The following article "explores three interrelated changes in curriculum ideology, structure, and content that fundamentally altered curriculum thought and practice around the turn of the last century."

During the Progressive Era, the ideology, structure, and content of public school curriculum changed significantly. By 1930, curriculum ideology had become scientific, curriculum structure had been differentiated, and curriculum content had been greatly expanded. As the legacies of those changes continue to shape our understanding about the nature of educational change in general and of curriculum change in particular, historical information concerning the dynamics of those changes remains important. Without such historical understanding, advocates of curriculum change today are often unable to examine certain assumptions about curriculum change. As a consequence, they expend boundless energy reinventing ideologies and models of change ill-equipped to solve the perplexing problems facing the curriculum field. In the hope of informing the current dialogue about curriculum change, the following essay selectively explores three interrelated changes in curriculum ideology, structure, and content that fundamentally altered curriculum thought and practice around the turn of the last century.

Science and the Ideology of Curriculum Change

In the latter part of the nineteenth century, the spirit of science captivated the educational world. School reformers such as John Philbrick believed that the voluntary and pluralistic patterns of nineteenth-century schooling failed to meet the changed educational demands of an industrialized and urbanized civilization. According to Philbrick, the solution lay in "perfecting the system itself," developing what educational historian David Tyack has called "the one best system" of education. "The best is the best everywhere," announced Philbrick in 1885. "If America devises the best school desk," he optimistically continued, "it must go to the ends of the civilized world."¹

In short, the goal of Philbrick and other late nineteenth-century school reformers was a uniform and scientific system of education. Large scale industrial bureaucracies provided a readily available model for the organization and governance of that system, and "scientific management" soon came to guide the development and implementation of its new curriculum.

The appearance of Frederick W. Taylor's The Principles of Scientific Management (1911) gave strong impetus to school reformers to apply scientific principles to the curriculum field.² The leading exponent of scientific curriculum-making, John Franklin Bobbitt, drew heavily on Taylor's work. Along with other curriculum reformers, such as W. W. Charters and David Snedden, Bobbitt reasoned that if scientific procedures could increase productivity and efficiency in industry, those same procedures could be used to improve curriculum. By establishing scientific procedures for determining the means by which specific curriculum objectives could be drawn directly from

life, Bobbitt helped to establish a universal technique for curriculum-making.\(^3\)

Stressing themes of expertise, specialization, and efficiency, these early curriculum reformers effectively eliminated what they felt were wasteful and unscientific curriculum practices resulting from either poor training or lay interference in curriculum development. By the 1930s, therefore, not only had curriculum-making become a scientific and professional endeavor, it had also achieved academic independence as a separate and specialized field of study.

The emergent scientific ideology of curriculum and curriculum change left several legacies that continue to influence curriculum policy. First, curriculum came to be viewed by educators as a professional, nonpolitical concern. Today, educators believe that professionally trained specialists are better qualified to make curriculum decisions than school board members or the public, largely because the specialists’ judgments are seen to be based on technical, educational, and scientific criteria rather than upon political considerations. As a result, educators are often blinded to the political nature of the knowledge they transmit and are frequently surprised (as numerous textbook controversies and sex education protests will attest) about the strong political reactions to their curriculum formulations.

Second, viewing curriculum development as a rational and scientific process often obscures important power alignments among and between political coalitions, economic interest groups, and professional organizations—all of whom may benefit from curriculum change. Teachers of driver education, along with automobile manufacturers and dealers, for example, are not likely to stand by unheard if the rational and scientific processes of curriculum development deemed that driver education should be abolished.

Third, the application of scientific procedures to curriculum development suggests that curriculum is “value-free” or “value-neutral.” However, as Herbert Kliebard notes:

> "Curriculum development," he concludes, "requires sophistication, judgment, and intelligence and only secondarily a technical (and I might add, scientific) skill."\(^4\)

The Child and the Structure of Curriculum Change

While educational reformers were developing an ideological consensus about the scientific bases of curriculum and curriculum change, an important structural shift took place. In the 1880s, reformers such as John Philbrick sought to create a standardized curriculum: a uniform course of study for all pupils regardless of individual interests or abilities. In the last decade of the nineteenth century, however, a growing recognition of individual differences among children of varying social and ethnic backgrounds led curriculum-makers to abandon the ideal of a uniform structure. Largely because of organizational, ethnic, and scientific imperatives, a differentiated curriculum was established.

Organizational imperatives to differentiate the curriculum stemmed from a tremendous increase in the numbers and types of children brought within the purview of the school. Indeed, child labor legislation and compulsory attendance laws brought large numbers of children who, under earlier schooling conditions, would not have been in school or would not have stayed...
in school so long. Reformers, therefore, saw a need to change the curriculum in order to interest and hold these new pupils. In an inquiry into why children left high schools in such large numbers, a 1906 Massachusetts report concluded: "It is the dissatisfaction of the child which takes him from the school. . . . the great lack is in the system, which fails to offer the child of fourteen continued schooling of a practical character." It was rapidly becoming obvious that organizational imperatives demanded differentiation of curriculum content.

Between 1880 and 1919, more than 23 million immigrants came to the United States, swelling public school enrollments and creating an ethnic imperative for curriculum differentiation. In 1908, for example, the U.S. Immigration Commission found that 58 percent of all the students in 37 cities across the country had foreign-born fathers. (New York led all other cities with 72 percent.)

The regional origins of these immigrants were as important to school reformers as their numbers. In 1909, a Stanford University professor, Ellwood P. Cubberley, stated:

These southern and eastern Europeans are of a very different type from the north Europeans who preceded them. Illiterate, docile, lacking in self-reliance and initiative . . . their coming has served to dilute tremendously our national stock.

Curriculum-makers soon realized that these "new" immigrants needed a different curriculum—one that would not only teach them the English language and the requirements of living in a democracy, but one that would also convince these sons and daughters of foreign soil to accept the superiority of Protestant, Anglo-Saxon values.

Finally, as heterogeneous school enrollments increased, new scientific imperatives reinforced the need for a differentiated curriculum. Important discoveries in the fields of child psychology and intelligence testing gave compelling "scientific" support for curriculum differentiation. In his massive, two-volume study entitled Adolescence (1904), G. Stanley Hall challenged the principle of a standardized curriculum on the grounds that it was a "specious delusion" to deny the wide range of individual differences among school children. The principle of uniformity, Hall stated, does not apply to the great army of incapables . . . for whose mental development heredity decrees a slow pace and early arrest, and for whom by general consent both studies and methods must be different.

New developments in intelligence testing provided further "scientific" justification for a differentiated structure, in addition to furnishing the means by which school personnel could objectively sort students by their "evident or probable destinies." Intelligence test pioneer Lewis Terman stated in 1923:

Intelligence tests can tell us whether a child's native brightness corresponds more nearly to the median of (1) the professional classes, (2) those in the semi-professional pursuits . . . or (5) unskilled labor. This information will be of great value in planning the education of a particular child and also in planning the differentiated curriculum here recommended.

Together, organizational, ethnic, and scientific imperatives led curriculum practitioners and theorists to discard the ideal of uniformity and embrace a differentiated structure. The National Education Association confirmed the shift. In 1893, the NEA's prestigious Committee of Ten had rejected a differentiated curriculum for high school students; however, in the Cardinal Principles of Secondary Education (1918), the NEA's Commission on the Reorganization of Secondary Education recognized "individual differences in capacities and aptitudes among secondary-school pupils" and recommended a curriculum commen-

surate with individual ability and probable occupation.11

The legacy of that shift still confronts us with important policy questions. First, although sorting continues to occur, curriculum-makers must be careful of the categories they use to differentiate children and must constantly reevaluate the organizational, ethnic, and scientific rationales for structural differentiation. Second, close attention to children and their differences often results in "blaming the victims" for school failure. From the ethnic and racial inferiority theories of Ellwood P. Cubberley and Lewis Terman, to the cultural deprivation theories of James Coleman, we often obscure the ways in which schools systematically and structurally rationalize inequality. Third, because of curriculum differentiation and the always fashionable appeal for educators to "meet the needs of the child," curriculum-makers often fail to address the important question of what knowledge should we as a society hold in common, and why? In other words, curriculum needs a socially-conserving component as well as an individually-liberating component.

The Society and the Content of Curriculum Change

In an 1899 lecture, John Dewey observed: "The obvious fact is that our social life has undergone a thorough and radical change. If our education is to have any meaning for life," he counseled, "it must pass through an equally complete transformation."12

As suggested in the two preceding sections, the curriculum was undergoing an ideological and structural transformation. A third transformation that took place during the Progressive Era involved broadening curriculum content. "Are we going to have the schools ignore the larger work of education and remain an inflexible missionary of the three R's?" asked the social reformer Robert Hunter in 1904. Or should the school, he continued, "take, as its responsibility, the entire problem of child life and master it?"13 By answering this question in the affirmative, educational reformers opened the curriculum to tremendous growth.

"Inexorably expansionist about the role and function of schooling," progressive educators such as Dewey, Bobbitt, and Charters felt that the curriculum should be directed toward the achievement of objectives broadly and scientifically drawn from real life.14 The Cardinal Principles report in 1918 confirmed this expansion of the curriculum to "educate for life." The seven objectives were as follows: (a) health, (b) command of fundamental processes, (c) worthy home membership, (d) vocation, (e) citizenship, (f) worthy use of leisure, and (g) ethical character.15 With such broad aims, there was little in life that would not be considered a subject for the school curriculum.

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The goal of preparing the individual child for life, however, was only part of the justification for broadening the curriculum. Because educators viewed social problems as essentially educational problems, an expanded curriculum was extolled as a lever of social reform. Reformers believed that industrialization, for example, had separated work and life by removing the locus of work from the home to the factory; therefore, the school curriculum needed to introduce the vocational training once provided by other social institu-


15 Cardinal Principles, op. cit., p. 5.
Likewise, as educators believed that urbanization contributed to certain social vices such as drinking and smoking, the curriculum needed to introduce lessons on the evils of alcohol and tobacco. Finally, as immigration had brought such a widely diverse group of foreigners, the curriculum needed to respond with special classes in English and Americanization.

Broadening the content of curriculum, both to educate “the whole child” and to alleviate social problems, left several legacies that have important implications for curriculum change today. First, as Herbert Kliebard notes, in broadening the curriculum to “educate for life,” the scientific curriculum-makers simply took the world as it was (or, more correctly, the world as they saw it), and then assumed that this was the world as it ought to be. The *Cardinal Principles*, for example, advocated that girls be trained in homemaking because of its importance to the girl herself and to others whose welfare will be directly in her keeping. . . . The majority of girls who enter wage-earning occupations . . . remain in them for only a few years, after which homemaking becomes their lifelong occupation.

As educating youth for “life” remains a goal of public education today, curriculum-makers must continually examine how their own view of the world (and how it ought to be) may contradict other people’s beliefs or circumscribe children’s futures.

Second, by believing that an everchanging school curriculum was the way to achieve both individual improvement and social reform, progressive educators developed a narrow, school-bound view of curriculum. Like John Dewey and Franklin Bobbitt in the past, curriculum-makers today usually acknowledge that other institutions have curricula, but then fail to explore seriously how these various curricula affect one another. Most states, for example, currently mandate that public schools teach about the dangers of alcohol and narcotics. However, the “curricula” of television and magazine advertisements, greeting cards and popular songs, and peer groups and parents often teach that drinking is fun, relaxing, and an accepted—even desirable—practice. Curriculum-makers blind to such interrelationships will have difficulty constructing a viable course on alcohol use.

Third, and finally, the tremendous attention paid to expanding the curriculum during the Progressive Era led educators then and today to concentrate primarily on what schools transmit, rather than on what children learn. Although most educators realize that what is intended is not necessarily what is internalized, we continue to devote our major attention to the physical manifestations of school curriculum rather than to how children actually experience curricula of infinite variety and form. As Lawrence Cremin discusses, churches, synagogues, families, scout troops, television, and day-care centers all have curricula that educate (and miseducate) children every day. To my mind, developing a school curriculum that would equip children to make sense of and evaluate these various curricula—what C. A. Bowers calls “a curriculum for cultural literacy”—remains the most important priority for curriculum change today.