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AUTHOR Moore, Colleen A.
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ABSTRACT

Because of the increased need for a trained labor force to work in growing industries and because the public schools had failed to provide such workers, many corporations conducted their own training programs during the period 1900-1930. Departing from the older methods of training foremen and having them train the workers, these schools provided both general education and job training. Corporate schools especially stressed educating the workers to the "proper" values that would promote corporate efficiency (thus corporate profits), and, according to the prevailing social theory, the good of society would be enhanced. In addition to training workers in specific jobs and molding industrial values, the corporate schools also sought to prepare white, native-born men for promotion to the executive ranks. The corporate schools were so good at their tasks that public schools began to copy some of their methods. By 1930, however, corporate financial troubles caused by the Great Depression as well as union troubles and growing public intolerance of the class-hardening promoted by the corporate schools had caused their demise. Their tasks were taken over by public schools and vocational education programs. (KC)

"CORPORATION SCHOOLS: 1900-1930"

by

Colleen A. Moore

Department of Educational Foundations

The University of Akron

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A large number of corporation schools were established in the first three decades of this century. The focus of this research was the examination of the issues leading to the creation of these schools, the organizational structure they followed, and the intended purposes they achieved.

Two basic issues about which the discussion of corporation schools centered were the role of industry in the training and general education of the worker and the role of public education in training and educating students for work. These issues arose in the late nineteenth century and became focal points for educational decision-making in the early 1900s. The arguments which developed about training in the factories, and about vocational education in the public schools were essentially disagreements over the role industry was to play in education and the influence corporate forces were to have on the goals of public schools.

The problem of promoting industrial growth while limiting its deleterious social effects was an issue debated by social reformers in the mid- and late nineteenth-century. The school came to be seen as a major agent in this process. Knowledge gained through schooling was considered as a natural resource of intellectual power through which development a more integrated industrial society could be achieved. The inadequately functioning "social" institutions of the nineteenth century were replaced, by the early decades of the twentiety century, with a system of education in the United States. Through this systematic transmission of "moral virtue" and behavior, the traditional values of society were to be preserved.[1] This research focused on the period during which the development of the American educational system

took place, but examined American education from the perspective of the industrial education movement in the early twentieth century.

Because apprenticeship training had come to be questioned as to its relevance and adequacy by the late nineteenth century, a "popular movement for formal industrial education" began.[2] The specialization and standardization of the assembly line and the increasingly more rapid technological changes which resulted from the phenomenon of industrialization had so "automated" industrial work that a leveling of labor resulted. Apprenticeship training, highly developed but also specific to "pre-industrial" forms of labor, was no longer a determining factor in preparation for industrial work.[3]

The leveling of the labor force created a new hierarchy in business which required specialized individuals with specialized schooling. However, a result of industrialization had been the creation of levels within which an employee could move horizontally but only with difficulty could a worker move vertically.[4] Locked into these positions, worker movement was so restricted that additional problems resulted for business.

Managers of business found it necessary to utilize more effective communication and training techniques to assure a smooth, "uninterrupted" flow of information to the workers at all levels of the industrial complex. The success of business came to depend on the ability of its managers to coordinate all aspects of the industrial process and to insure smooth production, increased output, increased quality of goods, and fewer accidents and other losses of time and manpower.[5]

Business "from the very beginning of industrial development in the United States," had attempted to exert paternalistic control over its workers.[6] Control was considered good business because it was believed a more "concerned"

and "involved" employer would be one who would cultivate a happier, better trained worker. An "investment in people" came to be the slogan by which industry would justify its influence and control over the available one half to two-thirds of the workers' time spent in the factory due to the long working day. Employers recognized that it was the worker's labor which produced the product and that efficiency of work was the factor which most affected the profit from labor.[7] To keep the worker happy, therefore more productive, became a role of industry.

Business attempted to influence all aspects of a worker's life by educating him for work and for leisure. "Education for leisure, under the conditions of automatic production," was considered education for life.[8] Managers of business thus established a rationale for their attempts at moral education within the industrial training programs of workers. The values which were instilled in the worker so that he could live a more productive life were also to insure his contribution to the larger social order. The transmission of these values was required by managers of the industrial work order to quarantee the survival of the new corporate society. Labor was to become educated to take part in this corporate order of newly industrialized America.

Moral training, in the nineteenth century, had as its major purpose the prescription and remedy of moral decline. Education had come to be viewed as a powerful force through which moral decline could be checked and the antidote of "proper habit formation" through emotional and attitudinal training used to cure social ills. Industrial education therefore came to have more than an economic foundation. The moral elevation of the poor took on increasing importance as business and society in general sought to reduce the threat to the social order of a large, poor, uneducated working class.

Improving the morals of members of the working class and training workers to fit into the reduced skill levels of industry became the goal of industrial education.[9] Work requirements came to be cast in terms of behavior rather than skill and "control" was justified by the efforts of those with power in this corporate society to create harmony within the work order for the greatest good for all.[10]

Many persons in the late nineteenth and early twentieth century came to fear the involvement of industry in the education and training of workers. These fears lay in the ideas of "servitude, control, profit motive," and also fears about "efficiency." Proponents of the labor movement and other social reformers came to worry about the exploitation of the worker.[11] An oversupply of trained workers could result in reduced wages and a large force of "scabs" who would hinder efforts at unionization. Management domination of private corporation schools, and eventually the heavy impact of corporate values on public schooling, was believed to lead to too much specialization and the creation of a stratified school system which would further hamper the mobility of the working class.[12]

Many advocates of the return of industrial education to the domain of the public schools sought to reduce the fear of the creation, by business, of an industrial proletariat, and also to modify the role of industry in American life.[13] From 1890 to 1930, American public education became altered in its basic structure and character. Schooling became national in scope and compulsory for students until mid-adolescence. The curriculum of public schools was expanded to include studies designed to help the student find that person's appropriate place in schooling and ultimately in the industrial economy.[14] Paternalism therefore also became apparent in public schools in

the differentiation of curricula, and particularly in the "guidance" movement of the early twentiet century.

In effect, American public education cooperated with the system of business.

> The values, beliefs, prejudices, and sympathies that formed the outlook of the leaders of corporate industry were identical to the views of public educators.15

Public schools were transformed in the early years of this century into an instrument for achieving the objectives and meeting the needs of the corporate society. The justification for this restructuring of the American educational system was that the views of leaders in both schools and in business were the same. The greater good of all was touted as the primary consideration of what quickly came to be labeled "class" education.

The stress on patriotism and the need to meet the competition of foreign business emphasized the goal of establishing America, through its industrial output, as a world power. The prestige of industry was to be maintained by the educational system as it came to shift from the "opening" of students minds to the "accommodating" of students to industrial work. Such came to be the patriotic responsibility of schools--training students to fit the requirements of a hierarchical work force.[16] The traditional intellectual curriculum of the nineteenth century was replaced in many schools with a curriculum stressing "learning by doing." A class education came to replace the common education ideal.[17]

Education for "all" eschewed the class orientation of industrial training and "calmed" the fears of labor by offering types of preparation considered most "appropriate" to the intellectual and skill capacities of the poor. Many reformers argued that shunting some workers into the

proletariat was a reasonable rationale as those workers were limited by their "nature" anyway. Questions arose about the right of schools to harden class lines, but were answered by responses such as "for the good of the state, for the well-being of the largest number, and for the perpetuity of the state."[18] Many viewed industrial education as a means of providing universal secondary schooling without disturbing the shape of the social structure or permitting excessive social mobility.[19] Such criticism was well-founded in view of the social unrest which resulted in the late 1920s and early 1930s from not only an economic base but also worker "rights" considerations.

The question of how to make schooling "more relevant to the emerging corporate order" was the major point about which criticism and reform of public education centered in the late nineteenth century.[20] American public schooling had become considered of ambiguous value as a source of training of industrial manpower. The emphasis of schooling became "what was good for business was good for society" and moral education stressed cooperation and self-sacrifice to society. "Individual instruction" was to have as its goal the education of the individual for the role one was to play in society. School and society were to become more integrated and control rather than rescue became the premise of industrial training.[21]

Schools had as a purpose the adaptation of students to the existing conditions of industry and accordingly had to adjust the "future worker" to industrial requirements. If the general welfare of the community rested with meeting the manpower needs of industry, then labor would have to be "dignified" and efforts to make it more effective (efficient) were justified. Creating an industrial working class from the urban poor was hidden under the guise of "equality of educational opportunity for all." Schooling was to allow the

child to "realize" his most appropriate position within the work order and was to meet the needs of society and the child by preparation of future workers for their "most probable life career."[22] Public education in America therefore became heavily involved in campaigns to end urban poverty and crime, to Americanize foreigners, to rejuvenate the democratic spirit, and to educate children for accommodation into this "industrial" society. The image of the highly organized, smoothly working structure of a corporation became that adopted by American "Progressive" educational leaders.[23] This image of education shaped the form and direction of twentieth century American public education.

Mainstream industrial education of the mid- and late nineteenth century was a popular response to the necessity for schools to assume more manual training of students. Much training of students was supplied by apprenticeship courses and by manual training and trade shcools; but in the early 1900s private industries and vocational schools set out to assume this function.[24]

The manual training idea of "educated labor" was that the worker should develop specific work skills and also receive instruction from a liberal arts curriculum.[25] Learning by doing was combined with a general education.

Industrial education was to prepare a worker in more than the skills needed for a job. The teaching of industriousness and the clearing up of character problems was hoped to lead to improved worker-manager relations as workers came to realize and appreciate their place in the work order. Labor's schooling was hoped to relieve labor problems which many managers of business and many educators believed were simply the result of ignorance.[26]

Vocational training became more and more emphasized as the impact of business values and industrial ethics was more fully felt by schoolmen in the

early 1900s. The results of this impact were an intensified commitment to the integration of the school and the economy and a justification for the utilitarian value of diversified schooling.[27] A more practical, a more vocational type of schooling for students was demanded.

Corporation schools were examined as a response, specific to industry, to the need for vocational training; but also important to examine was the parallel growth of vocational education in the public schools from 1900 to 1930. Schoolmen adopted the corporate model of administration, and efficiency also became their goal. Compulsory attendance, vocational guidance, and the differentiated curriculum resulted from this new focus on a more practical education which was to assure the nation students prepared for citizenship in the industrial order.[28] Vocational training became occupationally specific and preparation for a vocational life was stressed. Specific training, not general education, and education in the general social and personality traits suited to corporate organizations became the function of schools. The assumption of dissimilar abilities and different desires and capacities of different classes became the justification for the "democratic" preparation of students as cooperative workers in industry.[29] "Equal educational opportunity" was argued as being satisfied by providing differentiated schooling. However, industrial training officially sanctioned the emerging class structure of corporate industrialism.[30] The "equal education" ideal of the nineteenth century became fully subverted to "equal opportunity" by the early decades of the twentieth century.

Corporate education had many shared purposes with the developments in industrial education in mainstream public education. Schooling in America had shifted from early colonial trade training to an emphasis on factory

training.[31] This shift in emphasis to an on-the-job setting for the training of the worker was the reason why many corporations came to support some form of industrial education outside the mainstream of American public education. For those who could afford to do so, usually the larger companies with a broader financial base from which to function and a larger work force necessary to train, specific job training and related general education came to be an efficient means by which to meet both immediate and long-range needs of industry.[32] The scientific management of schooling became a function assumed by industry not only for reasons of efficiency but also because public schools had failed "to meet the higher industrial needs of training." Public and private schools, offering specific industrial training programs were unable to provide the numbers of workers needed by industry and were unable to adjust their programs quickly enough to meet the constantly changing technological skills demanded for factory jobs.

Training on the job was to become an important social fact and the relation of training in an industrial setting to the American educational system was important to examine in order to understand the origin and rationale of corporation schools. Training in industry became an integral part of the modern productive system because of need.[33] The training in industry rationale was supported by its learning-by-doing emphasis and its opportunity provided to workers to rise within the system--to achieve success within the "industrial democracy."[34]

Education in industry essentially offered nothing new as a method of training and educating people. Education for a job and on the job had long been practiced in America but as industry expanded, a premium was placed on quick training, therefore efficient production, therefore increased profits.[35]

Informal on-the-job types of training were supplemented in many factories, after 1900, by more formal programs which included general education and formal classroom instruction modelled after the methods used in the public schools. Despite the fact that the existing agencies for education were not meeting the needs of industry, it must be noted that the growth of corporation schools can be tied to business paternalism and efficiency.[36] Business leaders were certainly not blind to the impact such training programs could have on the control of the worker.

"Training" was the label substituted by many in industry for "education" to stress the place of corporation schools outside mainstream education. Though such programs do not have a well-recorded history and though each program was a separate effort, all arose out of similar conditions and functioned in much the same way. Therefore, though education in industry took the form of "corporation schools" the movement was sporadic and was not of an "institutionalized" character.[37] Enough common characteristics can be found however, to examine corporation schools as a group, and as a movement by corporations from 1900 to 1930 to meet the needs of industry for trained man power and to establish a spirit of cooperation within the industrial setting by educating the worker for industrial citizenship.

The context within which corporate educational programs were created was the phenomenon of industrialization. The response by industry to the lack of efficient and adequate public industrial educational programs was to create schools within the factory. As these schools grew in number and their programs in scope, advocates of traditional modes of schooling reacted with objections to the involvement of business in education. However, "as industrial development proceeded to become a dominant factor in the economic life of America,"

the implications of industrial education, whether in a factory setting or in public school, commanded attention.[38] Seldom were points of commonality between private industrial training institutions and public schools discussed. Shared purposes were not examined and though public educators who favored education for work advanced vocational education legislation in the early 1900s, few others spoke to this issue. Most public school educators continued to view, as a challenge and threat, the involvement of corporations with educational policy decisions.

Industrialization was the causal event leading to education related to industry. Industry constantly demanded more skilled machine designers and planners to improve production set-ups. However, these advances led to the skill dilution of the mass production system and to an increasing need for efficiency and "cooperation" among workers. Adequate training for work came to mean attention to "order, regularity, punctuality, strict adherence" to rules and the ability to cooperate with co-workers--and with management.[39] This transformation in the culture of work stressed the development of attributes (attitudes) necessary for the new work culture. The modern employer had two goals to meet which were to be facilitated by this type of behavioral training: 1) to insure harmony and the development of individual powers within the internal organization of business and 2) to cultivate both public and worker good will at every point of business.[40]

Business was faced with a number of specific problems related to worker attitude and satisfaction in the job setting. An inadequate supply of employees demanded the development of trained workers; a lack of highly skilled or technically trained employees for promotion created the need to develop managerial talent; the demand for higher grade production than that

produced by unskilled workers caused industry to train men in order to improve the quality of their output; the too frequent turnover of labor forced companies to consider incentive programs to reduce the rate of workers leaving for other employment; and waste and accidents from carelessness or "ignorance" of untrained workers was to be reduced through education.[41] Corporation schools were established to meet all these needs.

Public sentiment was originally not in favor of public monetary support for the training of students for business, therefore corporations undertook the training of workers to meet the specific needs of each company. The National Association of Corporation Schools (NACS), which merged with the National Association of Employment Managers to become the American Management Association in 1914, stated the general aims of such schools as developing the employee to the highest level of efficiency, thereby increasing the efficiency of industry, and established a broad goal of influencing the established educational institutions to favor industrial training.[42] Public sentiment was eventually swayed by favorable economic conditions and the superpatriotism of the World War I period to support industrial education in the public schools.

This study was limited to the period from 1900 to 1930 because it was during that period that most examples of corporate education became viable forms of schooling for workers. The study ended with the 1930s because the economic and social upheavals of that decade led to the demise of most corporation schools or to their transformation into decentralized, specialized types of training no longer under the umbrella of a formal comprehensive educational structure. Also, a "system" of American education had become a reality by the 1930s and the managers of business saw the assumption of industrial training as a responsibility of the public schools.

Corporate education, from 1900 to 1930 most closely modeled a "system" of industrial training for workers. Though the system consisted of numerous, separate, independent efforts by large corporations, it was, overall, effective in meeting most immediate and many long-range needs of industry. Workers were educated in the skills demanded by the mass production system and in the attitudes necessary for survival in the emerging corporate order.

The purpose behind the idea for corporate education was an "investment in people." Corporate leaders realized that without the cooperation of the worker they could not obtain favorable conditions for production. By education and the offer of the incentive of promotion within the company labor hierarchy, and by correcting social maladjustments and improving working conditions, managers hoped to create stability and harmony in the factory setting and create a "rational" market for the goods created by and purchased by labor.[43] Industry hoped to realize a profit not only from the consumer market (of which laborers were members) but also from savings of time, material, and manpower on the job. Efficiency was the keyword and the goal of business.

Training programs started with the education of foremen with an emphasis on educating them to transmit, effectively, company policy. Also, managers believed that foremen (workers) educated in the problems of business would not only provide the company with savings realized from the inexpensive production of skilled manpower but would also provide the company a return by increasing the understanding of the workers about the problems of business. It was believed this understanding would promote a spirit of cooperation, would increase the development of company loyalty, and would provide a community spirit within which each "industrial citizen" achieved his maximum potential for the good of society.[44]

Training employees in the specifics of work of course improved production but the goal of teaching the men about business was a primary consideration of industry. Managers saw the formal training of workers as a means by which they could affect "quality" control over their employees and saw the groups of trained men as a pool from which they could identify and specially train future executives.[45] Therefore, training programs were established not only to improve production and train available manpower for the manual needs of the industry but also to perpetuate the industrial institution by developing industrial intelligence, by fostering contentment, by providing the incentive to workers of education as preparation for promotion, and by rewarding the educational achievements of workers by advancing such men into the management positions of the company.[46]

The low numbers of available workers in urban areas in the first two decades of this century caused industries to offer incentives, such as educational programs, just to get men to come to the cities. The flow of men to urban areas was heaviest during this period but still the drive for efficiency continued in the factories. Businesses realized that manpower could often be replaced by machine power, considered by many managers more reliable.[47] Machines were frequent replacements for large numbers of men but the rationale offered the public was that such "labor-saving" devices also reduced the cost of goods which created a beneficent cycle for the worker (also a consumer). Besides, said industry, men would always be needed to design and repair and run machines and set up new production techniques.[48] Labor could understand the principle of business behind lowered costs but those without jobs could hardly rationalize their lack of income by such considerations.

Effective training was widely recognized as a way of achieving efficiency.[49] A major purpose of training for efficiency was also recognized as the development of managerial talent. In 1921, the American Federated Engineering Societies reported that fifty to seventy-five percent of the waste in factory production could be attributed to ineffective management.[50] Industries wished to waste no time in developing such manpower and meeting the demands for increased production, quality goods and greater profits.

A chief argument for the development of industrial education in whatever form was to fulfill America's economic "destiny," to develop her natural resources of both manpower and natural materials.[51] It became "America's duty to guide the continuing evolution of the Iron Man intelligently."[52] The scientific management of worker education was modeled by corporation schools which adopted the methods of formal educational instruction and provided what many leaders in educational theory were advocating--education in a natural, "life" situation.

The boredom of the mass production system increased worker alienation, however the task of the corporation schools came to be an emphasis on dealing with the problems related to worker personality adjustment, proper habit formation, and value conditioning--industrial intelligence development. Developing industrial intelligence was to allow the worker to perceive his contribution to the total process and was believed to reduce alienation and to allow the worker to experience satisfaction in his role in the industrial order. Training and education were to lead to the creation of industrial citizens, making a maximum contribution to the industrial order of American society.

The rationale of industrial education, especially as expounded by the originators of corporation schools, was to meet a number of criteria. Education

in industry was to provide the democratic ideal of equality of educational opportunity to workers. Workers were to be identified for promotion through training programs designed to find their capacity and mold them to fit the needs of industry. Maximum productivity of all was the goal of industrial education and supplementing on-the-job training with formal classroom instruction was intended to develop the "whole" man, one who would be best prepared to contribute to industrial progress this degree of production. Acculturating the employee to imdustrial work would be education for work, for the job, and preparation for promotion. The benefits to the worker were considered, by industry, to be many. The benefits of training to business were of an even greater magnitude. The creation of an efficient, loyal workforce would decrease the need to restructure the monotonous work setting and the spirit of harmony and cooperation would (it was hoped) reduce the focus, by labor unions, on the faults of business.[53]

In theory, the incentives offered to workers by business in forms such as educational programs in corporation schools were based on "enlightened" attitudes. In practice, the basis of these attitudes was questionable. Though business obviously wanted to protect its investment in people in order to realize a return, the opportunities for control of the worker and the perpetuation of the class structure within the labor hierarchy cannot be denied.

The "system" of corporation schools in the early 1900s gained identity as the programs became successful. It was recognized that corporation school programs allowed the participation of many individuals in education in connection with their occupation and that such models often became those absorbed by public school efforts to achieve similar goals of industrial (vocational) training.[54] By providing comprehensive educational programs to workers,

American manufacturers set up models of corporate education which, though they differed in curricular and organizational features, functioned in comparable ways to achieve common purposes. Corporation schools were established to solve the problems created by industrialization and, in most cases, were judged successful. They also established criteria by which other such programs could be evaluated.

There existed no typical corporation school in the time period studied because of the diverse conditions and different demands of each industrial organization. However, a typical administrative organization existed because many of the directors of corporation schools got together at conferences held by the National Society for the Promotion of Industrial Education or many belonged to the NACS.[55] Corporation schools modeled public schools and the programs they adopted supplemented on-the-job training in the factory setting with formal classroom instruction. The scientific management of instruction involved both full-time and part-time education of the worker with factory, classroom, and office types of work training.[56] The training of the "whole worker" was emphasized in many corporation schools and included the development of specific skill requirements, general educational courses, education for leisure, and the development of general social and personality characteristics. The significance of the development of worker aptitude and attitude was recognized by business, and corporation schools provided training in both aspects.[57] Factory schooling had a definite socializing function in the preparation of the laborer for work and the assumption of industrial citizenship in the work order.

Accommodating the laborer to industrial work was achieved through "learning by doing" types of training combined with general education

instruction. Most corporation schools admitted all "qualified" employees into the educational programs. Criteria for entrance were physical fitness, sex, ability, and the desire to improve one's position.[58] A criticism of such programs was that most corporation schools, as did public schools, offered a "class" education and hardened class lines. In many industries, non-white or foreign-born persons or females were not offered the "equal opportunity" of education. The most menial and the least skilled jobs were given to persons from racial or ethnic minority origins. Few females were hired for other than secretarial positions in industry and those positions involved a minimum of vertical mobility.

Special training programs for college graduates, skilled technical workers, and supervisory personnel; programs for unskilled workers (such as Americanization classes); and trade apprenticeship programs were the most common types of schooling offered by the corporation schools surveyed in this research. Specific and general subjects were offered to augment a worker's education but these courses were usually business-oriented. Workers were usually paid for their work in the shop and for their time in class. Many corporation schools came to be labeled "continuation" schools and some industries also formed cooperative school programs with local universities or high schools.

Some examples of corporations which established schools in the period studied are as follow:

American Locomotive
American Institute of Banking
American Telephone and Telegraph
Baldwin Locomotive Works
Bausch and Lomb Optical
B. F. Goodrich
Brighton Mills
Brooklyn Edison

Burroughs Adding Machine
Cadillac Motor Car
Carnegie Steel
Commonwealth Edison of Chicago
Curtis Publishing
Equitable Life Assurance Society
Ford Motor
General Electric
General Motors
Goodyear Tire and Rubber
International Harvester
Ludlow Manufacturing (Mass.)
Metropolitan Life Insurance
Milwaukee Electric Railway & Light
Newport News Shipbuilding & Dry Dock
New York Edison
New York Stock Exchange
Prudential Insurance
Singer Sewing Machine
Standard Oil
Swift and Company
Wayne Knitting Mills (Ind.)
Westinghouse
Western Electric
White Motor Company (Cleveland, Ohio) 59

Corporation schools became models of efficiency and dealt with the problems of social organization which required an interest in worker characteristics and social life. The activities of corporation schools were designed to fit the worker to the modern industrial organization and were often so successful that their programs and organizational features were adopted by public schools.[60]

Corporation schools were rated a success in improving efficiency in production and in education of the workers for industrial life.[61] They were judged superior in the responsiveness of the students (as compared to public schools) and showed superior performance results from their methods of teaching. Corporation schools achieved their objectives. "Business training paved the way for many promotions, the quality of production improved, and labor turnover was better controlled, while waste and the number of accidents were

reduced."[62] This success of corporation schools also offers points for consideration about the relation of the economic motive to efficient learning.

Failures of corporation schools were that they were too specific, too selective, and too parochial. They could not meet the criteria of efficiency to the larger social community because they could not provide universal education and could not reach enough workers.[63] Corporation schools were, by the nature of their goals and setting, too limited in scope. They could not offer a breadth of view of society and institutions other than industry nor could the programs encompass general cultural development.[64] They did not, in fact, provide equal opportunity for all to advance within the corporate management structure and were not as democratic in their promotional practices as advocated.[65]

Though managers of business promoted education as reducing the worker turnover rate, increasing the number of available skilled workers, and decreasing the effects of unionism, the discriminatory practices of management personnel perpetuated labor unrest and stimulated the growth of unionism. Much of the shortage of skilled workers can be attributed to the waste of manpower which was "the result of economic discrimination against minorities, particularly negroes."[66] Though many white, native born, english-speaking males were able to rise in the factory hierarchy, jobs often did not even exist for women and blacks and the illiterate immigrant was hired last and given the worse job in the factory. The paternalistic relationship between capital and labor would, in the 1930s, be replaced by one of antagonism.

Union activities in the 1930s were one aspect of the general social unrest created by economic hard times and the attitudes and practices of business. The climate of the industrial setting became one characterized by

further alienation of workers, by a fear of loss of job security, and by a lack of loyalty as incentive programs were reduced in number.

The recessions forced many companies to reevaluate their educational programs and few found justifiable reasons for continuing their factory schools beyond 1930. The concept of comprehensive industrial educational programs in a factory setting was abandoned and businesses replaced "formal" education with on-the-job, apprenticeship types of schooling.[67] The return to foreman training and the expectation that the foreman would act as the key man between management and labor emphasized the rift between management and the lower ranks. The decentralization of training and the assignment of training responsibility to foremen was, in effect, a return to the older apprenticeship system of education for work. However, not all aspects of a job could be learned by or taught by a foreman alone. Therefore industries began to put pressure on the public schools to assume more responsibility in the education of youth.[68] The economic benefits to business of industrial education at public expense were not overlooked.

Public schools directly absorbed some private industrial educational programs. The final demise of corporately supported comprehensive education of workers was almost complete by the mid-1930s.[69] As more and more federal and state monies were channeled into vocational types of public education, the assumption, by mainstream schools, of all general educational responsibilities was complete. Schools were also unable to continue vocational training such as that offered by industry and through the twenties, thirties, and forties and the emphasis of public schooling was seen as "life adjustment" and the teaching of personal relations and strategies for everyday living rather than the teaching of academic or vocational skills. The schools were called upon

to redress the failures of family, culture, and economy and to teach the youth of America resistance to the deleterious effects of urbanization, mass media indoctrination, and to deal with feelings of alienation and frustration which resulted from the economic situation.[70] Public schools increasingly became the agents of social reform and business narrowed its methods of job training to delete all attempts at social reform, supporting the institution of moral education in schools during this period. Schools, ideally, became in charge of the problems of youth. Corporations, though having experienced successes as well as failures, for the most part turned the "business" of schooling over to public educators.

FOOTNOTES

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