In the late 1960s it was my good fortune to participate in an endeavor called "The History Education Project." It was an effort to provide summer seminars at Yale for New Haven secondary school teachers of history who wanted an opportunity to update their knowledge of their given fields of history. In most cases that meant American history and so many of my colleagues in the field offered seminars.

Those were troubling if exciting days for history as a discipline was under attack for not being relevant, for being boring, for covering too long a period in its traditional survey form, and for failing to keep the attention span of the most conscientious student, not to speak of the least attentive one. Meanwhile history itself was being joined or rather submerged in the social sciences, or civics, or social problems courses. I remember my daughter having one that focused on Vietnam, Venereal Disease, Alcoholism, and Eskimos.

In the various History Education Project seminars, whether they were on the Jacksonian Period or the Civil War, or Recent Trends in American Historiography, I found that both the high school teachers and the university instructors were faced with the reality that constitutional issues or military battles no longer seemed as real as the past of the Black American, or heroes who could be understood by Americans of all ethnic backgrounds. It was clear that both the shape and content of history and even the approach to history had to change. All of us faced a common disciplinary and instructional crisis which, I am delighted to say, laid to rest the myth that in a dialogue between college professors and public school teachers, each could understand the other's language but in effect refused to speak it. We soon discovered that we had common problems and interests and that, indeed, history was an ideal subject for seminars devoted to catching up in one's field with the new research, learning to
use a new currency of concepts, and watching with fascination the ever-
changing panorama of American history and its meaning. In this process
the secondary school teacher was absolutely crucial as someone who could
report what they and their students needed or how the newest generations
of students could be reached.

Obviously one of the answers was to stress social history rather than
traditional political history. Another was to cut the grand impersonal
march of time and the presidential synthesis down to a study of shorter
periods. Out of that came what the New Haven teachers called the mini-
course that lasted several weeks rather than several months. For some
years it was a great success and the concept is still used in various forms.

But the message that should have come to all of us was that we should
begin to question not just the usual structure of American history but its
very subject matter. What was needed was both an updating and a reor-
ganization. In our first efforts we tended to concentrate on single topics
or themes. But by doing that we were in danger of creating a fragmented
selective history that would isolate one historical experience from the
others. But whatever our problems, I was comforted to hear from one of
the teachers that what we were doing sure seemed more exciting than
taking a summer teacher’s college course entitled “Getting To Know Your
Janitor.”

Our discovery of mutual interests and mutual needs, plus the fact that
history must always be in a process of revision and updating, points up a
problem that has troubled me profoundly ever since I went into teaching
thirty-seven years ago. It is that American education has somehow man-
aged to fragment itself not only into grammar, high school, college and
university units, but between subject matters and between content and
method. Each has jealously guarded its bailiwick and its special interests
somewhat like Scottish clans defending their ancestral turfs. Ironically,
although we were all in the field of “education” that word itself was a
shrine to some, a methodological system to others, and a subject of slight
derision among others. We have been in a confederation period of edu-
cation in the United States where educational states’ righters have pre-
vailed over a sense of federal union.

It is that problem, among others, that I think the Yale-New Haven
Teachers Institute was founded to overcome: that is to establish, once
and for all, the commonality and relatedness of all problems concerning
teaching and educating, no matter what subject and no matter at what
level. That in turn touches a more fundamental problem in the United
States: a sense of community. Another purpose of the Yale-New Haven
Teachers Institute has been to restore a sense of community to a city that
once had one of the most developed senses of civic pride one could find
in America.
For these reasons I agreed in 1979 to offer a seminar called “Remarkable City: New Haven in the Nineteenth Century.” But there were other compelling reasons as well, chief among them being the fact that the State of Connecticut required a course on state or local history to be taught in the schools. My hope was that we could use New Haven as a way to teach urban history and further, to focus on the major local changes that had occurred while we were in the process of becoming an industrial nation. I also wanted to focus on the resulting art and material culture that came out of American industrialization. Such an approach would also allow us to focus on the history of labor as well as on the elite, and that, in turn, inevitably meant studying immigrant and minority history. It was the hope of some members of the seminar that we might write a high school text using the local history of New Haven as a model for a social history of all urban areas. It was even my ambition to see if we could not present the history of the microcosm in such a way that we could explain national events as well. And finally it was our plan to identify sources and artifacts for a major exhibit on nineteenth-century New Haven that could become part of the celebration in 1988 of the three-hundred-and-fiftieth anniversary of the founding of New Haven Colony.

While we did not realize all of these plans in the seminar, a number of new courses on local history did emerge, a great deal of fresh research was done, and I, for one, made a series of discoveries about local and urban history in the abstract and about Connecticut and New Haven in particular that genuinely surprised us all.

My first discovery was that one cannot live in New England without acknowledging first the colonial period. It is celebrated everywhere and I doubt if there is a child over five in New England who has not been to Sturbridge or other living museums to witness candle-making, weaving, and the manufacture of iron and pewter products. New Haven history is no exception. If I dared give a lecture on the city without mentioning that the Reverend John Davenport and Theophilus Eaton founded New Haven in 1638 at a place called Quinnipiac, I would be suspect if not thrown out.

But what struck me most about New Haven’s founding was the nature of its settlers. Economically they were the very opposite of the Pilgrims at Plymouth. The latter spent years in poverty and in getting out of debt to their English sponsors. They were sustained in the early years, writes one historian, “by the beaver and the Bible.” In stark contrast we have the statement in the Reverend Benjamin Trumbull’s 1818 edition of the History of Connecticut that “the New Haven Adventurers were the most opulent company which came into New England, and they designed a capital colony.” The New Haven Green, laid out by John Brockett, Surveyor, was appropriately called “The Market Place” until 1759, and only thereafter by its present name. We learned that Governor Eaton was a
wealthy merchant worth £3,000 and that he had servants. Both he and Davenport were college graduates and both men had lived in London.

My point is that New Haven was not a rural frontier settlement but a mercantile center and religious haven founded by urban types. Thus New Haven is one of the most persistent urban centers in American history and deserves to be a major case study of urban life in America over the three-and-a-half centuries of its existence. Five of the fifteen colonial towns with a population of more than 3,000 were located in colonial New Haven, so to study New Haven was to study much of the history of Connecticut. To understand urban New Haven, which lived by trading and shipping, was to better understand those other early urban areas: Boston, Philadelphia, New York, Charleston and Savannah.

New Haven was incorporated as a city in 1784 and boasted 5,000 people in 1800, 10,000 in 1830 and 40,000 in 1860. By 1900 it had 108,000 persons as inhabitants. Here we have in microcosm, the growth of urban America.

What was the secret of that growth? Far from having a parochial outlook, its merchants and businessmen saw the world as their oyster—although you might say that those in Fairhaven, which was a center for oysters, saw the oyster as their world. These men changed when the world changed, so much so that one can say New Haven went through a series of radical economic and social transitions that we do not fully appreciate. Suffice it to say that throughout the nineteenth century, the adjustments they made were impressively successful. Although we know who the heroes are, we are not sure how they preserved the New Haven economy. By addressing economic cause and effect on a local basis it seemed that we had the chance to explain to students the dynamics of history in a believable and persuasive way.

The first of these successful periods after New Haven became a city was between 1785 and 1807, which, as the late Rollin Osterweis has observed, was the heyday of New Haven shipping. Up to 100 ships a year sailed from the harbor. The harbor trade alone is said to have netted New Haven $150,000 a year in import duties. It is no wonder then that New Haven Federalists were set by the ears in 1801 when Jefferson replaced the Federalist customs officer with the father of a loyal Democrat-Republican. This transfer of patronage led Timothy Dwight the Elder of Yale, an ardent Federalist, to deliver a fourth of July oration to the Society of the Cincinnati in which he declared that “we are given over to revolution, society is cast into the slews, and the marriage bond undone.” How much clearer the local meaning of the so-called “Jeffersonian Revolution of 1800” becomes if we see it in this local manifestation.

We would miss the point of the period 1785 to 1807 being the heyday of shipping, however, if we did not also realize that to maintain its trade
New Haven had to drain the inland of grains, farm products and cheeses, for Connecticut then was considered excellent farming country. Naturally turnpikes and toll roads developed to speed the movements of these goods. Meanwhile Connecticut men moved elsewhere to sell the manufactured goods that were also made in Connecticut. Some of the Dana family went to Mobile, Alabama to trade, some of the Sillimans to Tennessee, and so-called Yankee peddlers could be found all over the country.

We found that while our Connecticut and New Haven textbooks gave us the facts, they did not always give us the understanding or the larger meaning. Demographers now tell us that by 1790 Connecticut had become saturated insofar as it could support a farming population. People had to migrate—and thousands from Connecticut did go west to the Connecticut Reserve in Ohio and elsewhere—or go into non-farming occupations by moving to industrializing cities. Just how dramatic the Connecticut exodus was can be seen in the fact that in 1800 it was estimated that one in every four United States Congressmen had been born or educated in Connecticut. A surplus of aggressive missionizing Yale graduates helped found a score of new colleges in the Old Northwest by 1830. One of Eli Whitney’s major problems was to keep his skilled workers from going to Ohio.

Meanwhile New Haven businessmen were investing in the infamous Yazoo Lands in Mississippi and in the Western Reserve as well as New York lands, so much so that party factions in Connecticut actually formed around land companies.

Such an economic heyday also owed much to a scientific attitude which had developed under President Ezra Stiles of Yale who was, in effect, a local Benjamin Franklin in that he, too, experimented with electricity and hot air balloons, while studying astronomy and Indian archaeology. Such an inquisitive attitude fostered the genius of Eli Whitney, the son of a Massachusetts farmer who graduated from Yale in 1792, invented the cotton gin in 1793, and by 1799 had developed the concept of manufacturing uniform component parts of a gun. While others must also be given credit for working out the theory of interchangeable parts, it was Whitney who applied it to the manufacture of firearms, a theory, which when fully understood, had far-ranging implications for both New Haven and the nation. First, it allowed the perfection of pattern machines and lathes, which then allowed one to turn out parts in mass and that meant that one could supply a national market. And equally important, mass production eventually meant the end of a need for skilled workers to manufacture the whole product. One could write a whole book on the changing world of the worker as a result of these technological changes in industry.

While other inventors were moving toward the same concepts both here and in Europe, it is Whitney alone who can take the credit for providing
the technology for making cotton king in the South and thus providing a major staple for the New England textile industry. The principle of mass manufacture of guns helped Whitney, Samuel Colt of Hartford and later the Winchester Company to develop two guns that are said to have "won the West": Colt's revolver and the Winchester rifle.

Much of what I have said comes from what the members of the New Haven seminar found during their summer of research. Benjamin A. Gorman, for example, fashioned an excellent teaching unit entitled "Discover Eli Whitney" from the materials on the inventor and his career, while Valerie Ann Polino found that she could create a unit called "New Haven and the Nation, 1865-1900," in which the relation of industrialization to labor, immigration and reform history was traced.

When Thomas Jefferson imposed the Embargo on American trade with Britain and France in 1807, all the shipping trade of New England declined precipitously. In desperation New Haven turned to other forms of transportation and to manufacturing. In 1810 when troubles with Great Britain were fast leading to war, James Brewster set up a carriage shop at Elm and High to manufacture fine carriages and wagons. Again the trade was not local but national. As others have observed, Brewster had a warehouse and repair shop in New York and sold carriages all over the South. We also learn from Richard Hegel's excellent history, The Completion of Independence in New Haven: Pioneers of Culture and Industry, that Connecticut Yankees, such as Chauncey Jerome, went South to manufacture clocks locally to escape the opposition to Yankee manufactured products. In 1842, however, Jerome located in New Haven and his firm eventually became the New Haven Clock Company. Our seminar revealed that as historians we have not fully explained the mystery of the wandering Yankee inventor-entrepreneur and his role in the development of the American economy.

American history tends to be a progression of success stories and while the national story of industrialization is often well covered and is told in terms of praise, we tend to talk about the big names like Carnegie, Rockefeller and Ford and the big strikes and the great depression. We do not know the world of the smaller entrepreneur, nor do we know the world of the nineteenth-century skilled laborer or the everyday world of labor itself. Nor do we always connect political and religious change to economic change although recent studies by Paul Johnson and others have clearly established this connection. I mention this because I believe New Haven history between 1818 and 1833 illustrates one of these turning points in American economic, political and religious history. Let me explain.

When the War of 1812 ended, the New England Federalists had been so discredited that Connecticut citizens in particular began to form parties
along new lines. One result was that the American Toleration and Reform Party, led by Jonathan Ingersoll and Oliver Wolcott, won in the Connecticut elections of 1817. The new party was made up of Methodists, Baptists, Episcopalians and liberal Congregationalists. The consequence was that in 1818 the state not only got a new constitution, the Congregational Church was disestablished. In that same year four private agencies appeared on the New Haven scene: The Female Humane Society, the Female Charitable Society, The Episcopal Female Charitable Society, and the Society for the Relief of Poor Female Professors of Religion. Something had happened to the status of religion and to the status of women as well. In the next decade New Haveners showed a great concern for educating Indians, Blacks and Hawaiians, and for founding schools. Schools for blacks were founded first in 1811, then in 1825, and finally in 1831, the year of the founding of Garrison’s The Liberator, a Negro college was proposed for New Haven but it failed.

One doubts that the turmoil of social change and reform that we associate with the Jacksonian Period could have been more eloquently demonstrated than by the changes taking place in New Haven at the same time.

Yet an equally fascinating story was taking place on the economic front. In 1822 the example of the Erie Canal’s fantastic success having been brought home to New Haven businessmen, they formed the Farmington Canal Company. With state help the firm got underway in 1825 and a canal from New Haven to Farmington—which eventually stretched to Northampton—was completed in 1828. That project brought Irish workers to New Haven and therefore a change in the city’s population. That worried the older Yankee citizens, who were also worried by the fact that the younger men and youths who had come to the towns and cities to work were uncontrollable. They drank and gambled and would not go to church. Both churchmen and city fathers found that one of the ways to control them was through evangelical revivals. In New Haven there was, at the same time, a crusade for Apprentice Rights in 1827, undoubtedly an expression of restlessness on the part of laborers, but in 1831 James Brewster, the carriage maker, David Daggett and Benjamin Silliman founded a Mechanics Institute to educate craftsmen and workers. While the purpose was a noble one, it also had the effect of distracting workers from other problems. Even so, new problems arose with the completion of the Farmington Canal, for many unemployed workers were stranded in New Haven and more were hit by a cholera epidemic as well. Thus in 1833 we see the appearance of two more agencies: The New Haven Female Society for the Relief of Orphans and the Mutual Aid Association to help young mechanics’ families in times of illness and distress. Here again one
sees evidence of the dramatic impact of industrialization on a given locality.

In the long run the canal was not a success and in 1833 some of those same businessmen who had built the canal turned to railroads. By the late 1840s a multiple railroad system had been perfected in southern New England which triggered a new takeoff in manufacturing. Oliver Winchester moved from making shirts to guns. Joseph E. Sheffield abandoned his career as a cotton broker to build railroads. Eli Whitney Blake invented and patented a stone crusher to aid in paving roads. Benjamin Silliman was busy refracting Pennsylvania crude oil that some speculating New Haveners had sent him for analysis. Silliman dramatically demonstrated the possibilities by showing that oil, gasoline, kerosene and paraffin could be derived from the crude oil. As New Haven men invested in and completed the last railroad link between the East and Chicago and then built the first railroad bridge across the Mississippi for the Chicago and Rock Island line, the world must have again seemed the oyster for the New Haveners to exploit. Meanwhile another New Havener, Charles Goodyear, had begun to experiment with galvanized rubber.

Perhaps the point is obvious but it seems worth stressing that not only did New Haven specialize in interchangeable parts but its entrepreneurs specialized in interchangeable businesses. It is important for students to understand the risks involved, the failures incurred, and the difficulty of organizing a new firm. These are as important to an understanding of American history and American industrialization as the story of colonial crafts or the story of the art and architecture of a city. On the whole both secondary schools and colleges have ignored the fascinating story of technological development for more simplistic accounts of industrial change. It is interesting to find that Whitney’s principle of interchangeable parts in the form of pattern lathes assisted Brewster in making axles for his carriages. And connected to the carriage trade were a dozen support industries that ranged from upholstery, tassel and fringe making to iron parts, brass trimming and handles. Ironically all of these developments took place in a city that was a paradise for craftsmen but which we have traditionally identified as primarily the site of Yale University.

By 1861 New Haven was larger than Hartford, with 232 factories and 507 stores, 14 banks, 5 insurance companies, 4 steamboat companies, and a water and gas company. The Civil War ruined the carriage trade which had depended heavily on Southern customers. But new firms arose to take its place. The Sargent Lock Company and cigar manufacturing firms came to prominence along with the first commercial telephone exchange in the country. The inventions of Charles Goodyear were continued in various rubber firms and by 1881 the New Haven Electric Light Company was in business. All this may sound like a paen of praise for industrialization
that we find in national histories. But the point I want to make, and the point that members of the Yale-New Haven Teachers Institute seminar made, is that while the Bigelow Company was making steam engines, boilers and sugar mill making machinery for the West Indies, and some of the stone crushers invented by Whitney Blake were being used to process the Comstock Lode of Virginia City, Nevada, unhappy laborers were organizing to demand decent wages, the end to employment of child labor, and to resist the employment of Italian immigrants as strike breakers.

In one of the seminar's most memorable reports, Ms. Valerie Ann Polino recorded the impact of ethnic labor on New Haven by following the names of those arrested by the police department in the years 1865–1900. At first Irishmen were arrested for many violations, but when the city's police force slowly became Irish, those arrested tended to have Italian names. By 1900 28 percent of New Haven's 108,000 population was foreign-born. That included 10,000 Irish, 6,000 Germans and Swedes, 5,000 Italians, 3,000 Russian Jews, and 2,000 English and Scots. Thus the local story of New Haven labor becomes a paradigm for the immigration history of the United States in the years between 1865 and 1900.

During the century that we have had under consideration, the New Haven harbor also underwent major changes, as ships changed from sail to steam, and as the shipping trade with the West Indies, which had almost created a planter and West Indian sub-culture in some areas of the city, declined and was replaced with vessels bringing coal to New Haven to supply the insatiable boilers of its burgeoning industries. Professor Gaddis Smith has done a study of the ecology of the harbor and has found that with industrialization the harbor became increasingly polluted. Indeed, the entire history of maritime endeavors associated with the harbor and the Sound was the subject of a joint study by two members of the seminar: George Foote and Stephen Kass, who demonstrated that New Haven, being both a harbor town and an industrial town, could be used as a major case study of environmental problems.

Thus far nothing has been said about the art and material culture that New Haven represents. Given the extraordinary wealth of the community in the nineteenth century, New Haveners were able to employ architects, build structures of lasting importance, and plan the city itself so that it would be a place of distinction that would excite national comment. As early as 1834 a visitor to the city wrote that "New Haven is considered to be the most handsome town in the States, and everyone enquires of the stranger, whether he has seen New Haven." Charles Dickens called Hillhouse Avenue—its most prominent residential street—the most beautiful avenue in America.

Let us go back for a moment to look at themes. New Haven citizens
created or developed an extraordinary number of things that had shaped modern life: first, transportation systems, whether they were coastal and Caribbean trade shipping, canals, toll roads, or railroads. Then they dealt with what you might call support services such as road surfaces, oil, rubber, carriages, wagons, steam engines, the telegraph and the telephone, and interchangeable parts. In all of these efforts they attempted to sell in a national and international market, and so they related not only to the South and the West but to the Caribbean as well. It seems no mere accident that Eli Whitney coming from such a craftsman’s paradise would invent and sell gins to Southern planters who in turn used their profits to buy New Haven carriages and clocks, or even that Southerners interested in such items came to New Haven to buy them and then decided it was a great place to vacation. Nor should it seem accidental that New Haven’s first black population was West Indian—because of the shipping trade.

Further, there is a continuity between the past and the present for one can trace the evolution of older industries to those still in existence. There is a connection between the fine copper engravings of Amos Doolittle of the early nineteenth century and the fine prints of the Meriden Gravure Company. The splendid locks of the Sargent Company had their origins in the manufacture of carriage parts in the nineteenth century. And in the changes so often faced by businessmen, we can see national history reflected and the larger reasons for a local decline or a boom.

By tracing the industries of New Haven we can trace its social and ethnic history as well as the city’s aesthetic history. Indeed, we cannot divorce art and material culture from the economy. In fact, in order to truly understand New Haven’s history we cannot compartmentalize the accounts. We cannot tell the story of the entrepreneurs without telling the story of the labor force. Nor can we ignore an intriguing statistic that 40 percent of the work force in the various New Haven factories in the nineteenth century were women. When one asks this question one is not talking about the world of labor unions and strikes but the workers’ world and how it evolved from a religious small-town preindustrial economy to a secular industrial one. My plea is not that we substitute social problems about the drinking parent or Vietnam for the impersonal story of national political history. It is that we go beyond both to try to relate the past to the present in a personal, believable way. And one way of doing that is to study one’s own past and relate it to the national scene. But this cannot be done without also comprehending that urban history means entrepreneurial history, labor history, social and cultural history, and ethnic history. It is this interdisciplinary approach that holds as much promise for the Yale-New Haven Teachers Institute as any other teaching method or updating we have tried.
In sum, this is a plea for schools and universities to find community by an intelligent joint study of their own locality or region and its relation to the world. By such one can see the relevance of history to present life, and understand the dynamics of social change, the workings of commerce and industry, and the values of research and learning itself. With regard to the latter, in the preparation of the teaching units for "Remarkable City: New Haven in the Nineteenth Century," teachers used the students themselves to do research, to compile family and neighborhood histories, to build a nineteenth-century oyster boat, to study architecture and to interview older New Haven citizens. The process was not just teaching, but research and discovery; it was not just history, but an exercise in understanding art and material culture; it was not just a history of politics but a history of society itself. And in the process of learning and talking we found that the problem of New Haven history like that of American history was, in effect, a failure to apply Eli Whitney's concept of interchangeable parts to its own past. We discovered that we were all a part of a whole and that by an intelligent study of the parts we would better understand the whole. Therein lies the purpose of a local effort called the Yale-New Haven Teachers Institute and its significance as a model for a national effort to relate town and gown, and the secondary school to institutions of higher learning in a mutually advantageous way.