

The Tenor of the Times

The schools we have today are very much the result of the decisions made by groups who held power at the turn of the century. These decisions did not go unchallenged at the time they were made, however. In fact, there were professional educators, social commentators, and some average citizens who were committed to an alternative vision of education to that promoted by a powerful coalition of businessmen, university presidents, education professors, and big city superintendents. I refer to this coalition as the pro-efficiency reformers. The former group, often alluded to in education circles as the “Deweyan educational progressives,” differed dramatically from the pro-efficiency coalition in their values, assumptions, and beliefs.

Both groups saw education as an instrument for achieving a preferred future. But their differing notions about the nature of childhood, the purpose of education in society, the capabilities and rights of men and women, the threat or promise presented by immigrants and racial minorities, and the power of efficiency to cure societal ills led them to aspire to very different visions of America in the twentieth century. As a result, their recommendations for how education ought to be defined and organized in this country had little in common. Much of the popular agenda for reforming today’s schools for the twenty-first century has its origins their debate.

In order to understand both the pro-efficiency and the educational progressive recommendations for school reform it is necessary to have a picture of the era in which they made their proposals. Schooling, after all, does not take place in a vacuum. A society’s history and tradition as well as the economic and political systems under which it lives all contribute to the way it fashions the formal and

informal education of its young.¹ In addition, the debate between the pro-efficiency coalition and the Deweyan educational progressives occurred during a period of societal crisis in America. As we shall see, the sense of crisis was to become a constant theme whenever Americans were to seriously discuss education throughout the twentieth century.

The Social Context

The period around 1900 was one characterized by powerful dislocations in society causing changes in traditional ways of living and working, challenging old ideas about the roles of family, government, and business in the social order. One cause of this upheaval was the tremendous growth in national population—a growth centered in cities ill-equipped for their sudden, geometric expansion. Chicago is a good example of this burgeoning growth. In 1885 Chicago had a population of 620,000. Five years later its population nearly doubled, with 1,200,000 people living and working within its boundaries. By 1893 there were 1,500,000 people in Chicago, testing the limits of the city’s governmental apparatus to meet even their most basic needs.²

A great part of the surge in population was due to a massive emigration from southern and eastern Europe to the United States. Nearly all these people arrived on American shores steeped in their own rich, traditional cultures and speaking only their native tongues. Many came carrying several children in tow—children who would soon be entering the already crowded schools of American cities. Many native-born Protestant Americans were uneasy at the prospect that the immigrants, often Catholic or Jewish, might not be assimilated. The native-born white Protestants who had long been dominant in the agrarian United States saw these newcomers as a threat to their power and influence, as immigrants and first-generation Americans settled in many cities. They perceived a link between a decline in their own predominance and an increase in crime, intemperance, sin, and disorder in society. This group sought some way to inculcate their sense of morality and values into the vast numbers of foreign-born Catholics and Jews who arrived on American shores.³

During the years preceding the turn of the century, new, more overriding hierarchies appeared throughout society. Corporations emerged as the primary force in industrializing the nation’s economy and work force. Efficiencies of scale allowed for mass production of many items previously produced by individual craftsmen.⁴ The trend toward centralization of power along bureaucratic lines was not limited to the business corporations, however. The growth in urban

population and the need for coordination of services fostered a series of experiments in a more systematic, centralized administration of a host of city functions led by reformers known as the “administrative progressives.”⁵

The agrarian economy and way of life was becoming less and less significant as a driving force in the experience of most Americans. While 80 percent of Americans lived on farms in 1830, fewer than 25 percent did so one hundred years later.⁶ Education functions once carried out by large farm families, the country church, and the rural village seemed to be neglected in the newly urbanized society. The dislocations caused by the industrial revolution—overcrowded cities, squalid living conditions, crime, drunkenness—shocked the middle class and humanitarians alike. Remedies for this degradation of life affecting a vast segment of the population were discussed with great urgency. It seemed the stability of the social order was at stake.⁷

Another source of concern for the nation was the increasing perception that America’s worldwide preeminence in industry was being challenged by other nations, particularly Germany. Industrialists’ concern about German competition caused them to find explanations for Germany’s economic success. Interestingly, they did not find them in better German technology, vertical or horizontal integration of German firms, or better German marketing. They found the answer in the German schools. This argument was advanced by Frank Vanderlip, vice-president of the National City Bank of New York in 1905, a man who later was to become the president of the largest bank in the nation:

In the group of great industrial nations, there has come forward in recent years one that has taken place in the very front rank among industrial competitors. That nation is Germany . . . I have had a somewhat unusual opportunity to study the underlying causes of the economic success of Germany, and I am firmly convinced that the explanation of that progress can be encompassed in a single word—schoolmaster. He is the great cornerstone of Germany’s remarkable commercial and industrial success.⁸

Industrialists saw adoption of the German system of vocational education as key to America’s preeminence in worldwide economic competition. President of the New York Central, W. C. Brown, stated that without it, “it is only a question of time when this country must surrender its place as a leader among the great manufacturing nations of the world.”⁹

All of these forces impinging on society—industrialization, urbanization, immigration, and the resulting population surge, foreign economic competition—took place during a time when formal schooling was a relatively new phenomenon.

In the early years of the new United States, most states did not see education as part of the state’s responsibility. The desirability of a well-educated working class was seldom recognized until after 1825, when social reformers endorsed education for the masses.¹⁰

Horace Mann, the most notable of those reformers, cited education as a way of reestablishing a sense of stability during times of turmoil.¹¹ In his famous Fifth Report in 1842, widely read throughout the states, Mann cited education as a means of increasing the value of labor. Although this idea was not immediately embraced by all businessmen, by the 1860s acceptance in business circles was widespread.¹² Mann’s message was one that found acceptance in state legislatures across the country, as well. As a result, one of the functions the state took on during the nineteenth century was the free education of children.

By 1860 most states had established free public elementary schools.¹³ By 1900 organized education had gained prestige, with the American people faithful to the notion that schooling was the remedy for every societal ill. A belief that education provided the road to safety and better times during periods of crisis was held by a wide spectrum of groups throughout the United States.¹⁴ As old societal agencies weakened and new educational tasks appeared, larger and larger burdens were placed on the school.¹⁵ William Graham Sumner remarked on this great faith Americans placed in formal schooling in 1906:

Popular education and certain faiths about popular education are in the mores of our time. We regard illiteracy as an abomination. We ascribe to elementary book learning power to form character, make good citizens, keep family mores pure, elevate morals, establish individual character, civilize barbarians, and cure social vice and disease. We apply schooling as a remedy for every social phenomenon which we do not like.¹⁶

Thus, the American people were philosophically committed to educate the masses of children as a means of coping with the challenges they faced. The capacity of the schools, however, to fulfill this appointed task was far from certain. Just in terms of physical capacity alone, the school system was totally overwhelmed by the growth in the population of school-aged children. Existing school buildings were dilapidated. Classes of sixty children were common. The national population of high school students, less than 5 percent of total children enrolled in schools, went from 220,000 in 1890 to 519,251 in 1900. New high schools appeared at the average rate of one a day.¹⁷ In 1800 there was no public institution providing secondary education in this country. In 1900 there were more than 6,000 free public high schools across the United States.¹⁸

The ward system of governance made urban schools the responsibility of neighborhood boards of education. Control of schools was decentralized and diffuse. By example, Boston had 190 independent boards of education supervising that many separate schools by the 1850s. Advocates of the arrangement argued that by enlisting the help of so many citizens, the schools stayed close to the people and fostered an interest in education. Yet, in the face of so many societal problems, the local ward board of education was cited by many critics as being unable to meet the demands being placed upon it. The flow of information throughout a city school system was erratic. Corruption—the buying and selling of teaching jobs and principalships—was common. New ideas in education—full-time, paid supervision, curriculum articulated by grades—were not being implemented by ward trustees and parents who wanted no change from the status quo. They wanted ungraded classrooms run by teachers in accordance with the wishes of the ward trustees.¹⁹ The system of school governance was cited by these critics as being responsible for the schools' inability to remedy a host of societal ills and prepare youngsters for their future adult roles. The school system as so configured was seemingly unable to deliver the needed elixir of stability.²⁰ Just as today, it was this sense that the schools were failing to ensure the perpetuation of American society that provided the impetus for the debate on reforming education in the nation.

If it was a given that children ought to be educated in schools, how precisely this education would proceed, what it would comprise, how it was to be organized, who would be empowered to decide critical educational issues were far from settled questions. By 1900 two very different educational philosophies emerged. The pro-efficiency agenda was in keeping with business management trends of the day: centralization of planning and decision-making in a bureaucratic hierarchy, and the standardized treatment of youngsters via a “factoryizing” of education. The reforms proposed by the educational progressives featured a decentralized school organization and the promotion of a child-centered education based on the inherent tendencies, talents, and interests of individual students. Adherents of both educational philosophies fervently believed that their respective doctrines could meet the challenges presented by the twentieth century.

At the center of each philosophy were beliefs about which aspects of American life were to be valued, enjoyed, and encouraged, and which ought to be discouraged and perhaps extinguished. Educational philosophies were, in this sense, rooted in larger social philosophies. They were imbued with particular values, assumptions, and beliefs about the direction America ought to go during

this period of change and transition. A discussion of education reform around the turn of the century, therefore, requires an understanding of the dominant values embraced by society.

Societal Values

Most discourse on the purpose of education is really about values that are not subject to empirical demonstration. The particular type of training a society chooses to provide its young is an expression of what it prizes and esteems. The public schools can be seen as an embodiment of society’s ambitions and coveted goals. They represent the contact point between the older and the younger generation where values are selected and rejected. Partiality is the very essence of education. Choices about architecture, selection of teachers, courses of study, texts, equipment, teaching methods, school organization, relations between pupils and teachers, and relations between teachers and administrators—all reflect fundamental choices made about what our society ought to be and the “proper” power relationships among the members of society.²¹

Visions about the preferred future of society tend to vary, however. Different groups value things and ideas differently. The ideologies of these groups do not come from thin air; they are rooted in complex ways in the existing social structure. Ideologies held by the majority have a way of serving the dominant groups in society at a particular time. Social commentator and educational progressive Jesse Newlon, wrote in 1934 about the extraordinary power of successful businessmen in shaping public opinion: “Dominant economic groups are in a position to wield great power. The public mind is in large measure susceptible to control and direction.” In many ways, our dominant values have long been those required for business and industry to thrive. Yet there have always been those who have differed in their ideas and values from those held by the majority. Education has proceeded amid the conflict among interest groups in society—both dominant and minority—and their accompanying values.

In this sense John Dewey was correct when he wrote in 1902 that the life of the school—as well as the demands for its reorganization—are integrally bound up “with the entire movement of modern life.”²² Ideas that were seriously pondered and hotly debated in America of 1900, i.e., the power and efficacy of science and efficiency to lift society from the morass of waste and corruption, the ambiguous role of the individual in an industrializing economy, the purpose of government in society, the capabilities and responsibilities of women and children in the social order—gave the school reform movement of one hundred years ago its unique character.

Efficiency: America's Secular Great Awakening²³

The 1984 edition of *Webster's New World Dictionary* defines efficient as “producing the desired result with a minimum of effort, expense, or waste.” Around 1900 the word *efficiency* had social and moral dimensions beyond the mere mechanical definition. It was during this time that efficiency became synonymous with goodness; that “right” was equated with efficient outcomes. Efficiency was used not only to denote mechanical operations—that is, the ratio between energy input and output—but also to characterize commercial, social, and personal relations. If a commercial venture was efficient, it returned a tidy profit on the money invested. If a relationship between individuals or groups was efficient, there existed social harmony. This social efficiency was usually due to legitimizing the leadership of those men seen as most expert or competent.²⁴ If persons were efficient they were effective, hard working, unsentimental, and virtually always male. Because efficiency was so central to what was valued, the perceived lack of it among women shut them out of important positions in society.

Work and morality—the moral obligation to work in an efficient manner—was a common societal theme in America by the middle of the nineteenth century.²⁵ American individualism was based on the notion that achievement and success came through efficiency, hard work, practicality, and responsibility.²⁶ The luminosity of the value of efficiency did not reach its peak, however, until early in the twentieth century. It was at that time that the rapid and widespread development of technological advances gave efficiency an almost magical quality. Technology made possible the performance of vast amounts of work with a minimal expenditure of human energy. It was a revolutionary idea. Remarkably, the transformation and dissemination of this idea into the realm of human and community affairs came about in short order.

The way to have efficient human affairs was to depend on professional competence and expertise. This was the unifying theme of the administrative progressives who sought to reform government. Just as the engineer could find the “one best way” to operate a particular mechanism without waste and avoiding mechanical failures, the social engineer could develop the “one best way” to administer government, design housing and living conditions, and provide for other social needs. In this sense, the judgment of one expert could be worth much more than the combined judgments of the ignorant multitude.²⁷ The highest degree of efficiency, in fact, was secured by centralizing authority and responsibility in one individual.²⁸ It was the duty of the socially efficient person to recognize this fact and cooperate once the expert decision was made on an issue of public concern.

The concept of efficiency was tied not only to the notion of specialized competence, but also to “bigness.” Big railroads, big banks, big corporations had been able, in two generations, to accomplish the transformation of the country from a traditional, agrarian society to a modern industrialized nation. Large enterprises using machinery and integrated operations to capacity reaped the benefits of efficiency. The “bigness” required for efficient operation by financial and industrial concerns was also seen as a requirement for the efficient operation of many other noncommercial endeavors. Many reformers from this time—commonly referred to as the Progressive Era—proposed big government, big schools, big social service organizations to efficiently minister to the needs of the people. Small, decentralized operations were viewed as wasteful. Organizations of all types were seen to require a “critical mass” in order to attain efficiency in their operations.²⁹

Large size, tied to the concept of professional expertise, could combat waste and corruption, the two most often cited evils of the time.³⁰ Given the problems exposed by the muckrakers of the progressive era, the idea of efficiency in the social realm held out the promise of a better tomorrow. Social efficiency suggested a moral clean-up. It implied that society was in control of its affairs; that the spread of efficient systems throughout society was not only desirable, it was possible. By 1910 an efficiency craze gripped the country. Efficiency societies, efficiency expositions, efficiency courses, and efficiency lectures were commonplace. Churches set up efficiency committees to increase membership. Feminists put forth the idea that efficient methods of doing housework would free women from subordination.

If a minority saw efficiency as a way to liberate individuals, most reformers sought to use efficiency to improve society in the aggregate through “professional social engineering.”³¹ Substituting guesswork with expertise, politics with competence, nepotism with professionalism, the social engineer could use his power to make society run as efficiently as a machine. Efficiency provided a reason for optimism during a time of perceived crisis. It could be used for purposes of social control. That idea was adopted by administrative progressives, lending legitimacy to their push to restructure government along rational, hierarchical, bureaucratic lines. Though the efficiency craze abated after 1915, the idea that efficiency could be used for social control remained one of its lasting effects.³²

The high value placed on efficiency in American society throughout this century has its roots in the century’s beginning. As will be shown in the chapters that follow, when alternatives to the status quo have been proposed, heightened efficiency has often been used as the primary rationale for their adoption. For

example, the pro-efficiency school reformers made efficiency the centerpiece of their program. The luster of the efficiency ideal did not dim with the passage of time. In fact, at the heart of today's education reform movement can be found the argument that schools must be restructured in order for them to efficiently meet the needs of America in the twenty-first century.

Science: The Dual Promise of Efficiency and Truth

Science and the scientific method—systematized, rational knowledge gleaned from study and observation—came into its own during the years around the turn of the century. It became a driving force conditioning the development of twentieth-century American civilization. It gave us methods of investigation, knowledge, and tangible products of technological innovation.³³ It became viewed as the key to the discovery of truth and efficiency. It was essential to the notion of progress.³⁴ The rise of the engineering profession represented the human embodiment of this scientific ideal. Engineers applied their arcane, scientific knowledge to technology, resulting in tremendous advances in manufacturing productivity, communications, transportation, and the national infrastructure. The engineer made the benefits of scientific knowledge real and obvious for every American. The engineer's status grew by 1900 from mere "mechanic" to user of science for the commonweal. Engineering became an esteemed and influential profession.³⁵

One mechanical engineer believed that by generalizing from scientific principles found in the mechanical world, human work could be done more efficiently. Frederick Taylor devised a theory of "scientific management," which he said could create a neat, understandable, coordinated world in the factory. As he got older, Taylor went beyond the factory gate and spoke of the applicability of scientific management principles "to every conceivable human activity." His system became more than a business therapy, it was also a social program. Taylor was not alone in believing that science could be the guiding principle of a better society. The social purity movement, the temperance reform movement, and the dietary reform movement all placed the value of science squarely in the middle of their policy for societal improvement.³⁶

The rationality of science depended on the use of numerical data gathered during investigation and study. The use of quantitative measures became the trademark of an "objective" study, despite the fact that statistics, percentages, and graphs were often used to legitimize wholly unscientific, biased theories. In 1902 prominent educational progressive John Dewey—who based much of his

reform agenda on the development of intelligence and democracy, as well as the problems of an industrializing society—rejected much of the quantitative educational research of the day because of the many conservative premises embedded within it. Merely counting things and using statistics did not produce, in his mind, “a magical guarantee of a scientific product.”³⁷ Yet, his voice was in the minority. For most Americans, use of quantitative measures was accepted as the way to discover objective reality. This belief in the power of numbers was central to the use of science as the tool to find truth and attain efficiency at the turn of the twentieth century.

Thus, science and efficiency were two overarching themes that together changed the way Americans evaluated human behavior, national events, and institutions in their environment. Efficiency was synonymous with goodness, and science was equated with the discovery of truth. Science provided the ways and means to attain efficiency. Social organizations as personal as the family and as distant as the national government were scrutinized in the light of these ideas. If progress was to result from human endeavor, science and efficiency were the lamps lighting the path of goodness and truth leading to that better way of life. The power of this idea remains strong even today—as the twentieth century comes to a close.

The Individual in the New Social Order

Social Darwinism, the late nineteenth-century individualistic philosophy, made it abundantly clear that in the natural order of things, people were not all equal in endowments. “Inequality appears to be the divine order,” wrote one prominent journalist of the era. Individuals who enjoyed power and wealth did so because they were endowed with exceptional talents that allowed them to rise to the top stratum in society. Social exclusiveness, ideas about “genealogical superiority,” and ardent patriotism in the face of massive immigration found greater acceptance in society.³⁸ Ideas about a natural hierarchy of people and of castes based on “natural ability” were written about and discussed. Pro-efficiency reformer Charles Eliot, president of Harvard and of the National Education Association, speaking to the Harvard Teachers’ Association in 1908 cited “four layers in civilized society which are indispensable, and so far as we can see, eternal”: a narrow upper layer, which “consists of the managing, leading, guiding class—the intellectual discoverers, the inventors, the organizers and the managers and their chief assistants”; a layer of skilled workers who could use technology in production; a layer representing the commercial class “which is employed in buying, selling and distrib-

uting”; and finally, the “thick fundamental layer engaged in household work, agriculture, mining, quarrying, and forest work.”³⁹

This concept of societal castes was also expressed at this time via use of a military analogy. In 1908 Andrew Draper, first commissioner of education for the state of New York and vocal pro-efficiency reformer, proposed that the mass of society was suited for the rank of corporal. These corporals comprised the wage-earning masses. They were corporals because of their “natural inclinations.” Draper felt they were important to society because they supplied the labor “for the great manufacturing and constructive industries” in a society that based its greatness, strength, and culture on industrialism. These corporals, in fact, were more important than the all too often “insipid colonels” who led “idle” lives in the arts or professions.⁴⁰ One can only surmise that as first commissioner of education for one of the most powerful states in the nation, Draper assumed himself to be among the generals of society, directing the corporals in a great and noble effort.

Draper and other members of the managing class wished to use science and efficiency to rationalize a variety of human endeavors. Seeing themselves as experts well-versed in sound scientific and management principles, they sought to direct society from above toward some vision of the good life. In so doing, they felt it necessary to have final determination of societal reform during this period of tremendous upheaval and dislocation. Expertise of the elite class was seen as preferable to participation by ordinary people in decisions affecting society. Having experts run the government for the commonweal was viewed as more efficient than the conflict-ridden, sometimes corrupt government “of and by the people.”⁴¹

Women

Men had greater status and power than women throughout the history of the United States. As the nation increasingly turned to science, bureaucracies, and expertise to steer America in the new century, men’s power became more and more established. Correspondingly, women found increased institutionalization of their traditionally low status. Although one could argue that it was highly inefficient to exclude individuals from avenues of participation in society solely on the basis of gender, scientific arguments were made to legitimize the practice and add credence to long-held stereotypical notions of women’s passivity, emotional weakness, and self-sacrificing nature.

Although many women had to work outside the home in order to support themselves and their families, their right to work was only grudgingly acknowledged.

Women were seen as surplus employees to be drawn upon when needed. They were relegated to the lowest paying occupations in the economy—domestic work, mill operatives, and teaching. Obstacles to entry in occupations that earned respect, authority, and money were many. Employment discrimination was open and rampant.⁴² Only one percent of lawyers were female in 1910, despite the fact that by 1900 thirty-four states permitted women to practice law. Much informal and formal prejudice existed. Women lawyers were not admitted into the American Bar Association until after World War I.⁴³ The American Medical Association not only refused to grant membership to women, it also barred men who held positions in medical schools in which women taught or studied. Lest the point had to be made more clear, men who served in hospitals that extended hospital privileges to female physicians could also be banned from membership in the AMA.⁴⁴ As far as being part of the elite class that could manage the new bureaucratic organizations that were becoming so prevalent at the time, it was unthinkable. Women in general were seen as having no “natural” talent for administrative tasks.⁴⁵

Just as it is today, gender was a fundamental organizing principle in society around the turn of the twentieth century.⁴⁶ Career opportunities for women were severely circumscribed by stereotypical ideas about their gentle nature and scientific prognostications about their limited abilities. If one would attempt to guess where women were placed in the four layers of society Charles Eliot described, it seems clear that regardless of their aspirations to the contrary, they would take their place in the “thick fundamental layer engaged in household work.” In a very real sense a person’s gender was perhaps the greatest predictor of the position she or he could attain in society.

The Rise of a Business Culture—1850 to 1920

Historically, business has been very important to the American value system. Some historians feel that by 1815, values necessary for a business civilization became the dominant in the new nation at the expense of other value systems. Certainly by 1850, values necessary for the smooth functioning of business were widely adhered to. Ideas about obedience to authority, punctuality to the minute, the evil of wasted time or property, the virtue of personal industry were increasingly commonplace and necessary for a nation in the midst of the transformation from an agrarian to an industrialized society.⁴⁷ In the opinion of social historian Merle Curti, the commercial class replaced the clergy as the keepers of the new morality by the middle of the nineteenth century.⁴⁸

After 1850 the United States became more and more a business-oriented democracy striving for material progress. The preeminent value of material success has been cited as one of the most important influences of business on the mainstream American culture. The importance of wealth as a measure of one's worth and the corresponding devaluation of land ownership as a means of gaining prestige were two changes in the value system after the Civil War. Merchants, publishers, lawyers, and bankers were increasingly seen as important contributors to the nation's material well-being. Cities became "mercantile centers" and helped proliferate this new value system.⁴⁹

Concepts of democracy were also tempered by the rise in the importance of business. Although democracy was still an ideal in the political domain, it had no place in the business world. Both common and statutory law protected property rights, which encompassed not only physical assets but the activities arising from use of those assets. Ownership of a business carried with it certain dictatorial rights over the use of the property associated with that business. "Liberty" carried with it ideas about the right of the businessman to control and dispose of his property in whatever manner he felt most likely to result in profit. In this way, notions of democracy were adapted to the utilitarian desires of businessmen.⁵⁰ And democracy stopped at the door of the business enterprise.

By 1900 the new form of business organization—the corporation—was fast on its way to becoming the most powerful institution in the economy. Alfred Chandler found in his study of the ascendancy of the corporation, *The Visible Hand: The Managerial Revolution in American Business*, that this modern business enterprise replaced market mechanisms in coordinating the activities of the economy and allocating its resources. The middle and top managers who ran these corporations represented a wholly new form of businessman: people who had no direct ownership in the business who, nonetheless, had unchecked power to coordinate the internally integrated units within the corporate organization. While no managers of this type existed in 1840, by 1912 they were the dominant type of businessman in the economy. According to Chandler, "Rarely in the history of the world has an institution grown to be so important and so pervasive in so short a period of time."⁵¹

Technology was the driving force behind the rise of the corporation. Technological advances in materials, power sources, and machinery resulted in an unprecedented increase in the output of goods manufactured. Technology also was the key to moving these goods quickly and cheaply from the point of production to the point of distribution. This tremendous increase in output and movement of goods required a corresponding growth in markets to absorb these goods. These developments all pointed to the need for organizational change

allowing greater administrative coordination.⁵² This needed administrative coordination resulted in the rise of the managerial hierarchy. Chandler sees this new managerial class as the defining characteristic of the modern business enterprise. The managerial hierarchy made possible the internalizing of the activities of many business units within a single enterprise. The hierarchy allowed for coordination that resulted in greater productivity, lower costs, and higher profits than coordination by market mechanisms. Once the hierarchy had proven itself successful in carrying out its administrative function, it became a source of permanence and power. Individual managers could come and go but the hierarchy remained regardless of the individuals who filled its organizational slots.⁵³

The managers who filled the corporate administrative hierarchy were salaried professionals with technical backgrounds. During the period 1870 to 1900, a period when less than 5 percent of the population attended high school, 40 percent of top corporate managers were college educated.⁵⁴ These managers were seen as “scientific men” who could deal with the need to coordinate and control vast amounts of capital and raw materials, and end waste in the form of production or distribution delays. The velocity of throughput—the number of units processed per day—was the key to economies that lowered costs and increased output per worker and per machine. Cost was the criterion on which the performance of every person in the hierarchy was evaluated.⁵⁵

As the modern business enterprise grew, ownership became separate from management. Owners had neither the information, the time, or the expertise to play a dominant role in decision-making. By 1917 the original entrepreneurs who founded many of these corporations rarely took part in decisions about pricing, output, and the like. Stockholders in general left the running of the business to the salaried managers. Members of the corporation’s board of directors held power to veto top-level decisions. They could replace senior managers with other career managers. Rarely, though, were they in the position to propose positive alternative solutions to policies developed by management—policies that often worked in the managers’ self-interest rather than in the interest of the enterprise.⁵⁶

The importance of the worker on the factory floor of the modern business enterprise lessened as that of the manager in the corporate office increased. Prior to mass production, a worker had both knowledge of and control over either part or all of the manufacture of a product. In contrast, the worker’s job in mass production was simply to feed materials into machines, keep an eye on their operations, and package the final product if that was not yet done automatically. Corporations’ better use of management, energy, and capital permitted greater production with fewer workers. In the manufacture of cigarettes, flour, canning,

soap, and photographic negatives—industries all using continuous process machines—the role of the worker relative to these other organizational variables became far less significant to production.⁵⁷

Frederick Taylor's ideas on scientific management further reduced the role of the worker to that of a mere executor, albeit an efficient one, of the plans designed by staff managers. Taylor saw the corporate hierarchy as being one of abilities—people would rise to their level of competence.⁵⁸ To gain maximum efficiency, therefore, power had to move up from the shop floor worker to the managerial hierarchy.⁵⁹ An individual worker had no control of his work; work that tended to be only one operation in a complicated process designed by someone higher up in the hierarchy.⁶⁰ The good worker became one who conformed to management's edicts. By the mid-1920s the institutionalization of this role for the worker had taken place. Sociologists Robert and Helen Lynd wrote in their 1929 classic, *Middletown*, that most work was "endlessly monotonous." The system they witnessed in the modern business enterprise demanded "little of a worker's personality save rapid, habitual actions and ability to submerge himself in the performance of a few routinized easily learned movements." Eighty-five percent of the workers they observed in this small mid-Western city worked under close supervision doing meaningless tasks.⁶¹

By 1920 the United States had become a business oriented culture where 5 percent of the corporations generated 79 percent of total corporate income.⁶² American business did not just represent another interest group in a pluralistic society. It was a predominant force. Business institutions affected the rest of society in a seemingly infinite number of ways. Decisions internal to corporations had economic and social effects, which economists later termed "externalities."⁶³ Innovative business practices spread throughout society through interpersonal relationships, use of the print media, and the manipulation of politics. The progressive period saw the passage of laws that many businessmen wanted enacted and enforced. Finally, the goals and values of a business oriented culture established norms about how people were to behave, what they ought to strive for, and what qualities or achievements should be rewarded.⁶⁴

Although the ascendancy of big business did not occur without skepticism and opposition from various quarters of society, by the end of World War I the middle class viewed business in a positive light. Corporate use of rationality and science to increase efficiency and eradicate waste made it seemingly the embodiment of much that was good—and certainly worth emulating—in this newly industrialized society.⁶⁵ This image of business was due, in part, to corporations' efforts at self-promotion through public relations and advertising.⁶⁶ The public mind's susceptibility to the domination by business was not only due to its

public relations effort, however, but through business control of strategic avenues of influence—employment, media, and credit.⁶⁷ The effort at self-promotion by business was successful.

The businessman, by 1920, supplanted the judge, the clergyman and the professor of generations past in prestige and authority.⁶⁸ To return to Charles Eliot’s image of the four layers of society, the narrow upper layer consisting of the managers and organizers was, no doubt, replete with businessmen from the managerial hierarchies of the nation’s most profitable corporations.

Education—Social Control or Personal Development?

A belief commonly held by people in positions of power during the nineteenth century—the “old Americans,” business and professionals—was that education could preserve the status quo because of its power to build character in American youth. When Horace Mann proposed free public education for the masses, this aspect of schooling was stressed at least as much as the intellectual discipline children might develop. According to Merle Curti, character-training was actually more important than intellectual development to the supporters of free public schools:

We tend today to think of our American system of public schools as having been founded out of a great zeal for the welfare of the plain people. But actually this zeal was tempered by zeal for the welfare of the employers of labor, by zeal for maintaining political and social status quo.⁶⁹

Mid-nineteenth-century education reformers such as Mann garnered the support of powerful interests by promising that schools would promote the general prosperity, eliminate social evils, and safeguard republican institutions against revolution. Schooling would have utilitarian value by teaching the children of the masses the virtues of honesty, industry, property, and respectability.⁷⁰ Schooling would insure that these children would grow into adults readily employable by the expanding industrial sector. Prominent industrialist Abbott Lawrence declared in 1846: “Let the common school system go hand in hand with the employment of your people; you may be quite certain that the adoption of these systems at once, will aid each other.”⁷¹

The members of the lower classes in society at this time—immigrants, blacks, poor whites—also looked toward education as a tool, but as a tool for social

change and personal betterment. The poor hoped that, if given the opportunity to become educated, their children would break down barriers based on class, ethnicity, and race, and join the ranks of those economically better off. In addition, they hoped that education would give them more power in the political realm.⁷² Ironically, this group's hope for what education could accomplish conflicted with the hope of those who supported education to protect their vested interests. As Curti asked:

Could the schools do both? Could they leave the wealthy with all their economic power and privileges and at the same time enable the masses to enter the upper ranks without jeopardizing the position of those already on top? Could all stand on the top of the pyramid?⁷³

As subsequent chapters will show, these disparate views of the purpose of education would persist throughout the twentieth century, coming to the forefront of public debate during periods of proposed educational change.

Conclusion

The sense of crisis bearing down on America at the turn of the century was the impetus behind demands for radical change in the way education was carried out. American society had to choose between alternative visions of education reform; visions that were rooted in particular ideas about how things ought to be. Ideas about education were influenced by beliefs about the efficiency of business methods, the power of science to reveal the truth, and the worth of the individual in society.

The business corporation embodied much of what was considered valuable at the turn of the century. Using science and technology, professionally trained managers could plan and coordinate the efforts of thousands of people in order to bring mass produced goods to market quickly and cheaply. Borrowing from the principles of corporate management, the administrative progressives began a reorganization of government that would take decisions out of the hand of local citizens and politicians and into the hands of expert managers. Professionals of all types gained power and status by virtue of their ability to use science in the service of their clients. Together, business, professionals, and the administrative progressives offered America the promise of a better life through efficiency and expertise.

The educational progressives looked upon many of these trends with alarm. Concern for the individual in the work place and the polity gave them reason to

worry that what was seen as progress by many was actually a danger to the individual citizen’s well-being. The pro-efficiency reform coalition, however, was made up of men who reaped the benefits of the new trends: businessmen, professors, and schoolmen who hoped to accomplish in education what the administrative progressives were accomplishing in government. Accordingly, their program for education reform embodied the principles of efficiency, science, and expert leadership.

A sense of crisis, a dependence on education to provide stability, a love of efficiency, and an admiration for business methods characterized this period. As we shall see, these were to become common themes in every period of education reform throughout the twentieth century.