upper class boys, and 3) higher schools for upper class girls. Although girls were provided education in Prussia beginning in 1908, one’s choice in curricula was limited mostly to home and kindergarten arts or becoming an elementary school teacher. The sorting of females into similar fields was encouraged in the United States as well, since, Inglis wrote “sooner or later” every woman will be involved with home and family. This was at once an attempt to make females more efficient in the home, but also a way to provide socio-moral education to all.
Intelligence testing was a subset of sorting. In presenting an individual with a full range of activities and guidance, secondary education had to test, diagnose, and direct in the narrower sense, moral, social, physical, and vocational guidance. In 1921, Inglis Intelligence Quotient Values was published. It is a tiny book filled with intelligence quotients of youth, and divided into mental ages (three years and no months to seventeen years and no months) and chronological ages (five years and no months to sixteen years and eleven months). These figures were to be used in education, as the “Description of Tables and Suggestions for the Use of Revised Edition” section at the beginning of the booklet explains: “There is a growing custom of converting scores in achievement tests into educational ages and dividing these by the chronological ages of the pupils to find ‘educational quotients.’” Inglis suggested that all students be given the chance to test his or her capabilities. “Social economy and personal efficiency and happiness postulate that each individual, as far as may be possible, should do what he can best do.” However, this encouragement was not the same as Dewey’s desire for the individual to fully develop; rather, it was a way to engage the bulk of students in vocational subjects.

In an effort to bring order out of disorder, Alexander James Inglis instituted extreme and long-lasting changes to secondary education that affected curricula and teacher training; in addition, his new school system, with its centralizing authority, homogenized and sorted students, and lengthened the mandatory time in spent in school. Michel Foucault explains how this era enforced new rules of reward, punishment, and control, as Frederick Winslow Taylor and others compelled obedience to a systemization and forced observance of workers and students. In creating this bureaucratic system, a disparate population was organized: those who would become leaders, and the multitude
of followers. Inglis’ close ties to Ellwood P. Cubberley, James B. Conant, and others aided in spreading this constitution to national heights.

Inglis influenced the influential and, under the guise of policies to improve the lives of children, instituted the ideals of efficiency, expertise, and exclusivity in schools. The disparity between students placed on an academic track and those forced into vocational coursework grows wider than ever; teachers have less and less control over classrooms, and parents have reduced authority over decisions affecting their children. Inglis and other social organizers of the time period redesigned the classroom, created school administration, and transformed Progressive era education into the Taylorite institution it remains today.

As Foucault described it, the age of conflict expanded control over institutions through normalizing judgments, hierarchical observations, and examinations. Inglis approved of the Taylorite need to intensely examine and adapt the school system in order to make future citizens malleable enough to fit specific industrial needs. Gilded Age and Progressive era difficulties called for stern measures that could bring order to chaos, and the high school was the ideal place to enact widespread change.

Although Inglis died in 1924 at age forty-four, others were waiting to institute high school administration in curricular and organizational method. Inglis’ association with Stanford University’s Ellwood Patterson Cubberley, and Harvard president, James Bryant Conant, both of whom worked with Inglis, extended his thinking for decades and advanced homogenization, centralization, and sorting. No other educator has had more of an effect on education than Alexander James Inglis. For what they conceived to
be the betterment of society, Inglis, and the like-minded men who followed in his footsteps, organized and standardized secondary education.
Chapter 3: Legacy of Alexander James Inglis

Although Inglis’ career ended with his death in 1924, his associates, Ellwood Patterson Cubberley and James Bryant Conant, continued to spread the word. Both men had worked directly with Inglis, and both wielded great power in education. Cubberley’s numerous speeches and books led the way in curriculum reform, teacher training, and consolidation of school districts; Conant’s research of student life and writings influenced many and effected great changes in secondary education. If not for these men, Inglis’ plans might not have continued.

Ellwood Patterson Cubberley was trained at Columbia University, taught at Harvard, became Superintendent of Schools in San Diego, California, and was Dean of the School of Education at Stanford University from 1917 until 1933. Cubberley wrote The History of Education (1920). Edward A. Krug’s, Salient Dates in American Education 1635-1964, refers often to Cubberley’s 1934 work, Readings in Public Education in the United States. Further, Cubberley wrote Changing Conceptions of Education (1909), Public School Administration (1916), and Public Education in the United States (1919). According to the memorial Stanford University gave for him, he wrote twenty volumes which cover every aspect of the history of education and school administration. Of particular note is his work on rural education, which led to “the consolidation of country schools and their improved supervision.” He served Stanford
in various capacities for thirty-five years, with two sabbatical appointments as Columbia and Harvard faculty. In his first year at Stanford alone, Cubberley traveled over seven-thousand miles to deliver over seventy lectures touting the importance of higher education for educators. He was instrumental in developing the profession of school administration, and he believed in using measurements, tests, and scientific accuracy as a way to ensure that education would run as efficiently as industry. Cubberley’s 1909 work presented a case for the reconstruction of the education system, and he created textbooks for education while working with Inglis. He felt that the interests of the nation and of organized labor should determine the character of education.

Cubberley was aware of the need to homogenize a varied population. He wrote that the school system was asked to help assimilate the newcomers, since many did not accept the idea of these new public schools: “In the cities, this became a serious question, and many additions and concessions had to be made, especially to the Germans, to get their children into our American public schools instead of their alien parochial schools.”

Cubberley’s remarks garnered attention, because he saw the need to adapt the curriculum to various types of students: “Our city schools will soon be forced to give up the exceedingly democratic idea that all are equal, and that our society is devoid of classes, as a few cities have already in large part done, and to begin a specialization of educational effort along many new lines in an attempt better to adapt the school to the needs of these many classes in the city life.”
In *Changing Concepts of Education*, Cubberley gave a summarized history of education, including the fact that by 1850, “the movement for state control of education had begun.” He explained why the school system had to change to accommodate centralized authority: “The school was asked [between 1875 and 1900] to concentrate its energy to some more definite purpose, to train the eye and the hand for direct and useful action.” In another section, he wrote: “We are slowly beginning to see…that the great battles of the world in the future are to be commercial rather than military.” He mentioned the importance of what America has learned from the “educational, political, and industrial progress of the German Empire.” He stated that the school “is essentially a time and labor saving device” and that “the danger from class subdivision is constantly increasing.”

Cubberley reinforced Inglis’ idea of the school as training ground, yet expanded on his plan. In speaking of the school system in general, he said: “There are many signs of an increasing centralization of management which will ultimately lead to greater efficiency…many options which communities have today will in time be changed into obligations…the state oversight of private and parochial education is likely to increase slowly.” His next words resonate deeply: “In particular, the attitude toward the control of the child is likely to change. Each year the child is coming to belong more and more to the state, and less and less to the parent…The plea in defense that ‘the child is my child’ will not be accepted much longer by society. Our future welfare is too thoroughly in the keeping of the child to permit of such a policy.” Thus, Cubberley wanted to lengthen the period of childhood dependence by removing children from the workforce and placing them in school.
In Public School Administration, Cubberley included a section called, “A New Lengthening of the Period of Dependence,” in which he spoke of the right of the state to assert authority both to regulate types of schools and to force compliance of school attendance, and explained that this had been “asserted and sustained by the courts.” He exposed the interests behind this:

It has become desirable that children should not engage in productive labor. On the contrary, all recent thinking and legislation have been opposed to their doing so. Both the interests of organized labor and the interests of the Nation have set against child labor…lengthening the period of dependence and training.\(^ {148}\)

Accordingly, children were removed from the workforce and placed in the school system, just as Inglis had planned, despite attempts to thwart compulsory attendance.

Inglis’ ideas were continued and amplified over the next forty years in the work of James Bryant Conant, leader of the next generation of efficiency advocates. The highly influential Conant reiterated Inglis’ ideas about secondary education through a body of notable speeches and books, thus ensuring that the transformation begun by Inglis survived and thrived amidst various challenges during the Cold War. Federal funding was increasingly used to expand vocational training.

Conant’s contributions were widely felt. President of Harvard from 1933 to 1953, he was an early proponent of standardized testing, including the S.A.T., and he was on the Board of Trustees of the Carnegie Foundation for the Advancement of Teaching. In tribute to his friend and colleague, he instituted the Inglis Lectureship at Harvard, “to perpetuate the spirit of [Inglis’] labors and contribute to the solution of problems in the field of his interest.”\(^ {149}\)
Like Inglis and Cubberley, Conant’s mission was to bring Prussian efficiency into America’s schools. Conant devoted an inordinate amount of time to studying the high school, putting aside his work as a chemist, college president, and ambassador to Germany to quietly work full-time on the issue of secondary education. The importance of guiding adolescents soon to be in the workforce or military was taken seriously by the generation which followed Inglis. In “The Revolutionary Transformation of the American High School,” Conant says the school system was radically, but beneficially, changed between 1905 and 1930. This translates as the removal of traditional courses like Latin, with the replacement of vocational education.\textsuperscript{150}

Conant’s three aims for the American high school were: 1) “to provide a general education for all the future citizens,” 2) “to provide good elective programs for those who wish to use their acquired skills immediately on graduation,” and 3) “to provide satisfactory programs for those whose vocations will depend on their subsequent education in a college or university.”\textsuperscript{151} Thus, the division between differently abled students was maintained.

Conant wrote The American High School Today: A First Report to Interested Citizens in 1959. Inside the front cover are Conant’s twenty-one recommendations for improving America’s secondary schools.\textsuperscript{152} These can be categorized into the same three parts of Inglis’ plan: homogenization, centralization, and sorting. Although Inglis largely achieved his ambitious plan for middle, secondary, and higher education, Conant guarded and expanded on his friend’s plan for education. Conant discussed modern secondary education in terms of evaluating and improving the comprehensive high school (i.e., a secondary school which houses both traditional and vocational education under one roof

44
and under one administration for nearly all children of high school age in one neighborhood or town). 153

Comprehensive high schools must provide for a diverse population; therefore, Conant spelled out numerous mechanisms for sorting and tracking students. He recommended individualized programs to differentiate students of vocational, commercial, and academic interest. 154 He paid close attention to vocational and trade training, including providing diversity in these programs. 155 Conant advised subject by subject ability grouping, 156 and discouraged ranking pupils according to their grades in all subjects. 157 He charted separately the academic subjects of interest to boys and girls, 158 and created career commitment diagrams showing the differences between the plans of girls and those of boys; 159 hence, the programs for girls would be different than those for boys. 160 Science courses were to be given in three sections grouped by ability. 161

There ought to be special consideration for very slow readers – these students, Conant advised, should be given remedial help, but also placed in very simple vocational work apart from the regular vocational programs. 162 Finally, there would be special, but separate, recognition for vocational or commercial students’ accomplishments. 163

For gifted students, there would be academic honors lists. Conant also advised speed reading for the college-bound, and he saw the benefit in providing tuition-free summer programs and materials for advanced students. 164 Other special electives and programs were instituted for the academically gifted, like Advanced Placement Programs (which work under the aegis of the College Entrance Examination Board). 165 The yearly inventory of the academically gifted was to be given to the school board through the
superintendent. Finally, there would be prerequisites for advanced academic courses.

In order to enhance similarity and cohesion, a required core curriculum was instituted for all, with emphasis on four years of English. English composition was specifically required. Students were to write a theme per week. Homerooms were to be used for the practice of mock government, student council meetings, and “for the purpose of developing an understanding between students of different levels of academic ability and vocational goals; [they were to be] organized in such a way as to make them significant social units in the school.” Conant also recommended a twelfth-grade social studies course that concentrated on economics, and were conducted in heterogeneous classes specifically to encourage “mutual respect and understanding between different types of students.” Perhaps 1959, like four decades earlier, called for centrally enforced rules mandating homogeneity in terms of democratic thinking, in order to avoid class conflict.

Conant concentrated on both the status and specific aspects of the high school in terms of a central authority: documenting comprehensive enrollment numbers in all states; recording the percentage of students in grades nine and ten who were academically talented; analyzing enrollment numbers in federally funded vocational programs; appointing guidance counselors who supplemented parental advice, beginning on the elementary level. He recommended that all schools have at least six periods per day. Upon graduation, in addition to a diploma, a record of courses taken, in the form of a card, should be carried in a wallet for future employers.
Federal funding supported Conant’s mission. Diversified programs furthered the development of marketable skills – Conant suggested federal money be made available for programs which provided advisory committees for each trade, composed of labor and management representatives. The new guiding legislation for the schools was the George-Barden Act of 1946. This act “[focused] on agricultural, industrial, and home economics training for high school students.” Once again, federal funds were given to encourage student enrollment in vocational education as an alternative to academic education, which allowed training in specialized programs in separate schools for “stenography, auto mechanics, mechanical drawing, and the building trades not offered in all comprehensive schools.

The launching of Sputnik by the U.S.S.R. in 1959 changed everything, and the significance of the federal response to Soviet technological advances cannot be overstated. Not only did the national curriculum change in science, math, and foreign languages, federal monies went to the purchase of new materials and teacher training. In addition to the National Defense Education Act provisions, federal programs such as the National Science Foundation, the Physical Science Study Committee, the School Mathematics Study Group, the American Institute of Biological Sciences Curriculum Study Group, and the Chemical Education Material Study Group were given huge grants to advance these subjects, and to “[improve] guidance, counseling, and testing programs, especially those directed at the identification and encouragement of the more capable students.” The textbook industry was forced to adopt the new curricula, and schools were required to put more focus on the academically gifted pupils.
Conant stimulated these changes, and initiated others, including reducing the number of school districts from 40,520 to fewer than 18,000; in addition, he closed small high schools that could not offer ‘quality’ vocational and academic programs. Conant established the Educational Testing Service and advanced placement in an effort to channel the academically gifted into technological universities. According to Conant (1953): “If the field of Waterloo was won on the playing fields of Eton, it may well be that the ideological struggles with communism in the next fifty years will be won on the playing fields of the public schools of the United States.” 182

Conant elaborated on Inglis’ ideas in many books, three of which were published in 1959 as a response to the Soviet space program success in 1957. The Soviet launch of Sputnik, the first satellite, sent waves of panic across the United States. Not only did the Soviet Union seem superior technologically, but fears mounted that such superiority might find American targets with armed missiles. The “missile gap” would prove more an illusion than a reality, but this conflict resulted in the proliferation of intercontinental ballistic missiles (ICBMs), the 1958 creation of NASA, and the Congressional enactment of the National Defense Education Act of 1958 which “authorized federal grants training in mathematics, science, and modern languages, as well as…student loans and fellowships.” 183

At a time when Sputnik sparked criticism of American educators, and the education system in general, Conant successfully counteracted public pressure, and used the situation to further solidify administrative and curricular changes in education. When the Russians had success in their rocket program, some Americans began to mistrust the school system, think the compulsory school age should again be lowered, and wish a
reversal in the social change which had occurred. Conant reminded critics of the current school system (1959) to look at the employment picture, and the ways in which Inglis’ system helped American society. In fact, he advanced Inglis’ plan by pointing out the benefit of beginning vocational education even earlier, in grades seven and eight, thus decreasing required subjects and increasing electives, including foreign languages; moreover, he used the controversy to encourage the necessary separation between students studying commercial arithmetic and those learning algebra in the seventh and eighth grades.

Conant suggested that policy was needed to guard against “insistent pressure” from traditional family guardians, allowing guidance counselors to protect students from “the unreasonable academic demands of their parents.” He insisted that all “recognize the necessity of diversity” and “support the efforts of the [school] board to improve the schools.” The former is the still widely-held belief that students must be segregated according to their abilities despite parental wishes; the latter, a call to acceptance of central power. Policy was also to be used against parents who wished to take their children on extended vacations which exceed the time period of regular school holidays.

‘Policy’ became the administrative tool which enforced newly centralized rules.

As with Inglis and Cubberley before him, Conant believed that decisions regarding children should be out of parental hands. In his 1959 book, The Child, the Parent, and the State, Conant said that “American parents have enormous influence on their schools. This is true in most communities and is a consequence of our system of local control through elected school boards whose members are bound to listen to the pleas of outraged fathers and mothers.” He explained that “there are no skilled
workmen who wish their sons to follow in their footsteps.”  

Conant complained that, “one of the factors leading to the present highly vocal discontent with public education has been the increasing demands of parents in certain suburbs for a purely academic curriculum for all their children.” Yet this went against the idea that only a small percentage were to be given that advantage in the secondary public school system. Conant saw the logic of the Soviet system, and he quoted Khrushchev, who demanded that the interests of the state override those of the parents. In the name of the future welfare of the state, Khrushchev said, there will be no objections of parents to the contrary. “All youth will do as they are told; there will be no exceptions.”

Despite his early death at age forty-four, Inglis’ work remained in publication for decades, and was considered the blueprint for high school development. But his influence did not stop there, because Inglis worked with Ellwood Patterson Cubberley and James Bryant Conant, whose devotion to bringing forward Inglis’ Progressive era ideals is clear. The importance of continuing Inglis’ work was to make secondary education more effective for the whole population. These men were advocates of functionality in secondary schools with the same end in mind as the previous generation, that of disciplining and training preselected workers, while preparing the minority of students for college.
Conclusion

The Progressive era enacted changes in many institutions in the United States, but the reworking of secondary education enforced a hierarchy on the general population like no other. The shift in economic ideology from nineteenth-century laissez-faire to a twentieth-century increase in government control created leaders in the education system like Alexander James Inglis, who became a key figure in ensuring that Progressive ideals were actuated and disseminated to the public.

Michel Foucault’s study concentrates on how, during this time period, the professions created themselves through rhetoric and control, and illustrates how the field of education was no exception. He explained how homogenization, centralization, and sorting were used by leaders to form a common ground for students of different classes while, at the same time, creating a cohesive administrative system. Foucault unfolds this larger perspective, allowing historians to view the leaders of education in the same light as other social organizers of the era.

Frederick Winslow Taylor’s time studies and systemization of the factory and other institutions fit well with the testing and measurement of social psychologists of the time period. It was Taylor who suggested streamlining and categorizing the workforce according to ability. He also created a centralized system from which orders would be issued. Taylor’s ideas were not well implemented in factories during his time, but his
suggestions for the study of work and workers became the foundation of modern management.

Although a humanist, not a Taylorite, John Dewey’s democratic ideology was used as an impetus to implement changes in schools. The idea of bettering one’s self for the greater good was transformed by Inglis and his associates into the list of duties a high school was to impose upon its students: a sense of citizenship; a work ethic; and leisure time spent in a productive fashion. These educational goals, once activated, forged a compliant citizenship, thus creating order out of disorder.

Students of various backgrounds were a challenge to an educational system which was not standardized. Through Inglis, a new model was implemented which emphasized homogenization, centralization, and the sorting of immigrant and native children. These policies were not only put in place to acquaint the new students with what was expected of them as Americans, but also to encourage camaraderie between the students who would become managers and those who would become line workers. It was thought that identifying a student’s potential early on would guarantee one’s optimal placement in the workforce; hence, society would flow in a more logical and less conflicted way. Another important piece of the new system came in arranging a comprehensive, singular-minded network of school systems which held to the same standards.

Inglis’ contribution to the “Cardinal Principles,” as well as his Principles of Secondary Education, worked in tandem with Ellwood Patterson Cubberley’s. Cubberley fashioned extensive administrative manuals to establish a longer high school stay. He
worked tirelessly, writing books and delivering speeches, trying to convince educators to further their training, and make managerial and curricular changes.

His work was continued into future decades by Harvard president James Bryant Conant, who revisited secondary education, and extended the same recommendations that Inglis had before him. A new generation of American school children was to be affected through his devotion to bringing Prussian efficiency and control to American schools. Like Inglis and Cubberley, Conant wrote several books regarding the importance of state controlled schools, and suggested that students be relegated by plans laid out for them by the state, rather than by their parents.

As the institutional structure of these educational ideas were embedded, the distance between well-intentioned words and bureaucratic disregard for ‘unfit’ students widened. As American education gained definition, Inglis helped to standardize it; thus, a hierarchical structure was put in place under the guise of helping each high school student live up to their potential in fields selected for them by trained guidance counselors. Through testing, the newly structured secondary schools directed and marginalized students according to their perceived abilities.

Inglis radically changed American education, and his influence is still felt. Central control through identical school boards, mandatory teacher certification, and required curricula has been the model of education since his time. The most notable result of his work is channeling purportedly unfit students away from the opportunities which only advanced education provides. In his aim to improve society, Inglis’ regulating and standardizing measures may have been necessary during the chaos of the Progressive era,
but the net effect of such changes left a legacy of class, ethnic, racial, and gender divisions which have left the United States with a system which categorizes rather than celebrates the individual.
Notes:

4 Ibid., preface.
8 Porter. The Rise of Big Business, 106.
9 Ibid., 111.
11 Ibid., 645.
13 Tindall and Shi. America, 525.
14 Ibid., v. II, 645.
15 Ibid., v. II, 524-525.
17 Dennis O’Neil. “Darwin and Natural Selection.” Palomar Community College. (February 23, 2010). April 10, 2010. http://anthro.palomar.edu. 7. In actuality, it is not necessarily the “strongest, biggest, or smartest and most cunning individuals.” Evolutionarily speaking, it is “simply the ones who have the combination of traits that allow them to survive and produce more offspring” that are considered ‘the fittest.’ The ‘versatile generalist’ would win out in a changing environment. O’Neil, 4.
21 Ibid., 43. According to Smuts, Cattell worked with Galton developing mental tests, which were replaced by the intelligence scale (derivatives of French psychologist, Alfred Binet’s, IQ tests); Goddard translated the intelligence scale for use in testing mentally retarded children (William Healy used it on juvenile delinquents); Terman adapted the scale in 1916 and “launched the American mental testing movement.” Smuts, 44. Selden explains that Dewey was decidedly against eugenics, and he did not believe in classification; in fact, “he spoke out against the issue of racial differentiation.” He addressed a 1909 National Negro Conference, and “placed his rejection of racism in the context of work he had recently published on social policy and biological science regarding the discredited theory of acquired characteristics.” Selden, 113.
25 Ibid., 72.
27 Ibid.
37 Ibid.
39 Ibid., 16.
40 Ibid., 112-113.
41 Ibid., 35.
42 Ibid., 170.
43 Ibid., 202-204.
44 Ibid., 169.
47 Ibid., 227.
48 Ibid., 230-231.
49 Ibid., 228.
50 Selden. *Inheriting Shame*, 114.
52 Wirth. *John Dewey as Educator*, 223.
54 Kliebard. *The Struggle*, 133.
55 Ibid., 95-96.
56 Ibid., 124.
58 Ibid., 113-114.
The idea of vocation once meant a personal calling from inside or God. In this transition, going to a “vocational” school meant that one was not called to college, and would now have to be a laborer. Vocational training has now entered the university level.


Ibid.


Ibid.


Ibid.

Ibid., 15.


Ibid., 14.

Ibid., 12.

Ibid., 12.

Ibid., 20.

Ibid., 16.

Ibid., 17.

Ibid., 11.

Krug. Salient Dates, 117.

Ibid., 19.

Ibid., 14.

Ibid., 12.

Ibid., 12.

Ibid., 20.

Ibid., 16.

Ibid., 17.

Ibid., 11.

Krug. Salient Dates, 133.

Ibid., 4-5.

Ibid., 19.

Ibid., 12.

Ibid., 20.

Ibid., 16.

Ibid., 17.

Ibid., 11.

Krug. Salient Dates, 133.

Ibid., 120.

Robert Guisepi, ed. “Prussia: The International History Project.” http://history-world.org/prussia.htm. 5/7/10. Prussia is most commonly referred to as being the same as Germany; however, the area of Prussia was a separate German state which was its own kingdom. In the late 19th century, its height of expansion included land along the North and Baltic seas, from Belgium, the Netherlands, France, and Luxembourg on the west, to the Russian Empire on the east, Austria-Hungary on the east, southeast, and Switzerland on the south. It was considered a successful kingdom with a fierce, devoted army; however, it lost much territory against Napoleon, but came back victorious when Napoleon lost the Battle of Waterloo in 1815. Prussia reached the peak of its power by linking all German states economically to it. Prussia “provoked war with Denmark in 1864, the Seven Weeks’ War against Austria in 1866, and the Franco-Prussian War in 1870.”
It was seen as the leading state in Germany after these wars. After this point, its history coincides with Germany. The state of Prussia was abolished in 1947 after World War II.


Ibid., 20.


Ibid., 96.

Haber. *Efficiency and Uplift*, 64.

Ibid., 65-66.


Ibid., 101-103.

Ibid., 105-106.

Ibid., 118-131.

Ibid., 131-155.

Ibid., 131.

Ibid., 351-353.

Ibid., 377-378.

Ibid., 360-361.

Ibid., 369.

Ibid., 377.

Ibid., 375.

Ibid., 275-289.

Ibid., 342.

Ibid., 228-229.

Ibid., 229.

Ibid., 231-232.

Ibid., 239.

Ibid., 251.

Ibid., 378.

Ibid., 369-370.

Ibid., 379-380.

Ibid., 379.

Ibid., 158-159.

Ibid., 380-382.

Ibid., 381-382.

Ibid., 381.

Ibid., 108-111.

Ibid., 15.

This thesis mainly deals with white education, but much was occurring in the African American community as well. *The Plessy v. Ferguson* Supreme Court decision of 1896 formalized race relations in education and other public institutions. “Jim Crow” – the physical separation of races – became a hegemonic influence on life in the United States. Booker T. Washington and William E.B. Dubois offered different educational philosophies for African Americans. Washington focused on vocational education, while Dubois was noted for intellectual development, “the talented tenth” as he called it. The Plessy decision remained in effect until the 1954 Supreme Court decision of *Brown v. Board of Education*.


Inglis, *Principles*, 208.

Ibid., 216-219.

Ibid., 611-615.

Ibid., 382-383.


These men worked with one another in various capacities. John Dewey (1859-1952) was at the University of Chicago from 1894-1904, and at Columbia University from 1904-1952. G. Stanley Hall was one of his professors. Both Dewey and E. L. Thorndike (1874-1949) studied under William James. E. L. Thorndike taught at Columbia University, Teachers College, during Dewey’s time. E. P. Cubberley (1868-1941) got his MA in School Administration from Columbia University, Teachers College, in 1901, and his Ph.D. at Columbia in 1905. He spent 1910-1911 at Harvard. The bulk of his career was spent at Stanford as Dean of Education. He was a friend of Inglis and Conant. Inglis (1879-1924) earned his Ph.D. from Columbia University, Teachers College, in 1911. Conant (1893-1978) got his Ph.D. in Chemistry at Harvard in 1916, and was president of Harvard from 1933-1953.

Edgar C. Rohman, Jesse B. Sears, and Lewis M. Terman, Chairman of the Academic Council of Stanford University. “Memorial Resolution: Ellwood P. Cubberley (1868-1941).”


Ibid.


Ibid., 56-57.

Ibid., 34.

Ibid., 40.

Ibid., 49.

Ibid., 53.

Ibid., 54-55.

Ibid., 62-63.

Ibid., 63.


Ibid., 2-4.


Ibid., inside cover.

Ibid., ix.

Ibid., 46-47.

Ibid., 51-52.

Ibid., 49.

Ibid., 66.

Ibid., 114-121.

Ibid., 28-31.

Ibid., 51-55.

Ibid., 73.

Ibid., 55-56.

Ibid., 67.

Ibid., 67-68.

Ibid., 62-63.
166 Ibid., 63-64.
167 Ibid., 65-66.
168 Ibid., 47-48.
169 Ibid., 50-51.
170 Ibid., 74-75.
171 Ibid., 75-76.
172 Ibid., 132-133.
173 Ibid., 62-63.
174 Ibid., 128-129.
175 Ibid., 44-45.
176 Ibid., 64-65.
177 Ibid., 50.
178 Ibid., 52.
182 Ibid., 266-267.
185 Ibid., 27.
186 Ibid., 36.
187 Ibid., 93-94.
189 Ibid., 67.
190 Ibid., 68.
191 Ibid., 7.
192 Ibid., 9.
Bibliography


Rohman, Edgar C., Jessie B. Sears, and Lewis M. Terman, Chairman of the Academic Council of Stanford University. “Memorial Resolution: Ellwood P. Cubberley (1868-1941).”


About the Author

Heidi Tilney Kramer was born in Atlanta, Georgia, and earned her B.A. at Eckerd College in Saint Petersburg, Florida. Having achieved success as an illustrator and elementary school art teacher, she decided to attend the University of South Florida for an M.A. in American Studies. Ms. Kramer is the winner of numerous art awards, as well as recipient of the Osher Scholarship. Her primary interest is the study of childhood in the United States. She enjoys visiting other countries in order to compare motherhood and childhood in America with other cultures, and has been to over a dozen other lands pursuing that interest.