

POWER AND IDEOLOGY IN EDUCATION

Edited and with an Introduction by
JEROME KARABEL and A.H. HALSEY

NEW YORK OXFORD UNIVERSITY PRESS 1977

5. Unequal Education and the Reproduction of the Social Division of Labor

SAMUEL BOWLES

The ideological defense of modern capitalist society rests heavily on the assertion that the equalizing effects of education can counter the disequalizing forces inherent in the free market system. That educational systems in capitalist societies have been highly unequal is generally admitted and widely condemned. Yet educational inequalities are taken as passing phenomena, holdovers from an earlier, less enlightened era, which are rapidly being eliminated.

The record of educational history in the U.S., and scrutiny of the present state of our colleges and schools, lend little support to this comforting optimism. Rather, the available data suggest an alternative interpretation. In what follows I will argue 1) that schools have evolved in the U.S. not as part of a pursuit of equality, but rather to meet the needs of capitalist employers for a disciplined and skilled labor force, and to provide a mechanism for social control in the interests of political stability; 2) that as the economic importance of skilled and well educated labor has grown, inequalities in the school system have become increasingly important in reproducing the class structure from one generation to the next; 3) that the U.S. school system is pervaded by class inequalities, which have shown little sign of diminishing over the last half century; and 4) that the evidently unequal control over school boards and other decision-making bodies in education does not provide a sufficient explanation of the persistence and pervasiveness of inequalities in the school system. Although the unequal distribution of political power serves to maintain inequalities in education, their origins are to be found outside the political sphere, in the class structure itself and in the class subcultures typical of capitalist societies. Thus unequal education has its roots in the very class

structure which it serves to legitimize and reproduce. Inequalities in education are thus seen as part of the web of capitalist society, and likely to persist as long as capitalism survives.

1. THE EVOLUTION OF CAPITALISM AND THE RISE OF MASS EDUCATION

In colonial America, and in most pre-capitalist societies of the past, the basic productive unit was the family. For the vast majority of male adults, work was self-directed, and was performed without direct supervision. Though constrained by poverty, ill health, the low level of technological development and occasional interferences by the political authorities, a man had considerable leeway in choosing his working hours, what to produce, and how to produce it. While great inequalities in wealth, political power, and other aspects of status normally existed, differences in the degree of autonomy in work were relatively minor, particularly when compared with what was to come.

Transmitting the necessary productive skills to the children as they grew up proved to be a simple task, not because the work was devoid of skill, but because the quite substantial skills required were virtually unchanging from generation to generation, and because the transition to the world of work did not require that the child adapt to a wholly new set of social relationships. The child learned the concrete skills and adapted to the social relations of production through learning by doing within the family. Preparation for life in the larger community was facilitated by the child's experience with the extended family, which shaded off without distinct boundaries, through uncles and fourth cousins, into the community. Chil-

From *Review of Radical Political Economics* 3 (Fall 1971). Reprinted by permission of the author.

dren learned early how to deal with complex relationships among adults other than their parents, and children other than their brothers and sisters.¹

It was not required that children learn a complex set of political principles or ideologies, as political participation was limited and political authority unchallenged, at least in normal times. The only major socializing institution outside the family was the church, which sought to inculcate the accepted spiritual values and attitudes. In addition, a small number of children learned craft skills outside the family, as apprentices. The role of schools tended to be narrowly vocational, restricted to preparation of children for a career in the church or the still inconsequential state bureaucracy.² The curriculum of the few universities reflected the aristocratic penchant for conspicuous intellectual consumption.³

The extension of capitalist production, and particularly the factory system, undermined the role of the family as the major unit of both socialization and production. Small peasant farmers were driven off the land or competed out of business. Cottage industry was destroyed. Ownership of the means of production became heavily concentrated in the hands of landlords and capitalists. Workers relinquished control over their labor in return for wages or salaries. Increasingly, production was carried on in large organizations in which a small management group directed the work activities of the entire labor force. The social relations of production—the authority structure, the prescribed types of behavior and response characteristic of the work place—became increasingly distinct from those of the family.

The divorce of the worker from control over production—from control over his own labor—is particularly important in understanding the role of schooling in capitalist societies. The resulting social division of labor—between controllers and controlled—is a crucial aspect of the class structure of capitalist societies, and will be seen to be an

important barrier to the achievement of social class equality in schooling.

Rapid economic change in the capitalist period led to frequent shifts in the occupational distribution of the labor force, and constant changes in the skill requirements for jobs. The productive skills of the father were no longer adequate for the needs of the son during his lifetime. Skill training within the family became increasingly inappropriate.

And the family itself was changing. Increased geographic mobility of labor and the necessity for children to work outside the family spelled the demise of the extended family and greatly weakened even the nuclear family.⁴ Meanwhile, the authority of the church was questioned by the spread of secular rationalist thinking and the rise of powerful competing groups.

While undermining the main institutions of socialization, the development of the capitalist system created at the same time an environment—both social and intellectual—which would ultimately challenge the political order. Workers were thrown together in oppressive factories, and the isolation which had helped to maintain quiescence in earlier, widely dispersed peasant populations was broken down.⁵ With an increasing number of families uprooted from the land, the workers' search for a living resulted in large-scale labor migrations. Transient—even foreign—elements came to constitute a major segment of the population, and began to pose seemingly insurmountable problems of assimilation, integration, and control.⁶ Inequalities of wealth became more apparent, and were less easily justified and less readily accepted. The simple legitimizing ideologies of the earlier period—the divine right of kings and the divine origin of social rank, for example—fell under the capitalist attack on the royalty and the traditional landed interests. The broadening of the electorate of political participation generally—first sought by the capitalist class in the struggle against the entrenched interests of the pre-capitalist period—threatened soon to become an in-

strument for the growing power of the working class. Having risen to political power, the capitalist class sought a mechanism to insure social control and political stability.⁷

An institutional crisis was at hand. The outcome, in virtually all capitalist countries, was the rise of mass education. In the U.S., the many advantages of schooling as a socialization process were quickly perceived. The early proponents of the rapid expansion of schooling argued that education could perform many of the socialization functions which earlier had been centered in the family and to a lesser extent, in the church.⁸

An ideal preparation for factory work was found in the social relations of the school: specifically, in its emphasis on discipline, punctuality, acceptance of authority outside the family, and individual accountability for one's work.⁹ The social relations of the school would replicate the social relations of the workplace, and thus help young people adapt to the social division of labor. Schools would further lead people to accept the authority of the state and its agents—the teachers—at a young age, in part by fostering the illusion of the benevolence of the government in its relations with citizens.¹⁰ Moreover, because schooling would ostensibly be open to all, one's position in the social division of labor could be portrayed as the result not of birth, but of one's own efforts and talents.¹¹ And if the children's everyday experiences with the structure of schooling were insufficient to inculcate the correct views and attitudes, the curriculum itself would be made to embody the bourgeois ideology.¹² Where pre-capitalist social institutions—particularly the church—remained strong or threatened the capitalist hegemony, schools sometimes served as a modernizing counter-institution.¹³

The movement for public elementary and secondary education in the U.S. originated in the 19th century in states dominated by the burgeoning industrial capitalist class, most notably in Massachusetts. It spread rapidly to all parts of the country except the South.¹⁴ In Massachusetts the extension of

elementary education was in large measure a response to industrialization, and to the need for social control of the Irish and other non-Yankee workers recruited to work in the mills.¹⁵ The fact that some working people's movements had demanded free instruction should not obscure the basically coercive nature of the extension of schooling. In many parts of the country, schools were literally imposed upon the workers.¹⁶

The evolution of the economy in the 19th century gave rise to new socialization needs and continued to spur the growth of education. Agriculture continued to lose ground to manufacturing; simple manufacturing gave way to production involving complex interrelated processes; an increasing fraction of the labor force was employed in producing services rather than goods. Employers in the most rapidly growing sectors of the economy began to require more than obedience and punctuality in their workers; a change in motivational outlook was required. The new structure of production provided little built-in motivation. There were fewer jobs like farming and piece-rate work in manufacturing in which material reward was tied directly to effort. As work roles became more complicated and interrelated, the evaluation of the individual worker's performance became increasingly difficult. Employers began to look for workers who had internalized the production-related values of the firm's managers.

The continued expansion of education was pressed by many who saw schooling as a means of producing these new forms of motivation and discipline. Others, frightened by the growing labor militancy after the Civil War, found new urgency in the social control arguments popular among the proponents of education in the antebellum period.

A system of class stratification developed within this rapidly expanding educational system. Children of the social elite normally attended private schools. Because working class children tended to leave school early, the class composition of the public high

schools was distinctly more elite than the public primary schools.¹⁷ And as a university education ceased to be merely training for teaching or the divinity and became important in gaining access to the pinnacles of the business world, upper class families used their money and influence to get their children into the best universities, often at the expense of the children of less elite families.

Around the turn of the present century, large numbers of working class and particularly immigrant children began attending high schools. At the same time, a system of class stratification developed within secondary education.¹⁸ The older democratic ideology of the common school—that the same curriculum should be offered to all children—gave way to the “progressive” insistence that education should be tailored to the “needs of the child.”¹⁹ In the interests of providing an education relevant to the later life of the students, vocational schools and tracks were developed for the children of working families. The academic curriculum was preserved for those who would later have the opportunity to make use of book learning, either in college or in white-collar employment. This and other educational reforms of the progressive education movement reflected an implicit assumption of the immutability of the class structure.

The frankness with which students were channeled into curriculum tracks, on the basis of their social class background, raised serious doubts concerning the “openness” of the social class structure. The relation between social class and a child’s chances of promotion or tracking assignments was disguised—though not mitigated much—by another “progressive” reform: “objective” educational testing. Particularly after World War I, the capitulation of the schools to business values and concepts of efficiency led to the increased use of intelligence and scholastic achievement testing as an ostensibly unbiased means of measuring the product of schooling and classifying students.²⁰ The complementary growth of the guidance

counseling profession allowed much of the channeling to proceed from the students’ own well-counseled choices, thus adding an apparent element of voluntarism to the system.

The legacy of the progressive education movement, like the earlier reforms of the mid-19th century, was a strengthened system of class stratification within schooling which continues to this day to play an important role in the reproduction and legitimation of the social division of labor.

The class stratification of education during this period had proceeded hand in hand with the stratification of the labor force. As large bureaucratic corporations and public agencies employed an increasing fraction of all workers, a complicated segmentation of the labor force evolved, reflecting the hierarchical structure of the social relations of production. A large middle group of employees evolved comprising the clerical, sales, bookkeeping, and low level supervisory workers.²¹ People holding these occupations ordinarily had a modicum of control over their own work; in some cases they directed the work of others, while themselves being under the direction of higher management. The social division of labor had become a finely articulated system of work relations dominated at the top by a small group with control over work processes and a high degree of personal autonomy in their work activities, and proceeding by finely differentiated stages down the chain of bureaucratic command to workers who labored more as extensions of the machinery than as autonomous human beings.

One’s status, income, and personal autonomy came to depend in great measure on one’s place in the hierarchy of work relations. And in turn, positions in the social division of labor came to be associated with educational credentials reflecting the number of years of schooling and the quality of education received. The increasing importance of schooling as a mechanism for allocating children to positions in the class structure, played a major part in legitimizing

the str
it unde
the pas
lege of
tion to
the pro
division

In)
tance
Even in
to the
the bas
the cla
tion af
heritan
of the
division
compe
well a
proble
simple
becaus
in hun
tal—th
childre
society
import
tion, t
heritar
the so
to gen
tials r
family
paper
repro
form c

2. CL
SCHO

Unequ
divisic
occup
tional
schoo
the ar
tion g
positi
Be

the structure itself.²² But at the same time, it undermined the simple processes which in the past had preserved the position and privilege of the upper class families from generation to generation. In short, it undermined the processes serving to reproduce the social division of labor.

In pre-capitalist societies, direct inheritance of occupational position is common. Even in the early capitalist economy, prior to the segmentation of the labor force on the basis of differential skills and education, the class structure was reproduced generation after generation simply through the inheritance of physical capital by the offspring of the capitalist class. Now that the social division of labor is differentiated by types of competence and educational credentials as well as by the ownership of capital, the problem of inheritance is not nearly as simple. The crucial complication arises because education and skills are embedded in human beings, and—unlike physical capital—these assets cannot be passed on to one's children at death. In an advanced capitalist society in which education and skills play an important role in the hierarchy of production, then, the absence of confiscatory inheritance laws is not enough to reproduce the social division of labor from generation to generation. Skills and educational credentials must somehow be passed on within the family. It is a fundamental theme of this paper that schools play an important part in reproducing and legitimizing this modern form of class structure.

2. CLASS INEQUALITIES IN U.S. SCHOOLS

Unequal schooling reproduces the social division of labor. Children whose parents occupy positions at the top of the occupational hierarchy receive more years of schooling than working class children. Both the amount and the content of their education greatly facilitates their movement into positions similar to their parents'.

Because of the relative ease of measure-

ment, inequalities in years of schooling are particularly evident. If we define social class standing by the income, occupation, and educational level of the parents, a child from the 90th percentile in the class distribution may expect on the average to achieve over four and a half more years of schooling than a child from the 10th percentile.²³ As can be seen in Table 1, social class inequalities in the number of years of schooling received arise in part because a disproportionate number of children from poorer families do not complete high school.²⁴ Table 2 indicates that these inequalities are exacerbated by social class inequalities in college attendance among those children who did graduate from high school: even among those who had graduated from high school, children of families earning less than \$3,000 per year were over six times as likely *not* to attend college as were the children of families earning over \$15,000.²⁵

Because schooling—especially at the college level—is heavily subsidized by the general taxpayer, those children who attend school longer have access—for this reason alone—to a far larger amount of public resources than those who are forced out or drop out early.²⁶ But social class inequalities in public expenditure on education are far more severe than the degree of inequality in years of schooling would suggest. In the first place, per-student public expenditure in four-year colleges greatly exceeds that in elementary schools; those who stay in school longer receive an increasingly large *annual* public subsidy.²⁷ Second, even at the elementary level, schools attended by children of the poor tend to be less well-endowed with equipment, books, teachers, and other inputs into the educational process. Evidence on the relationship between the level of school inputs and the income of the neighborhoods which the schools serve is presented in Table 3.²⁸ The data in this table indicate that both school expenditures and more direct measures of school quality vary directly with the income levels of the communities in which the school is located.

Table 1. Percentage of Male Children aged 16-17 Enrolled in Public School, and Percentage at Less than the Modal Grade Level, by Parent's Education and Income, 1960^a

	% of male children aged 16-17 enrolled in public school	% of those enrolled who are below the modal level
1. Parent's education less than 8 years		
Family Income:		
less than \$3,000	66.1	47.4
\$3,000-4,999	71.3	35.7
\$5,000-6,999	75.5	28.3
\$7,000 and over	77.1	21.8
2. Parent's education 8-11 years		
Family income:		
less than \$3,000	78.6	25.0
\$3,000-4,999	82.9	20.9
\$5,000-6,999	84.9	16.9
\$7,000 and over	86.1	13.0
3. Parent's education 12 years or more		
Family income:		
less than \$3,000	89.5	13.4
\$3,000-4,999	90.7	12.4
\$5,000-6,999	92.1	9.7
\$7,000 and over	94.2	16.9

Source: Bureau of the Census, *Census of Population, 1960*, Vol. PC-(2)5A, Table 5.

a. According to Bureau of the Census definitions, for 16-year olds 9th grade or less and for 17-year olds 10th grade or less are below the modal level. Father's education is indicated if father is present; otherwise mother's education is indicated.

Table 2. College Attendance in 1967 among High School Graduates, by Family Income^a

Family income ^b	Percent who did not attend college
Total	53.1
under \$3,000	80.2
\$3,000 to \$3,999	67.7
\$4,000 to \$5,999	63.7
\$6,000 to \$7,499	58.9
\$7,500 to \$9,999	49.0
\$10,000 to \$14,999	38.7
\$15,000 and over	13.3

a. Refers to individuals who were high school seniors in October 1965 and who subsequently graduated from high school.

Source: U. S. Department of Commerce, Bureau of the Census, *Current Population Report*, Series P-20, No. 185, July 11, 1969, p. 6. College attendance refers to both two- and four-year institutions.

b. Family income for 12 months preceding October 1965.

Inequalities in schooling are not simply a matter of differences in years of schooling attained or in resources devoted to each student per year of schooling. Differences in the internal structure of schools themselves and in the content of schooling reflect the differences in the social class compositions of the student bodies. The social relations of the educational process ordinarily mirror the social relations of the work roles into which most students are likely to move. Differences in rules, expected modes of behavior, and opportunities for choice are most glaring when we compare levels of schooling. Note the wide range of choice over curriculum, life style, and allocation of time afforded to college students, compared with the obedience and respect for authority expected in high school. Differentiation occurs also within each level of schooling. One needs only to compare the social relations of a

Table
Resou
borho

1. Cu
2. Av
3. Te
4. Re
5. Ve

Source
a. Joh
of Ed
Organ
b. Jo
Evide

junior colle
year college
high school
ban high
point.³⁰

The diff
schools att
social class
Rather, the
educational
both paren
siveness of
teaching an
different so
equalities in
reinforced
cial resou
paucity of
tion of chil
not only lea
to the chil
roles in th
teachers ar
working cla
tions which
factory. T
poorly supp
tate against
multiplicity
cialized tea
nel), and p
for the tea

Table 3. Inequalities in Elementary School Resources: Percent Difference in Resource Availability Associated with a One Percent Difference in Mean Neighborhood Family Income

Resource	Within cities (1)	Between cities (2)
1. Current real education expenditure per student	n.a.	.73 ^b
2. Average real elementary school teacher salary	.20 ^a	.69 ^b
3. Teacher-student ratio	.24 ^a	n.a.
4. Real expenditure per pupil on teacher salary	.43 ^a	n.a.
5. Verbal ability of teacher	.11 ^a	1.20 ^a

Sources:

a. John D. Owen, "An Empirical Analysis of Economic and Racial Bias in the Distribution of Educational Resources in Nine Large American Cities" (Center for the Study of Social Organization of Schools, Johns Hopkins University, 1969).

b. John D. Owen, "Towards a Public Employment Wage Theory: Some Econometric Evidence on Teacher Quality," *Industrial Labor Relations Review* (forthcoming, 1972).

junior college with those of an elite four-year college,²⁹ or those of a working class high school with those of a wealthy suburban high school, for verification of this point.³⁰

The differential socialization patterns in schools attended by students of different social classes do not arise by accident. Rather, they stem from the fact that the educational objectives and expectations of both parents and teachers, and the responsiveness of students to various patterns of teaching and control, differ for students of different social classes.³¹ Further, class inequalities in school socialization patterns are reinforced by the very inequalities in financial resources documented above. The paucity of financial support for the education of children from working class families not only leaves more resources to be devoted to the children of those with commanding roles in the economy; it forces upon the teachers and school administrators in the working class schools a type of social relations which fairly closely mirrors that of the factory. Thus financial considerations in poorly supported working class schools militate against small intimate classes, against a multiplicity of elective courses and specialized teachers (except disciplinary personnel), and preclude the amounts of free time for the teachers and free space required for a

more open, flexible educational environment. The lack of financial support all but requires that students be treated as raw materials on a production line; it places a high premium on obedience and punctuality; there are few opportunities for independent, creative work or individualized attention by teachers. The well-financed schools attended by the children of the rich can offer much greater opportunities for the development of the capacity for sustained independent work and the other characteristics required for adequate job performance in the upper levels of the occupational hierarchy.

While much of the inequality in U.S. education exists between schools, even within a given school different children receive different educations. Class stratification within schools is achieved through tracking, differential participation in extra-curricular activities, and in the attitudes of teachers and particularly guidance personnel who expect working class children to do poorly, to terminate schooling early, and to end up in jobs similar to their parents.³²

Not surprisingly, the results of schooling differ greatly for children of different social classes. The differing educational objectives implicit in the social relations of schools attended by children of different social classes has already been mentioned. Less important but more easily measured are dif-

ferences in scholastic achievement. If we measure the output of schooling by scores on nationally standardized achievement tests, children whose parents were themselves highly educated outperform the children of parents with less education by a wide margin. A recent study revealed, for example, that among white high school seniors, those whose parents were in the top education decile were on the average well over three grade levels ahead of those whose parents were in the bottom decile.³³ While a good part of this discrepancy is the result of unequal treatment in school and unequal educational resources, it will be suggested below that much of it is related to differences in the early socialization and home environment of the children.

Given the great social class differences in scholastic achievement, class inequalities in college attendance are to be expected. Thus one might be tempted to argue that the data in Table 2 are simply a reflection of unequal scholastic achievement in high school and do not reflect any *additional* social class inequalities peculiar to the process of college admission. This view, so comforting to the admissions personnel in our elite universities,

Table 4. Probability of College Entry for a Male who has Reached Grade 11^a

		Socioeconomic quartiles ^b			
		Low		High	
		1	2	3	4
Ability Quartiles ^b	Low 1	.06	.12	.13	.26
	2	.13	.15	.29	.36
	3	.25	.34	.45	.65
	High 4	.48	.70	.73	.87

a. Based on a large sample of U.S. high school students as reported in John C. Flannagan and William W. Cooley, *Project TALENT, One-Year Follow-up Studies*, Cooperative Research Project Number 2333, School of Education, University of Pittsburgh, 1966.

b. The socioeconomic index is a composite measure including family income, father's occupation and education, mother's education, etc. The ability scale is a composite of tests measuring general academic aptitude.

is unsupported by the available data, some of which are presented in Table 4. Access to a college education is highly unequal, even for children of the same measured "academic ability."

The social class inequalities in our school system and the role they play in the reproduction of the social division of labor are too evident to be denied. Defenders of the educational system are forced back on the assertion that things are getting better; the inequalities of the past were far worse. And, indeed, there can be no doubt that some of the inequalities of the past have been mitigated. Yet new inequalities have apparently developed to take their place, for the available historical evidence lends little support to the idea that our schools are on the road to equality of educational opportunity. For example, data from a recent U.S. Census survey reported in Table 5 indicate that graduation from college has become increasingly dependent on one's class background. This is true despite the fact that the probability of high school graduation is becoming increasingly equal across social classes. On balance, the available data suggest that the number of years of schooling attained by a child depends upon the social class standing of the father at least as much in the recent period as it did fifty years ago.³⁴

The argument that our "egalitarian" education compensates for inequalities generated elsewhere in the capitalist system is so patently fallacious that few will persist in maintaining it. But the discrepancy between the ideology and the reality of the U.S. school system is far greater than would appear from a passing glance at the above data. In the first place, if education is to compensate for the social class immobility due to the inheritance of wealth and privilege, education must be structured so as to yield a negative correlation between social class background of the child and the quantity and quality of her or his schooling. Thus the assertion that education compensates for inequalities in inherited wealth and privilege

Tab
coll

Son's
in I!

25-
35-
45-
55-

a. Ass
Source
Growt

is falsifi
social c
as by
rectly,
equality

Seco
of inter
lem of
moment
capitalis
tance of
ercise
distribut
of socia
quantity
consider
which or
tion: une
and capi
equally c
The only
society is
As the lat
type of
labor earn
inequality
to the con
the case
distributed
The disequ
intensified

Table 5. Among Sons who had Reached High School, Percentage who graduated from college, by Son's Age and Father's Level of Education

Son's age in 1962	Likely dates of college graduation ^a	<8 years	Father's education					
			Some high school		High school grad		Some college or more	
			% Graduating	Ratio to <8	% Grad	Ratio to <8	% Grad	Ratio to <8
25-34	1950-1959	07.6	17.4	2.29	25.6	3.37	51.9	6.83
35-44	1940-1949	08.6	11.9	1.38	25.3	2.94	53.9	6.27
45-54	1930-1939	07.7	09.8	1.27	15.1	1.96	36.9	4.79
55-64	1920-1929	08.9	09.8	1.10	19.2	2.16	29.8	3.35

a. Assuming college graduation at age 22.

Source: Based on U.S. Census data as reported in William G. Spady, "Educational Mobility and Access: Growth and Paradoxes," *American Journal of Sociology*, Vol. 73, No. 3 (November 1967).

is falsified not so much by the extent of the social class inequalities in the school system as by their very existence, or, more correctly, by the absence of compensatory inequalities.

Second, if we turn now from the problem of intergenerational immobility to the problem of inequality of income at a given moment, a similar argument applies. In a capitalist economy, the increasing importance of schooling in the economy will exercise a disequalizing tendency on the distribution of income even in the absence of social class inequalities in quality and quantity of schooling. To see why this is so, consider a simple capitalist economy in which only two factors are used in production: uneducated and undifferentiated labor, and capital, the ownership of which is unequally distributed among the population. The only source of income inequality in this society is the unequal distribution of capital. As the labor force becomes differentiated by type of skill or schooling, inequalities in labor earnings contribute to total income inequality, augmenting the inequalities due to the concentration of capital. This will be the case even if education and skills are distributed randomly among the population. The disequalizing tendency will of course be intensified if the owners of capital also ac-

quire a disproportionate amount of those types of education and training which confer access to high-paying jobs.³⁵ A substantial negative correlation between the ownership of capital and the quality and quantity of schooling received would have been required merely to neutralize the disequalizing effect of the rise of schooling as an economic phenomenon. And while some research has minimized the importance of social class biases in schooling,³⁶ nobody has yet suggested that class and schooling were inversely related!

3. CLASS CULTURE AND CLASS POWER

The pervasive and persistent inequalities in U.S. education would seem to refute an interpretation of education which asserts its egalitarian functions. But the facts of inequality do not by themselves suggest an alternate explanation. Indeed, they pose serious problems of interpretation. If the costs of education borne by students and their families were very high, or if nepotism were rampant, or if formal segregation of pupils by social class were practiced, or educational decisions were made by a select few whom we might call the power elite, it would not be difficult to explain the continued inequalities in U.S. education. The

problem of interpretation, however, is to reconcile the above empirical findings with the facts of our society as we perceive them: public and virtually tuition-free education at all levels, few legal instruments for the direct implementation of class segregation, a limited role for "contacts" or nepotism in the achievement of high status or income, a commitment (at the rhetorical level at least) to equality of educational opportunity, and a system of control of education which if not particularly democratic, extends far beyond anything resembling a power elite. The attempt to reconcile these apparently discrepant facts leads us back to a consideration of the social division of labor, the associated class cultures, and the exercise of class power.

I will argue that the social division of labor—based on the hierarchical structure of production—gives rise to distinct class subcultures. The values, personality traits, and expectations characteristic of each subculture are transmitted from generation to generation through class differences in family socialization and complementary differences in the type and amount of schooling ordinarily attained by children of various class positions. These class differences in schooling are maintained in large measure through the capacity of the upper class to control the basic principles of school finance, pupil evaluation, and educational objectives.

This outline, and what follows, is put forward as an interpretation, consistent where testable with the available data, though lacking as yet in firm empirical support for some important links in the argument.

The social relations of production characteristic of advanced capitalist societies (and many socialist societies) are most clearly illustrated in the bureaucracy—and hierarchy of the modern corporation.³⁷ Occupational roles in the capitalist economy may be grouped according to the degree of independence and control exercised by the person holding the job. There is some evidence that the personality attributes as-

sociated with the adequate performance of jobs in occupational categories defined in this broad way differ considerably, some apparently requiring independence and internal discipline, and others emphasizing such traits as obedience, predictability, and willingness to subject oneself to external controls.³⁸

These personality attributes are developed primarily at a young age, both in the family and, to a lesser extent, in secondary socializing institutions such as schools.³⁹ Because people tend to marry within their own class (in part because spouses often meet in our class segregated schools), both parents are likely to have a similar set of these fundamental personality traits. Thus children of parents occupying a given position in the occupational hierarchy grow up in homes where child-rearing methods and perhaps even the physical surroundings tend to develop personality characteristics appropriate to adequate job performance in the occupational roles of the parents.⁴⁰ The children of managers and professionals are taught self-reliance within a broad set of constraints,⁴¹ the children of production line workers are taught obedience.

While this relation between parents' class position and child's personality attributes operates primarily in the home, it is reinforced by schools and other social institutions. Thus, to take an example introduced earlier, the authoritarian social relations of working class high schools complement the discipline-oriented early socialization patterns experienced by working class children. The relatively greater freedom of wealthy suburban schools extends and formalizes the early independence training characteristic of upper class families.

Schools reinforce other aspects of family socialization as well. Students' and parents' aspirations and expectations concerning both the type and the amount of schooling are strongly related to social class.⁴² The expectations of teachers, guidance counselors, and school administrators ordinarily reinforce those of the students and parents. Schools often encourage students to develop

aspir
socia
"dev
It
intr
for
Disc
tion
curr
the
abil
son:
limi
diff
imp
trai
bee
mo
in:
hol
are
ter
tha
the
pri
scl
of
be
m
ot
er
sc
m
cl
se
rr
th
co
so
P
g
l
i
7
t
l
i

aspirations and expectations typical of their social class, even if the child tends to have "deviant" aspirations.

It is true that to some extent schools introduce common elements of socialization for all students regardless of social class. Discipline, respect for property, competition, and punctuality are part of the implicit curriculum of virtually all schools. Yet given the existing institutional arrangements, the ability of a school to change a child's personality, values, and expectations is severely limited. The responsiveness of children to different types of schooling seems to depend importantly upon the types of personality traits, values, and expectations which have been developed through the family. Furthermore, children spend a small amount of time in school—less than a quarter of their waking hours over the course of a year. Thus schools are probably more effective where they attempt to complement and reinforce rather than to oppose the socialization processes of the home and neighborhood. It is not surprising, then, that social class differences in scholastic achievement and other measures of school success are far greater than would be accounted for by differences in the measured school financial resources and other inputs (quality and quantity of teachers, etc.) alone.⁴³

Class differences in the total effect of schooling are—in this interpretation—due primarily to differences in what I have called class subculture. The educational system serves less to change the results of the primary socialization in the home than to ratify them and render them in adult form. The complementary relationship between family socialization and schools serves to reproduce patterns of class culture from generation to generation.

The operation of the labor market translates differences in class culture into income inequalities and occupational hierarchies. The personality traits, values, and expectations characteristic of different class cultures play a major role in determining an individual's success in gaining a high income or

prestigious occupation. The apparent contribution of schooling to occupational success and higher income seems to be explained primarily by the personality characteristics of those who have higher educational attainments.⁴⁴ Although the rewards to intellectual capacities are quite limited in the labor market (except for a small number of high level jobs), mental abilities are important in getting ahead in school. Grades, the probability of continuing to higher levels of schooling, and a host of other school success variables, are positively correlated with "objective" measures of intellectual capacities. Partly for this reason, one's experience in school reinforces the belief that promotion and rewards are distributed fairly. The close relationship between educational attainments and later occupational success thus provides a meritocratic appearance to mask the mechanisms which reproduce the class system from generation to generation.

So far, the perpetuation of inequality through the schooling system has been represented as an almost automatic, self-enforcing mechanism, operating only through the medium of class culture. An important further dimension of the interpretation is added if we note that positions of control in the productive hierarchy tend to be associated with positions of political influence. Given the disproportionate share of political power held by the upper class and their capacity to determine the accepted patterns of behavior and procedures, to define the national interest, and in general to control the ideological and institutional context in which educational decisions are made, it is not surprising to find that resources are allocated unequally among school tracks, between schools serving different classes, and between levels of schooling. The same configuration of power results in curricula, methods of instruction, and criteria of selection and promotion which confer benefits disproportionately on the children of the upper class.

It is not asserted here that the upper class

controls the main decision-making bodies in education, although a good case could probably be made that this is so. The power of the upper class is hypothesized as existing in its capacity to define and maintain a set of rules of operation or decision criteria—"rules of the game"—which, though often seemingly innocuous and sometimes even egalitarian in their ostensible intent, have the effect of maintaining the unequal system.

The operation of two prominent examples of these "rules of the game" will serve to illustrate the point. The first important principle is that excellence in schooling should be rewarded. Given the capacity of the upper class to define excellence in terms on which upper class children tend to excel (for example, scholastic achievement), adherence to this principle yields inequalitarian outcomes (for example, unequal access to higher education) while maintaining the appearance of fair treatment.⁴⁵ Thus the principle of rewarding excellence serves to legitimize the unequal consequences of schooling by associating success with competence. At the same time, the institution of objectively administered tests of performance serves to allow a limited amount of upward mobility among exceptional children of the lower class, thus providing further legitimation of the operations of the social system by giving some credence to the myth of widespread mobility.

The second example is the principle that elementary and secondary schooling should be financed in very large measure from local revenues. This principle is supported on the grounds that it is necessary to preserve political liberty. Given the degree of residential segregation by income level, the effect of this principle is to produce an unequal distribution of school resources among children of different classes. Towns with a large tax base can spend large sums for the education of their disproportionately upper class children even without suffering a higher than average tax rate.⁴⁶ Because the main resource inequalities in schooling thus exist

between rather than within school districts,⁴⁷ and because there is no effective mechanism for redistribution of school funds among school districts, poor families lack a viable political strategy for correcting the inequality.⁴⁸

The above rules of the game—rewarding "excellence" and financing schools locally—illustrate the complementarity between the political and economic power of the upper class. In each case, adherence to the rule has the effect of generating unequal consequences via a mechanism which operates largely outside the political system. As long as one adheres to the "reward excellence" principle, the responsibility for unequal results in schooling appears to lie outside the upper class, often in some fault of the poor—such as their class culture—which is viewed as lying beyond the reach of political action or criticism. Likewise, as long as the local financing of schools is maintained, the achievement of equality of resources among children of different social classes requires the class integration of school districts, an objective for which there are no effective political instruments as long as we allow a market in residential properties and an unequal distribution of income.

Thus it appears that the consequences of an unequal distribution of political power among classes complement the results of class culture in maintaining an educational system which has thus far been capable of transmitting status from generation to generation, and capable in addition of political survival in the formally democratic and egalitarian environment of the contemporary United States.

The role of the schools in reproducing and legitimizing the social division of labor has recently been challenged by popular egalitarian movements. At the same time, the educational system is showing signs of internal structural weakness.⁴⁹ These two developments suggest that fundamental change in the schooling process may soon be possible. Analysis of both the potential and

the limits of educational change will be facilitated by drawing together and extending the strands of the above argument.

4. THE LIMITS OF EDUCATIONAL REFORM

If the above attempt to identify the roots of inequality in U.S. education is convincing, it has done more than reconcile apparent discrepancies between the democratic forms and unequal content of U.S. education. For it is precisely the sources of educational inequality which we must understand in order to develop successful political strategies in the pursuit of educational equality.

I have argued that the structure of education reflects the social relations of production. For at least the past century and a half, expansion of education and changes in the forms of schooling have been responses to needs generated by the economic system. The sources of present inequality in U.S. education were found in the mutual reinforcement of class subcultures and social class biases in the operations of the school system itself. The analysis strongly suggests that educational inequalities are rooted in the basic institutions of our economy. Reconsideration of some of the basic mechanisms of educational inequality lends support to this proposition. First, the principle of rewarding academic excellence in educational promotion and selection serves not only to legitimize the process by which the social division of labor is reproduced. It is also a basic part of the process which socializes young people to work for external rewards and encourages them to develop motivational structures fit for the alienating work of the capitalist economy.⁵⁰ Selecting students from the bottom or the middle of the achievement scale for promotion to higher levels of schooling would go a long way towards equalizing education, but it would also jeopardize the schools' capacity to train productive and well-adjusted work-

ers.⁵¹ Second, the way in which local financing of schools operates to maintain educational inequality is also rooted in the capitalist economy, in this case in the existence of an unequal distribution of income, free markets in residential property, and the narrow limits of state power. However, it seems unwise to emphasize this aspect of the long run problem of equality in education, for the inequalities in school resources resulting from the localization of finance may not be of crucial importance in maintaining inequalities in the effects of education. Moreover, it seems that a significant undermining of the principle of local finance may already be under way in response to pressures from the poorer states and school districts.

Of greater importance in the perpetuation of educational inequality are differential class subcultures. These class-based differences in personality, values, and expectations, I have argued, represent an adaptation to the different requirements of adequate work performance at various levels in the hierarchical social relations of production. Class subcultures, then, stem from the everyday experiences of workers in the structure of production characteristic of capitalist societies.

It should be clear by this point that educational equality cannot be achieved through changes in the school system alone. Nonetheless, attempts at educational reform may move us closer to that objective if, in their failure, they lay bare the unequal nature of our school system and destroy the illusion of unimpeded mobility through education. Successful educational reforms—reducing racial or class disparities in schooling, for example—may also serve the cause of equality of education, for it seems likely that equalizing access to schooling will challenge the system either to make good its promise of rewarding educational attainment or find ways of coping with a mass disillusionment with the great panacea.⁵²

Yet if the record of the last century and a half of educational reforms is any guide, we

should not expect radical change in education to result from the efforts of those confining their attention to the schools. The political victories of past reform movements have apparently resulted in little if any effective equalization. My interpretation of the educational consequences of class culture and class power suggests that these educational reform movements failed because they sought to eliminate educational inequalities without challenging the basic institutions of capitalism.

- Efforts to equalize education through changes in government policy will at best scratch the surface of inequality. For much of the inequality in U.S. education has its origin outside the limited sphere of state power, in the hierarchy of work relations and the associated differences in class culture. As long as jobs are defined so that some have power over many and others have power over nothing—as long as the social division of labor persists—educational inequality will be built into U.S. society.

NOTES

1. This account draws upon two important historical studies: P. Aries, *Centuries of Childhood* (New York, 1970); and B. Bailyn, *Education in the Forming of American Society* (New York, 1960). Also illuminating are anthropological studies of education in contemporary pre-capitalist societies. See, for example, J. Kenyatta, *Facing Mount Kenya* (New York, 1962), pp. 95–124. See also Edmund S. Morgan, *The Puritan Family: Religion and Domestic Relations in Seventeenth Century New England* (New York, 1944).

2. P. Aries, *Centuries of Childhood*. In a number of places, Scotland and Massachusetts, for example, schools stressed literacy so as to make the Bible more widely accessible. (See C. Cipolla, *Literacy and Economic Development* (Baltimore, 1969); and E. Morgan, *The Puritan Family* (ch. 4).) Morgan quotes a Massachusetts law of 1647 which provided for the establishment of reading schools because it was "one chief project of that old deluder, Satan, to keep men from knowledge of the Scriptures."

3. H. F. Kearney, *Scholars and Gentlemen: Universities and Society in Pre-Industrial Britain* (Ithaca, N.Y., 1971).

4. See B. Bailyn, *Education in the Forming of American Society*, and N. Smelser, *Social Change in the Industrial Revolution* (Chicago, 1959).

5. F. Engels and K. Marx, *The Communist Mani-*

festo (1848); K. Marx, *The 18th Brumaire of Louis Bonaparte* (New York, 1852).

6. See, for example, S. Thernstrom, *Poverty and Progress: Social Mobility in a 19th Century City* (New York, 1969).

7. B. Simon, *Studies in the History of Education, 1780–1870*, Vol. I. (London, 1960).

8. Bailyn, *Education in the Forming of American Society*.

9. A manufacturer, writing to the Massachusetts State Board of Education from Lowell in 1841 commented:

I have never considered mere knowledge . . . as the only advantage derived from a good Common School education . . . (Workers with more education possess) a higher and better state of morals, are more orderly and respectful in their deportment, and more ready to comply with the wholesome and necessary regulations of an establishment . . . In times of agitation, on account of some change in regulations or wages, I have always looked to the most intelligent, best educated and the most moral for support. The ignorant and uneducated I have generally found the most turbulent and troublesome, acting under the impulse of excited passion and jealousy.

Quoted in Michael B. Katz, *The Irony of Early School Reform* (Cambridge, Mass., 1968), p. 88. See also David Isaac Bruck, *The Schools of Lowell, 1824–1861: A Case Study in the Origins of Modern Public Education in America* (unpublished senior thesis, Department of Social Studies, Harvard College, April 1971).

10. In 1846 the annual report of the Lowell, Mass., School Committee concluded that universal education was "the surest safety against internal commotions." (*1846 School Committee Annual Report*, pp. 17–18.) It seems more than coincidental that in England, public support for elementary education—a concept which had been widely discussed and urged for at least half a century—was legislated almost immediately after the enfranchisement of the working class by the electoral reform of 1867. See Simon, *Studies in the History of Education, 1780–1870*. Mass public education in Rhode Island came quickly on the heels of an armed insurrection and a broadening of the franchise. See F. T. Carlton, *Economic Influences upon Educational Progress in the United States, 1820–1850* (Madison, Wisc., 1908).

11. Describing the expansion of education in the 19th century, Katz concludes:

. . . a middle class attempt to secure advantage for their children as technological change heightened the importance of formal education assured the success and acceptance of universal elaborate graded school systems. The same result emerged from the fear of a growing, un-schooled proletariat. Education substituted for deference as a source of social cement and social order in a society stratified by class rather than by rank.

(M. B. Katz, "From Voluntarism to Bureaucracy in U.S. Education," mimeo, 1970.)

12. An American economist, writing just prior to the "common school revival," had this to say:

Education universally extended throughout the community will tend to disabuse the working class of people in respect of a notion that has crept into the minds of our mechanics and is gradually prevailing, that manual labor is at present very inadequately rewarded, owing to combinations of the rich against the poor; that mere mental labor is comparatively worthless; that property or wealth ought not to be accumulated or transmitted; that to take interest on money lent or profit on capital employed is unjust . . . The mistaken and ignorant people who entertain these fallacies as truths will learn, when they have the opportunity of learning, that the institution of political society originated in the protection of property.

(Thomas Cooper, *Elements of Political Economy* (1828), quoted on pp. 33-34 of Carlton, *Economic Influences upon Educational Progress in the United States, 1820-1850*.)

Political economy was made a required subject in Massachusetts high schools in 1857, along with moral science and civic polity. Cooper's advice was widely but not universally followed elsewhere. Friedrich Engels, commenting on the tardy growth of mass education in early 19th century England, remarked: "So shortsighted, so stupidly narrow-minded is the English bourgeoisie in its egotism, that it does not even take the trouble to impress upon the workers the morality of the day, which the bourgeoisie has patched together in its own interest for its own protection." (Engels, *The Condition of the Working Class in England* (Stanford, Calif., 1968).)

13. See Thernstrom, *Poverty and Progress*. Marx said this about mid-19th century France:

The modern and the traditional consciousness of the French peasant contended for mastery . . . in the form of an incessant struggle between the schoolmasters and the priests.

(Marx, *The 18th Brumaire of Louis Bonaparte*, p. 125.)

14. Janice Weiss and I are currently studying the rapid expansion of Southern elementary and secondary schooling which followed the demise of slavery and the establishment of capitalist economic institutions in the South.

15. Based on the preliminary results of a statistical analysis of education in 19th century Massachusetts being conducted jointly with Alexander Field.

16. Katz, *The Irony of Early School Reform* and "From Voluntarism to Bureaucracy in U.S. Education."

17. Katz, *The Irony of Early School Reform*.

18. Sol Cohen describes this process in his "The Industrial Education Movement, 1906-1917" (*American Quarterly*, Vol. 20, Spring 1968). Typical of the arguments then given for vocational education is the following, by the superintendent of schools in Cleveland:

It is obvious that the educational needs of children in a district where the streets are well

paved and clean, where the homes are spacious and surrounded by lawns and trees, where the language of the child's playfellows is pure, and where life in general is permeated with the spirit and ideals of America—it is obvious that the educational needs of such a child are radically different from those of the child who lives in a foreign and tenement section.

(William H. Elson and Frank P. Bachman, "Different Course for Elementary School," *Educational Review*, XXXIX, April 1910; quoted in Cohen.)

See also L. Cremin, *The Transformation of the School* (New York, 1964), ch. 2, and David Cohen and Marvin Lazerson, "Education and the Industrial Order" (mimeo, 1970).

19. The superintendent of the Boston schools summed up the change in 1908:

Until very recently (the schools) have offered equal opportunity for all to receive one kind of education, but what will make them democratic is to provide opportunity for all to receive such education as will fit them equally well for their particular life work.

(Boston, *Documents of the School Committee*, 1908, #7, p. 53; quoted in Cohen and Lazerson, "Education and the Industrial Order.")

20. R. Callahan, *Education and the Cult of Efficiency* (Chicago, 1962); Cohen and Lazerson, "Education and the Industrial Order"; and Cremin, *The Transformation of the School*.

21. See M. Reich, "The Evolution of the U.S. Labor Force," in R. Edwards, M. Reich, and T. Weisskopf (eds.), *The Capitalist System* (Englewood Cliffs, N.J., 1971, forthcoming).

22. The role of schooling in legitimizing the class structure is spelled out in S. Bowles, "Contradictions in U.S. Higher Education" (mimeo, 1971).

23. The data for this calculation refer to white males who were aged 25-34 in 1962. See S. Bowles, "Schooling and Inequality from Generation to Generation," paper presented at the Far Eastern Meetings of the Econometric Society, Tokyo, 1970.

24. Table 1 understates the degree of social class inequality in school attendance in view of the fact that a substantial portion of the upper income children not enrolled in public schools attend private schools. Private schools provide a parallel educational system for the upper class. I have not given much attention to these institutions as they are not quantitatively very significant in the total picture. Moreover, to deal extensively with them might detract attention from the task of explaining class inequalities in the ostensibly egalitarian portion of our school system.

25. For recent evidence on these points, see U.S. Bureau of the Census, *Current Population Reports*, Series P-20, numbers 185 and 183.

26. W. L. Hansen and B. Weisbrod, "The Distribution of Costs and Direct Benefits of Public Higher Education: the Case of California," *Journal of Human Resources*, Vol. V, No. 3 (Summer 1970), pp. 361-370.

27. In the school year 1969-70, per pupil expenditures of federal, state, and local funds were

\$1490 per colleges and universities and \$747 for primary and secondary schools. (U.S. Office of Education, *Digest of Educational Statistics, 1969* (Washington: U.S. Government Printing Office, 1969).)

28. See also P. C. Sexton, *Education and Income* (New York, 1961).

29. See J. Binstock, *Survival in the American College Industry* (unpublished manuscript).

30. E. Z. Friedenberg, *Coming of Age in America* (New York, 1965). It is consistent with this pattern that the play-oriented, child-centered pedagogy of the progressive movement found little acceptance outside of private schools in wealthy communities. See Cohen and Lazerson, "Education and the Industrial Order."

31. That working class parents seem to favor more authoritarian educational methods is perhaps a reflection of their own work experiences which have demonstrated that submission to authority is an essential ingredient in one's ability to get and hold a steady, well-paying job.

32. See, for example, A. B. Hollingshead, *Elm-town's Youth* (New York, 1949); W. L. Warner and P. S. Lunt, *The Social Life of a Modern Community* (New Haven, 1949); R. Rosenthal and L. Jacobson, *Pygmalion in the Classroom* (New York, 1968); and W. E. Schafer, C. Olexa, and K. Polk, "Programmed for Social Class: Tracking in High School," *Trans-Action*, Vol. 7, No. 12 (October, 1970).

33. Calculation based on data in James S. Coleman, et al., *Equality of Educational Opportunity*, Vol. II (Washington, 1966), and methods described in S. Bowles, "Schooling and Inequality from Generation to Generation."

34. See P. M. Blau and O. D. Duncan, *The American Occupational Structure* (New York, 1967). More recent data do not contradict the evidence of no trend towards equality. A 1967 Census survey, the most recent available, shows that among high school graduates in 1965, the probability of college attendance for those whose parents had attended college has continued to rise relative to the probability of college attendance for those whose parents had attended less than eight years of school. See U.S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 185, July 11, 1969.

35. A simple statistical model will elucidate the main relationships involved:

Let y (individual or family income) be the sum of w (earnings from labor, including embodied education and skills, L) and k (earnings from capital, K), related according to the equation $y = w + k = aK^A L^B$. The coefficients A and B represent the relative importance of capital and labor as sources of income. The variance of the logarithm of income (a common measure of inequality) can then be represented by the following expression:

$$\text{var } \log y = A^2 \text{var } \log K + B^2 \text{var } \log L + 2AB \text{covar} (\log L, \log K).$$

The first term on the right represents the contribution of inequalities in capital ownership to total inequality, the second measures that part of total income inequality due to inequalities of education

and skills embodied in labor, and the third represents the contribution to income inequality of social class inequalities in the supply of skills and schooling. Prior to the educational differentiation of the labor force, the variance of labor was zero. All workers were effectively equal. The variance of the logarithm of income would then be due entirely to capital inequality and would be exactly equal to $A^2 \text{var } \log K$. The rise of education as a source of income and labor differentiation will increase the variance of the logarithm of embodied labor unless all workers receive identical education and training. This is true even if the third term is zero, indicating no social class inequalities in the provision of skills and education.

To assert the conventional faith in the egalitarian influence of the rising economic importance of education, one would have to argue that the rise of education is likely to be associated with either a) a fall in A , the relative importance of capital as a source of earnings; b) a decrease in the size of the covariance of the logarithms of capital and labor; c) a decrease in the inequality of capital ownership; or d) an increase in equality in the supply of education. While each is possible, I see no compelling reason why education should produce these results.

36. See, for example, Robert Hauser, "Educational Stratification in the United States," *Sociological Inquiry*, Vol. 20, Spring, 1970.

37. Max Weber referred to bureaucracy as the "most rational offspring" of discipline, and remarked: "... military discipline is the ideal model for the modern capitalist factory..." ("The Meaning of Discipline," reprinted in H. H. Gerth and C. W. Mills, *From Max Weber: Essays in Sociology* (New York, 1958, p. 261).

38. For a survey of the literature see J. P. Robinson, R. Athanasiou, and K. Head, "Measures of Occupational Attitudes and Occupational Characteristics" (Survey Research Center, University of Michigan, February 1969).

39. See, for example, Benjamin Bloom, *Stability and Change in Human Characteristics* (New York, 1964).

40. Note, for example, the class differences in child-rearing with respect to the importance of obedience. See M. Kohn, "Social Class and Parental Values," in R. Coser (ed.), *The Family* (New York, 1964); and L. Dolger and J. Ginandes, "Children's Attitudes towards Discipline as Related to Socio-economic Status," *Journal of Experimental Education*, Vol. 15 (1946), pp. 161-165. See also the study of differences in child-rearing practices in families headed by bureaucrats as opposed to entrepreneurs by D. Miller and G. Swanson, *The Changing American Parent* (New York, 1958). Also, E. E. Maccoby, P. K. Gibbs, et al., "Methods of Child-Rearing in Two Social Classes," in W. E. Martin and C. B. Stendler (eds.), *Readings in Child Development* (New York, 1954). While the existence of class differences in child-rearing is supported by most of the available data (but see H. Lewis, "Child-Rearing Among Low-Income Families," in Ferman et al. (eds.), *Poverty in America* (New York, 1961)), the stability of these differences over time has been questioned by U. Bron-

fenbrenner through T. Hodges (ed. 1963)).

41. See A. Achievement toward Ind. land et al., 1953); and Child Relat. Journal of.

42. See, for Social Mo., 1959); an.

Rigidity: Rural Penn. letin, Vol.

43. S. B. tion Funct. Income, ar.

44. This v. tion, Tec.

American 1971, pp.

non-cognit. ence, see

System: Society,"

No. 4 (Fe. On What 1968).

45. Those

ence" pri

tion to en

resources

colleges

entrance

lowest, o

standards

of the col

individual

mist), noi

6. /

Many sc

typolog

systems

Ralph F.

Mobility

summar

Turner

industri

upward

From So

fenbrenner ("Socialization and Social Class through Time and Space," in Kallenbach and Hodges (eds.), *Education and Society* (Columbus, 1963)).

41. See M. Winterbottom, "The Sources of Achievement Motivation in Mothers' Attitudes toward Independence Training," in D. C. McClelland et al., *The Achievement Motive* (New York, 1953); and M. Kohn, "Social Class and Parent-Child Relationships: An Interpretation," *American Journal of Sociology*, 68, 1963, pp. 471-480.

42. See, for example, S. M. Lipset and R. Bendix, *Social Mobility in Industrial Society* (Berkeley, 1959); and T. Iwand and J. Stoye, "Social Rigidity: Income and Occupational Choice in Rural Pennsylvania," *Economic and Business Bulletin*, Vol. 22 (Spring-Summer 1970), pp. 24-30.

43. S. Bowles, "Toward an Educational Production Function," in W. L. Hansen (ed.), *Education, Income, and Human Capital* (New York, 1970).

44. This view is elaborated in H. Gintis, "Education, Technology, and Worker Productivity," *American Economic Association Proceedings*, May 1971, pp. 266-279. For other studies stressing the non-cognitive dimensions of the schooling experience, see T. Parsons, "The School Class as a Social System: Some of its Functions in American Society," *Harvard Educational Review*, Vol. 29, No. 4 (Fall 1959), pp. 297-318; and R. Dreeben, *On What is Learned in School* (Reading, Mass., 1968).

45. Those who would defend the "reward excellence" principle on the grounds of efficient selection to ensure the most efficient use of educational resources might ask themselves this: why should colleges admit those with the highest college entrance examination board scores? Why not the lowest, or the middle? According to conventional standards of efficiency, the rational social objective of the college is to render the greatest increment in individual capacities ("value added," to the economist), not to produce the most illustrious graduat-

ing class ("gross output"). Yet if incremental gain is the objective, it is far from obvious that choosing from the top is the best policy.

46. Some dimensions of this problem are discussed in S. Weiss, "Existing Disparities in Public School Finance and Proposals for Reform" (research report to the Federal Reserve Bank of Boston, No. 46, February 1970).

47. Recall that Owen, whose data appear in Table 3, found that the relationship of various measures of teacher quality to the family income level of the area served by the schools was considerably higher between cities than within cities.

48. In 1969, federal funds constituted only 7 percent of the total financing of public elementary and secondary schooling. Moreover, current distribution formulae governing state and federal expenditures are only mildly egalitarian in their impact. See K. A. Simon and W. V. Grant, *Digest of Educational Statistics, 1969* (Washington: U.S. Dept. of Health, Education and Welfare, 1969).

49. See S. Bowles, "Contradictions in U.S. Higher Education" (mimeo, 1971).

50. Gintis, "Education, Technology, and Worker Productivity."

51. Consider what would happen to the internal discipline of schools if the students' objective were to end up at the bottom of the grade distribution!

52. The failure of the educational programs of the "war on poverty" to raise significantly the incomes of the poor is documented in T. I. Ribich, *Education and Poverty* (Washington, 1969). In the case of blacks, dramatic increases in the level of schooling relative to whites have scarcely affected the incomes of blacks relative to whites. (R. Weiss, "The effects of Education on the Earnings of Blacks and Whites," *Review of Economics and Statistics*, May 1970.) It is no wonder that Booker T. Washington's plea that blacks should educate themselves before demanding equality has lost most of its once widespread support.

6. A Typology for the Classification of Educational Systems

EARL I. HOPPER

Many sociologists agree that the most useful typology for the classification of educational systems is the one developed implicitly by Ralph H. Turner in "Contest and Sponsored Mobility and the School System."^{1,2} A brief summary of his typology may be useful. Turner assumes that educational systems in industrial societies are the main "modes of upward social mobility," and he argues that

the distinguishing characteristics of these modes are based on folk-norms which are pervasive throughout a given host society or type of host society. He distinguishes between a mode of "sponsorship mobility" based on "sponsorship folk-norms" and a mode of "contest mobility" based on "contest folk-norms." The former is defined as one in which

From *Sociology* 2 (1968):29-46. Reprinted by permission.