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ED 193 801

EA 013 069

AUTHOR Ramirez, Francisco O.; Meyer, John W.  
 TITLE Comparative Education: The Social Construction of the Modern World System.  
 INSTITUTION Stanford Univ., Calif. Inst. for Research on Educational Finance and Governance.  
 SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.  
 REPORT NO IFG-PR-80-B15  
 PUB DATE 80  
 GRANT HSMHA-2T32-MH-15149-03; OB-NIE-G-78-0212  
 NOTE 58p.; Sponsored in part by Stanford University's Organizational Training Program.

EDRS PRICE MF01/PC03 Plus Postage.  
 DESCRIPTORS Bibliographies; \*Comparative Education; \*Educational Benefits; \*Educational Research; Elementary Secondary Education; \*Government School Relationship; Higher Education; Institutional Characteristics; Organization; School Districts; School Organization; Social Influences

## ABSTRACT

This paper is a critical assessment of the theory and evidence on three general issues in comparative education. It assesses the factors affecting the origins and expansion of national educational systems: the factors influencing the organizational structure and ideologies of systems of mass schooling and higher education; and the effects of expanded educational systems for individuals, groups, and societies. It finds that the institutionalization of mass schooling is associated with nation-building processes in the eighteenth century, while universities originated in medieval Europe under papal sponsorship. In the post-World War II era, educational expansion is weakly influenced by national structural characteristics and seems to have its impetus in the rise of a transnational world culture. Participation in this wider civilizational network may explain the increasing convergence (especially at the lower levels) of educational organization and ideology. Education positively affects individuals, low status groups (women, for instance), and societal development. These effects may reflect the world-wide rise of educational credentialism. The paper concludes by advocating more explicitly comparative research that directly tests institutional-level explanations. A bibliography is included.  
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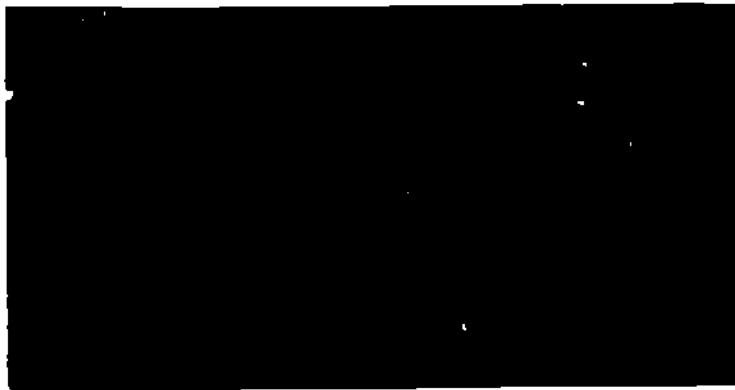
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## Institute for Research on Educational Finance and Governance

SCHOOL OF EDUCATION STANFORD UNIVERSITY



ED193801

EA 013 069

Program Report No. 80-315

COMPARATIVE EDUCATION: THE SOCIAL CONSTRUCTION  
OF THE MODERN WORLD SYSTEM

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The research on this paper was supported by funds from the National Institute of Education (Grant No. OB-NIE-G-78-0212), and by funds from the Organizational Training Program of Stanford University (Grant No. HSMHA 2T32 MH 15149-03). The analysis and conclusions here do not necessarily reflect the views or the policies of these organizations.

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### Abstract

This paper is a critical assessment of theory and evidence on three general issues in comparative education: a) the factors affecting the origins and expansion of national educational systems; b) the factors influencing the organizational structure and ideologies of systems of mass schooling and higher education; c) the effects of expanded educational systems for individuals, groups, and societies. We find that the institutionalization of mass schooling is associated with nation-building processes in the 18th century while universities originated in medieval Europe under papal sponsorship. In the post World War II era educational expansion is weakly influenced by national structural characteristics and seems to have its impetus in the rise of a transnational world culture. Participation in this wider civilizational network may explain the increasing convergence (especially at the lower levels) of educational organization and ideology. Education positively affects individuals, low status groups (e.g. women), and societal development. These effects may reflect the world-wide rise of educational credentialism. We conclude by advocating more explicitly comparative research that directly tests institutional-level explanations.

COMPARATIVE EDUCATION:  
THE SOCIAL CONSTRUCTION OF THE MODERN WORLD SYSTEM

The possibilities for comparative research on educational systems have been enhanced by the development of a number of cross-national data bases. Most of these cover national educational systems (UNESCO 1950-1971; UNESCO World Survey of Education 1955-1971; OECD 1972-73), but a few contain information on individuals or schools (the IEA studies [1967-1976]). Increasingly, studies comparing substantial numbers of national educational systems are being conducted using such materials, and the need for them is widely recognized (Merritt and Coombs 1977).

For the most part, however, research in "comparative education" merely consists in studies of education in individual countries, with few direct comparisons. The case study approach, whether with quantitative or qualitative data, still governs the literature: (see Comparative Educational Review 1977; Havighurat 1968; but also see Ecksten and Noah 1969). Such case studies, by definition, contain little variance at the system or societal level, so theoretical and empirical foci tend to shift downward to the individual, school, or regional level. This has had a number of unfortunate consequences for the field.

First, the issue of the factors affecting the origins and expansion of educational systems tends to be slighted: these factors tend to be found at the national level in modern societies, rather than in the choices of individual students, teachers, or school organizations. There is surprisingly little attention to this obviously important issue in the field, though more historical research has made some contributions (e.g., Craig and Spear 1978; Stone (ed.) 1974).

Second, there is little work comparing the institutional structures of national systems of education: most studies compare individual students. So, for instance, detailed sociological studies of curricular content in large numbers of countries are missing.

Third, the case study tradition theoretically underemphasizes those effects of education that take other forms than traditional socialization outcomes. Attention shifts to the individual level, and the effects of education on the masses or elites that pass through the system are not considered. Partly because of the absence of genuinely comparative data and research designs, variations among countries in education as a system of allocation are given too little attention (Collins 1979). The more direct effects of educational system in constructing legitimated authority in modern societies tend to be ignored (Bourdieu and Passeron, 1970; and Meyer 1977). These effects more than the individual-level ones, clearly require systemic variation in research: the absence of such variation impoverishes the field of comparative studies.

For just this reason, research in comparative education has had little effect on the general field of the sociology of education: the institutional effects to which comparative research should call attention are missing from most nominally comparative research designs. Thus the main lines of theory and research in the sociology of education--studies of the status attainment of individuals, and studies of classroom and school organizations--are uninformed by the inclusion of institutional or systemic factors. When such research is conducted in several countries, it is more in the spirit of simple replication than as part of a search for the effects of societal variations.



Our review emphasizes the importance of systemic comparisons, and the effects of systemic variables, since these are the areas in which the field of comparative education has a distinctive contribution to make. The review is organized around three general issues: a) the factors affecting the origins and expansions of national educational systems; b) the factors affecting the organizational structures and ideologies of schools and schooling systems; c) the effects of expanded educational systems for individuals, groups, and societies are reviewed.

Throughout this review, we distinguish between processes operating at the mass schooling level (elementary and secondary education, in most societies) and those operating at the elite level (tertiary education, for the most part). This distinction corresponds to the official language used in almost every country. More important, it reflects the historical reality that different forces operating in different eras shaped modern mass and elite educational systems. It is a mistake to imagine that schooling systems have always been age-staged hierarchies (Aries 1962; Illich 1970), and further to imagine that the creation of higher education presupposed the establishment of mass schooling. The first systems of compulsory mass schooling were created in and by nation-states in the early eighteenth century (Bendix 1964); medieval universities originated under the auspices of the Church in the late twelfth and early thirteenth centuries (Rashdall 1964). What may now seem the appropriate chronology was historically reversed--an observation whose significance we discuss in the concluding section.

## THE ORIGINS AND EXPANSION OF NATIONAL EDUCATIONAL SYSTEMS

Comparative research, as with other lines of work in the sociology of education, attends more to the effects of educational systems than to their origins. There is relatively little work developing explanations of the factors affecting the creation and change of either mass or elite systems of education. Most comparative research proceeds as if schools and universities are features of an inevitable natural landscape. Further, explanatory efforts tend to be limited to educational developments in a specific country, and suffer from a lack of more general applicability.

The factors that stimulate the expansion or change of educational systems may obviously be quite different from those that trigger its creation in the first place. But most theoretical work treats the two issues as similar. We review theoretical arguments on educational origins in the same frame as those on educational expansion. In assessing evidence, however, we distinguish the two issues.

### Theories of the origins and expansion of mass education

The best known current ideas trace the modern educational system to the transformation of the economic system. These ideas are functional in character--the modern economy is seen as creating demands for a huge labor force trained in the required skills or more broadly socialized to commitment and conformity in the impersonal economy. On the left, the functional requirements are seen as those of the capitalist class (e.g., Bowles and Gintis 1976), while on the right they are seen as arising from the system as a whole (Blaug 1968, 1969; Machlup 1972), but the logics involved are quite similar. The modern economy is seen as requiring a trained and socialized labor force, and as generating the resources (and social demand in individuals and subgroups, as well as the agencies of society itself) to produce the required training and socialization. In

modern economic thinking, this is the view of education as producing human capital in response to the requirements of the modern production system. Within the general perspective, the main issue is whether education functions more to generate cognitive training and skill for the modern economy, or whether it mainly creates broader kinds of socialization: for example, a compliant work force, or workers who accept the legitimacy of the system and their own role in it (Bowles and Gintis 1976; for a more cognitive emphasis, see Kohn and Schooler, 1978). This distinction is not very important for present purposes: in both cases, the central economic hypothesis is that systems of mass education arise where there are expanding modern production systems or plans for such systems.

A more sociological theme emphasizes social modernization as the critical causal factor, not only economic complexity, though the two variables are highly interrelated. Escalating institutional differentiation or an expanding and more specialized division of labor increasingly characterizes societies. The demands of a more complex social order lead to the removal of some socialization functions from families and extended kin groups and allocate them to more specialized agencies (Parsons 1957; Dreeben 1968; Eisenstadt 1956). Thus mass schooling expands as a result of increased social differentiation. As with narrower economic arguments, some theories emphasize cognitive requirements here, while most emphasize broader aspects of the socialization of values and personality characteristics (e.g., Inkeles and Smith 1974).

A third general argument traces mass education to changes in the constitutive organizational structure of society, that is, to the rise of rational and universalistic individualism and citizenship in the modern system. Organizationally, modern

social life takes place increasingly in large and impersonal bureaucracies (Weber 1968), and in networks of overlapping voluntary associations (Simmel 1955). Politically, life is organized around individual citizenship in the state (Bendix 1964) and in a web of participatory memberships in the nation (Almond and Verba 1963). Religiously, the modern system is again individualistic, conferring a distinct status on the individual as a member of the wider cosmos (e.g., Swanson 1967). All these changes impose the same new requirements on the socialization system: the individual must now be made a valid member of a very broad and universalistic collectivity. Concretely, these lines of thought predict the expansion of mass education in more rationalized bureaucratic societies, in systems with developed nation-states, and in societies most thoroughly affected by the Protestant Reformation.

Other explanations combine or modify elements from the theories above. Collins (1979, 1977, 1971) sees educational expansion as deriving from status competition. Weberian ideas about status struggles within bureaucratic or meritocratic systems are combined with Marxian ideas about the primacy of power differences between groups, and about the uses of education as part of a system of hegemonic domination. In this view, political and educational decentralization allow competition among ethnic, religious, or class groups to lead to the establishment and expansion of school systems, which are both instruments of domination by established groups and at the same time the means by which other groups must compete. Collins (1979) describes the process as one of cultural capital accumulation, and sees educational expansion as an inflationary process involved in competition for such capital.

Clignet (1974) sees autonomous schooling systems as produced by the conflicts between the differentiating forces of economic development, and the unified political system created by the emergence of legal specialization. To manage this conflict, religious specialists emerge, and later, differentiated schooling systems emerge to legitimate the conflicting requirements of economy and state.

Another perspective is found in the work of Yehudi Cohen (1975, 1970), who sees (as does Bendix) the connection between mass schooling and the formation of the nation state. Cohen adds the idea that it is national states that are part of a wider civilizational network of states that are likely to establish schooling systems. These develop as adaptive responses to boundary pressures generated by involvement in the wider intersocietal network: they help to establish civilization-wide ideological uniformity by eliminating local solidarities.

Finally, Ramirez and Rubinson (1979) see mass schooling as an institutionalized system of moral socialization (Durkheim 1961) utilized by national states to cope with the problem of defining and regulating societal membership, much like the initiation ceremonies of stateless societies. In the latter, relatively high levels of institutionalized collective authority lead to the establishment of initiation rites; in societies with states, those with more powerful and authoritative states are more likely to originate, expand, and nationalize mass schooling.

#### Evidence on the origins of mass schooling

Few general comparative studies address the question of the origins of mass schooling: most evidence comes from case studies of particular societies. Thus the theories reviewed

above have not really been squarely addressed in the literature, and there is a real need for more disciplined and explicitly comparative research.

Despite its popularity, the idea that industrialization or the associated changes in the economy produce mass education fits poorly with the available evidence. First, mass schooling systems in Europe (and Japan) preceded industrialization, as in Scotland, Prussia, and France (Bendix 1964; Dore 1964). And regional analyses for several European countries fail to show positive relationships between increases in industrialization and growth in early enrollments (Craig and Spear 1979; Lundgren 1976). Second, while there are some arguments that industrialization in the United States gave impetus to educational development (Field 1976; Katz 1975, 1968; Bowles and Gintis 1976), the evidence is not supportive (Field 1976). Mass schooling was established before industrialization, and seems to have little expanded by it (Kaestle and Vinovskis 1976); regional growth patterns cannot be explained by differences in level of industrialization (Meyer, et al., 1979; Sollow and Stevens 1977; Folger and Nam 1967). Third, the creation of mass education in the new nations ordinarily precedes much industrialization and is little affected by it (Meyer, et al., 1977). The arguments of revisionist historians that education is a creature of capitalism, conceived narrowly, may explain some organizational changes in educational structure, but do not given an account of the rise of mass educational systems in the first place.

The social modernization argument also does not fare well with the evidence. It explains little in the contemporary new nations (Meyer, et al., 1977). The classic argument of Bailyn that the changes in size and functions of the family

give rise to mass education is often discussed, but recent historiography challenges the thesis that the American family underwent a radical shift in composition and purpose. More important, the specific hypothesis linking nuclear family systems with the rise of schools is not supported by a comparative study explicitly designed to test it with cross-cultural data (Herzog 1962).

There is considerable evidence of the links between the expansion of the nation-state in the eighteenth century--particularly in France and Prussia--and the creation of mass education (Merriam 1931; Reisner 1927). But the development of the British national state did not have similar effects; and mass schooling developed early in the United States despite the absence of a strong or centralized state (Tyack 1974). A straightforward interpretation of mass schooling as resulting in general from expanded state authority seems questionable, as does any notion that political democracy is a prerequisite.

The status competition thesis draws mainly from the American educational experience (Collins 1979; Chapter 5). But no association between American educational expansion and immigration (or other measures of potential group competition) appear in empirical analyses. And recent discussions of the compulsory schooling laws tend to treat them as reflecting a revitalization movement normatively controlling all the groups involved in political society - middle classes as well as working classes, old protestants as well as immigrants - rather than as acts of domination by one adult group over others (Everhart 1977). Most important, from a comparative point of view, there is no evidence that societies with higher levels of group competition expand education more (Warren 1973). Even theoretically, the group competition idea, whatever its other virtues might attempt to enlarge their opportunities for such means of advancement as education--but this does not explain why education arose as the mechanism for advancement in the first place.

Both Cohen (1975, 1970) and Ramirez and Rubinson (1979) argue that mass schooling is more likely to originate in societies with states than in stateless societies. Some support is provided in one comparative study (Herzog 1962). The further argument that this arises because of the embeddedness of states in a wider civilizational system is at least consistent with the comparative evidence. It may account for the early development of mass education in European states--deeply embedded in a wider system at a very early stage (Strayer 1970).

The more general idea that mass education arises as a consequence of shifts upward in the collective level of authority (Ramirez & Rubinson 1979; Cohen 1970, 1975) also receives some support. In comparing societies without states, those with elaborate systems of collective authority tend to create some broader system of moral socialization (Cohen, 1964; Young, 1965; Kornhonen 1975). This analogy between educational systems and initiation ceremonies is also supported by evidence that the rise of the former is associated with the decline of the latter (Young 1965). But as noted earlier, in societies with states, mass schooling originates in those with both strong and weak states.

Obviously, none of the present theories seems adequately to explain the origins of mass schooling. It is necessary both to theoretically develop arguments about the conditions under which different processes operate, and to design more systematic tests. Both activities are underdeveloped in the field.

#### Evidence on the expansion of mass schooling in the current period

After World War II, mass education expanded rapidly in all countries--there were no reversals (Coombs 1968; Meyer, et al., 1975). Only a few studies attempt to explain why, or to explain variations in this expansion among countries.



Most of these are cross-sectional: such studies find correlations among various aspects of national development, and make arbitrary causal inferences. It is often assumed, for instance, that educational expansion affected economic and political growth (Harbison and Myers 1964; Curle 1964; Outright 1963. but for a dissenting view, see Bowman and Anderson, 1963). Causal inference, in this instance, requires longitudinal data.

The available multivariate panel analyses reflect very badly on the applicability of any of the main theoretical lines discussed above to an explanation of educational expansion in the current period (see Meyer et al., 1977). Levels of economic or industrial development--which are highly correlated with educational expansion in cross-sectional analyses--show weak effects on educational expansion in the present period. Indicators of modernization, such as urbanization, or political democracy usually show no effects at all. Neither do measures of many different aspects of state power and structure. Nor does the variable favored by conflict theories--ethnic fractionalization of the population (Warren 1974). Moreover educational expansion is unaffected by the level of national income inequality (Rubinson, n.d.).

Taken as a whole, such findings suggest that variations in national structural characteristics were not crucial in explaining the rapid educational expansion of the post-war period. They cast doubt on the contemporary utility of conceptions of education as resulting from national-level processes of social and economic development, status conflict, or expanded bureaucratization. All these factors may have been relevant in the past, but in the present period the thrust toward expansion seems to be both strong and independent of many such factors.

Apart from broader causal factors, ideas about how expansion is affected by the structure of the educational system itself, and the structural links it has with the state, have received little empirical support. Political theories suggest that education expands more rapidly if closely linked to the state; conflict theories suggest the opposite. Neither result appears in any substantial way (Ramirez 1973, 1974; Garms 1968). Educational systems incorporated more completely in the state grow about as rapidly as others. Indeed, in the modern period, systems linked to states that themselves are colonies grow about as rapidly as does education in independent nation-states (Meyer, et al., 1977). Higher levels of economic dependency, often cited as evidence of neocolonial ties (Altbach and Kelly 1978), do not seem to substantially slow educational expansion.

#### Theories of the origins and expansion of higher education

Theories of the expansion of higher education generally parallel those of lower levels, and cite the same causal mechanisms: industrialization, social modernization, class or status competition, or the expansion of state power. The status competition theory has been given special attention in the work of Ben-David and his students (Ben-David 1977; Ben-David and Zloczower 1962, 1963-64) on variations in higher educational expansion and in rates of scientific and technical innovations. The key idea employed is that competition within the academic systemic among groups competing for status produces higher educational expansion. Competition, and hence expansion, can be produced by decentralized forms of control over the university system: It can also be produced by close linkages between the academic system and the class structure, which increase the competitive utilization of education for status attainment.

The similarity of theories of mass educational expansion and higher educational expansion is probably a mistake. There is much evidence that the schools differ from the higher educational system in organizational structure, ideology, and history (Ramírez 1974; Bidwell 1965). Comparative researchers, tacitly recognizing the differences between the levels, choose different issues to study. In higher education, issues of intellectual authority and autonomy are much considered (e.g., Ben-David and Collins 1966). At lower levels, standard educational outcomes receive more attention, as in the well-known International Studies in Evaluation. The lower levels are organized to produce general outputs for society; the higher ones directly reflect (and may affect) socially and politically constituted authority.

The origins and nature of this authority should be a central theoretical and research issue. Throughout the world the university system is the main institution dominating higher education; selected out from a host of alternative structures, ranging from the forest universities (Basu 1957) and academies (Myers 1960) of India to the rival schools of Plato and Isocrates in Hellenic civilization, to Roman institutions (Beck 1965; Jainan 1951) to the Chinese examination system for the selection of official (Galt 1951; Weber 1958), to the socially and politically remote institutions of the Near East (Bozeman 1960).

Clearly, universities (unlike mass educational institutions which come much later) are creatures of medieval Europe. Ben-David (1969) sees the distinctive feature of the university as "the organizational form embodying the public recognition of the corporate autonomy of specialized intellectuals who perform important social functions." This view closely corresponds with Rashdall's (1964)

characterization of medieval universities as "corporations having close relations with both Church and State but possessing considerable independence in relation to each." Note that the Latin term universitas does not specifically mean a place of higher learning, but rather denotes a corporate group with an independent juridical status. While some historical institutions of higher learning enjoyed a measure of corporate autonomy (the Indian academies) and others a degree of political relevance (the Chinese and Roman institutions), medieval universities became the first institutions of higher learning to emerge as relatively autonomous and politically relevant corporations.

Better theories are needed, addressing the following questions: First, why did the universities develop in Medieval Europe and not elsewhere? Second, why did the universities flourish so much more in some territories in Europe than in others? The peculiar nature of European society--a system of partially autonomous states within a broader cultural network integrated around Church-based symbols and rules is undoubtedly very relevant. Universities did not arise in other civilizations in which culture and political organization were more nearly coterminous.

#### Evidence on the origins of the university

Little research has addressed the first question. But some lines of explanation are simply not tenable. There is no evidence that Medieval Europe held a technological or industrial edge over other civilizations. Explanations that stress industrialization cannot adequately explain the rise of the university in Medieval Europe. There is little systematic comparative evidence against which to assess theories that emphasize forces of differentiation and specialization or levels of conflict between opposing classes or groups.

A more promising strategy might be to consider evidence on the relationship between centralized authority and the rise of universities. Medieval Europe has been described as having a lower level of centralized authority than that found in other civilizations (Eisenstadt 1963; Bloch 1964). This comparative generalizations supports the thesis that conditions of political decentralization favor the establishment of the university. Moreover the rapidity with which universities developed in the relatively decentralized Italian city states further supports this perspective. But countervailing evidence may be adduced from the active role of the papacy in chartering universities and expanding the authority and autonomy of the masters, often in direct opposition to local ecclesiastical officials (Kibre 1962; Wieruszowski 1962). Similar struggles between secular central and local authorities over the university typically saw the former side with the university. It would seem that the universities were institutionalized by the favorable sponsorship of religious and civil authorities that sought to expand their spheres of jurisdiction within a political milieu that was not yet dominated by a system of national states. The perspective might help explain why universities evolved out of cathedral instead of monastic schools since the former fell more readily within the expanding scope of papal jurisdiction and enjoyed less collective identity than the schools associated with religious orders. This perspective may further explain subsequent papal interventions prohibiting the universities from discriminating against members of the monastic orders. The successful diffusion of both the Bologna (student-managed) and the Parisian (professor-managed) universities suggests that for this historical period both forms of academic governance were compatible with the institutional mandate of universities in general. This mandate emphasized universalistic ideology and scholarly authority not rationalized around national needs and goals. The decline of the papacy toward the end of the fourteenth century (partly due to the Schism) and the consolidation of state authority by the sixteenth century sitered but did not eradicate the transnational character of the university. We return to this point when we consider issues of organizational structure and ideology.

Evidence on the expansion of tertiary education

Simple arguments that tertiary education expands in response to economic growth or social modernization do not receive much support in comparative research. In the contemporary period, formal comparative research suggests that no structural factors play a major role in the rapid expansion of almost all systems of higher education (Meyer et al., 1977). Higher educational enrollment rates (in a situation in which age group populations were themselves expanding rapidly) increased many times in all sorts of countries, varying greatly in economic resources or modernization. In the modern period, the expansion seems characteristic of the whole world system, rather than to be mainly dependent on the features of specific countries.

In historical comparisons, the status competition theory receives some support. It has been used to interpret the rapid 19th century American expansion, in an educational system that was relatively decentralized and autonomous from the controls of state bureaucracies (Flexner 1930). The French system, on the other hand, was highly centralized (Zelding 1967) and protected from the impact of educational demand by the central controls of a dominant education ministry. Ben-David and Zloczower (1962), in developing the status competition perspective, locate Germany and Great Britain between the United States and France. The former had competition within the academic system due to a lack of central control (but see Ringer 1967 for an opposing point of view), but was hampered by the relative isolation of the academic system from the class structure. The British system was more responsive to group demands, but was less competitive due to the strong linkages between Oxbridge and the state. But it is difficult to draw inferences from only a few cases though

most recent research suffers the same limitation (Archer 1979, Van de Graff, et al., 1978). Empirical work based on more cases does not support the status competition perspective, insofar as ethnic group competition is taken as a potential independent variable (Meyer, et al., 1977).

The status competition theory suggests that central political controls lower tertiary educational expansion, but other lines of theorizing emphasize the importance of state control as a positive force, reasoning from the interests of the state in controlling an ever expanding rationalized elite sector. Coleman (1965) concludes that polity-directed educational systems are more highly developed than others, but this again is based on a limited sample of countries. A more general study designed to test this idea employed a sample of about 35 countries, and measured political control of tertiary education with data taken from the World Survey of Education Handbooks. Ramirez (1974) and Rubinson (1974) conclude that a general index of political control of tertiary education shows no effects at all on subsequent levels of tertiary educational enrollment. Thus, both theories of the positive and the negative effects of state control receive little support in the modern period.

Whatever conclusions may be made on the basis of historical data, the contemporary world educational revolution clearly undermined all the main theories of educational development. Intellectual reaction to this spectacular transformation of world culture has generally been pessimistic (Dore 1976; Freeman 1976; Collins 1979). Some of this reaction may reflect adverse judgments as to the societal consequences of educational expansion. But in part academics may be reacting to issues of academic organizational structure and ideology that directly affect their lives. We turn now to a comparative assessment of some of these issues.

## THE STRUCTURE OF EDUCATIONAL SYSTEMS

There is a great deal of research on the organization of schooling in the United States. But there is much less comparative work on the topic, and the extant comparative research tends to have a descriptive, rather than an explanatory flavor. Thus both questions of the origins of structural variations and of their consequences for educational effects and other social variables remain relatively unexplored. We review cross-national studies on three topics that have received a good deal of attention: structural differentiation within educational systems; relations between the national state and the educational system; and the social formation of teacher and student roles and statuses.

Structural differentiation

All modern educational systems are differentiated from other institutional structures, but there is much variation in the degree and the kind of internal structural differentiation. Clark (1978) distinguishes between horizontal and vertical differentiation. Within specific educational organizations, horizontal differentiation refers to the emergence of distinctions among departments and schools, while vertical differentiation refers to the number of distinct levels of training and certification. Within whole systems of higher education, horizontal differentiation refers to the number of separate sources of funding and control (e.g., private versus public, local or provincial versus national). Vertical differentiation refers to the extent to which different types of institutions are sorted out in terms of sequential connections (e.g., junior colleges, graduate training institutions), and in terms of prestige or reputation (e.g., the grande ecoles in contrast to universities in France; or Oxbridge versus the red brick universities in Britain).



There is much less structural differentiation in mass schooling than in higher education; the pressures for equality and citizenship operate to create more homogeneity at the mass level. But some systems have a good deal of formal tracking at the elementary level, as well as many differentiated programs (e.g., vocational schools or curricula; basic mass schooling versus university preparation) at the secondary level. Distinctions between public and private systems are common.

There is very little comparative research on the effects of structural differentiation (Springer 1977), although many central theoretical ideas in the sociology of education are directly relevant (e.g., Turner's, [1960] distinction between "contest" and "sponsored" mobility systems; or Davis', [1966] notion of "frog-pond effects"). It is generally assumed that structural differentiation of any form tends to have unequalizing effects on the socialization and allocation of students, and some studies provide suggestive empirical evidence (Kerckhoff 1975; Treiman and Terrell 1975; Himmelweit and Swift 1969; Meyer, Tuma, and Zagorski 1979). It is generally thought that more differentiated systems allocate educational opportunities even more unequally by social class and status background than do homogeneous ones. It is also generally argued that differentiated systems allocate subsequent occupational and status success in terms of the differentiated structure (even if it is nominally only horizontal in character); and thus operate in effect to transmit inequality more highly from generation to generation. These ideas deserve better empirical investigation: what is, across countries, the effect of structural differentiation on inequality?

On another dependent variable--system expansion--there is also some discussion in the literature. Clark (1978) and his associates (Van de Graaff, et al., 1978)

discuss the ways different systems coped with the recent unprecedented and unexpected increases in tertiary enrollments. They conclude that those systems with the least structural differentiation (e.g., Italy) underwent the greatest difficulties in adjusting to accelerated demands for access because both sectional outlets (e.g., regionally-based colleges) and multi-tier screening devices (tests, prerequisites) were missing. Attempts to formally limit admissions often generated strong egalitarian protest (Premofros 1979). This in turn leads to a system of easy access and high attrition which prompts further dissatisfaction.

But it is by no means clear that the same processes operate at lower levels of education, which are easier to expand (Nielsen and Hannan, 1977). It seems likely that structurally undifferentiated systems expand most at the mass educational level. They tend to offer the highest levels of anticipated opportunity (though educational inflation, as is well-known, operates here) on the broadest social basis, and encourage expanded participation for this reason. Little comparative research, however, addresses this issue.

What factors affect the degree of differentiation of an educational system? There is little comparative empirical work on the question, aside from the general finding that educational differentiation tends to reflect societal differentiation (Adams and Farrell 1969). Two kinds of factors are suggested theoretically, social organization and ideology. Clark (1976) follows Stinchcombe (1965) in arguing that the organization of education reflects characteristics arising from the system's period of origin. The unified academic oligarchies which competed with state ministries for control of European higher education in earlier periods may continue to reflect the personal and collegial authority

characterizing the earlier guild-like structure of these universities. On the other hand, the vertical and horizontal differentiation of American higher education mirrors the primacy of market logic during its institutional inception. American higher education continues to respond favorably to demands from academic entrepreneurs and constituent groups for expansion (e.g., departments and schools of recreation and leisure studies; or the earlier incorporation and diffusion of the discipline of sociology; or the greater ease with which new courses of study are adopted).

Organization aside, social ideology clearly plays an important role in determining structural differentiation. Cultures locate skill production and authority legitimation in their educational systems (Meyer 1977), and variations in these demands affect the system that results. Ideological pressures for equalitarian citizenship tend to reduce differentiation, while pressures for the technical legitimation of diverse forms of authority increase it. The American system is a compromise, with much homogeneity at lower levels, and much differentiation at higher ones.

The available comparative research suggests that structural forms are often the results of such compromises between competing ideologies. Thus the European compromises between rigid faculty control over curricula and elaborate state controls over admissions policies. So also the coexistence in Mexico of a system of shared governance in public universities (co-gobierno) with more bureaucratic authority in private schools (Levy 1977). Although much research suggests that centralized systems emphasize egalitarian educational ideology (Clignet 1974), this is diluted with the emphasis in such systems on efficiency-oriented central planning of educational allocation (Giles 1978).

Clearly much more research is needed on the factors affecting structural differentiation. The ideological and organizational inconsistencies that characterize the present systems produce competing structural consequences. There are individual demands and societal priorities, market forces and central planning, state bureaucracies and professional rules of autonomy. In this area, as in others, a main problem with present comparative research is that it is insufficiently organized around explanatory issues: it avoids answering the main questions of the origins and effects of structural differentiation by not explicitly asking the questions.

#### Relations between the national state and the school system

There are extraordinary differences among countries in the extent to which the national state authorizes and legitimates, and controls and directs, the educational system (Clark 1977; Levy 1978; Van de Graaff et al., 1978; Ramirez and Rubinson 1979). Institutions and students may or may not be directly funded; admissions may be controlled or not; and so also with curricula and instructional devices, or examinations and degrees. There is much descriptive work on these issues, but surprisingly little discussion in the literature of the factors that affect state control or of the consequences of this control.

Ramirez and Rubinson (1979) construct measures of national educational control for a large sample of countries and perform multivariate analyses attempting to explain variations in such control. They conclude that the general extent of power and authority of the state (which is rising rapidly in the modern world) is an important factor explaining national control over education. The size of the educational system is unrelated to the level of political control of education. Economic development and ethnic

heterogeneity have negative effects--complex and plural societies tend to have lower levels of direct national control. These findings are inconsistent with theories of educational control as resulting from the increased economic interdependence characteristic of modern societies. But they are consistent with theories emphasizing education as a normative system closely linked to the central political controls of the modern state system. The educational system is symbolically and structurally linked to the national state so as to affirm the national interest in the cultural production of citizens and elites alike. Ramirez and Rubinson (1979) find the same patterns in control over primary, secondary, and tertiary education, but control over the last tends to be notably lower. This suggests that the medieval traditions of corporate autonomy and professorial prerogative (and Córdoba-rooted student rights in the case of Latin American countries) continue to resist state authority.

The effects of expanded state control of education are less obvious than it might seem. Most theories simply suppose that higher levels of state funding and control weaken the strength and autonomy of the educational system, and subvert its ends (this is, indeed, a standard radical critique). And historically there are clear instances: Rashdall (1895) sees the breakdown of student power at Bologna toward the end of the fourteenth century as directly resulting from increased financial dependence on the city. But comparative research suggests that national funding is not inconsistent with a great deal of autonomy. The expansion of the University Grants in Great Britain has historically illustrated this possibility, though in recent years state authority over higher education has increased (Van de Graaff 1978; Perkin 1977). Empirical analysis of patterns of government funding in Mexico shows no inclination for such funding to be used to reward conforming

institutions or to punish "disorderly" ones (Levy 1979). Overall, however, a nine-country study concludes that greater government financing is linked to greater governmental control (Burns 1971).

But the issue is not clear. In some ways the expanded links between state and schools lead to political dominance of schooling. But in other ways, they lead to the political authorization of the autonomous power of the educational system: expanded resources, expanded legitimacy, greatly expanded rights to control the rules of substantive training and of personnel allocation in modern society, and generally expanded educational control over the whole range of cultural content. As strong links develop between states and schools, it is not clear where real control rises or what factors external to both systems might in fact be dominant.

#### The institutionalization of teacher and student statuses

Anderson (1977) cites the dearth of comparative studies on the status of teachers as a serious gap in our knowledge of the comparative structure of education. We do not know how teachers' rank in prestige and income hierarchies varies. We also do not have much comparative data on the interactional and institutional status rights and responsibilities of teachers at different educational levels. And yet this information is vital to our understanding of their efficacy as socialization agents, perhaps much more important than assessing pedagogical styles and modes of classroom organization since these seem poorly related to learning outcomes (Horowitz, 1979; Weick, 1976). The personal background characteristics of teachers are far less relevant to understanding collective teacher behavior (or the relative absence of such) than knowledge of whether teachers are civil servants, members of a national union, located in

universities made up of "chairs" or "departments", etc. Much of what we now know about the status of teachers across countries is based on the writing of national experts. Unfortunately the lack of a common reference in their work often results in unclear comparisons. Perhaps some recent research directions (e.g., the collection of studies published by the Yale Higher Education Research Group) will be complemented by parallel efforts on the status of primary and secondary school teachers. This task would sharpen our knowledge of cross-national variations in the status of teachers and would facilitate our analysis of the structural antecedents and consequences of teacher status.

In the 1960's much comparative interest in students derived from the real and imagined impact of student politics. But here again the case study focus of much published work (Daedulas, 1968; Emerson, 1968) hindered the development of more general explanations of the phenomena (but see Weinberg and Walker 1969 and Meyer and Rubinson 1972). Student politics no longer makes headlines but the significance of historical and comparative investigations of student organization and student status should not be underestimated. The traditionally high levels of student political activism in Latin America require explanations that emphasize their activist role in prior revolutionary movements (including the "reforming" of the universities) and their current high levels of power and privilege in university organization. The traditionally low levels of student political activism in the United States reflects a historical tradition which more sharply separates the world of learning from the real-life arenas of work and politics and, until recently, an institutional pattern of organizational commitment to in loco parentis principles. Contrary to much speculation on "the alienated student", persistingly higher levels of student political activism seem to be the consequences of political cultures which enhance the aspirations of students

(or youth in general) and organizational arrangements which confer greater decision-making rights on students (Arnove 1971).

Two broad lines of comparative inquiry would be useful to an understanding of the institutionalization of the status of teachers and students. First, in line with research which examines the influence of economic, social, cultural, and political characteristics of national societies on the extent to which the educational system is expanded and nationalized, studies could be undertaken to assess the relationship between cross-national variations along the relevant structural characteristics and the kinds of authority, autonomy, and identity enjoyed by teachers and students. Another research direction would be to examine the impact of different levels of institutionalized status rights on the character and extensiveness of teacher and student participation in the public realm. Such investigations would clarify whether teacher and students statuses are linked to one another in a zero-sum fashion or whether the same processes that expand or restrict the rights of teachers have similar consequences for students.

#### THE EFFECTS OF EDUCATION

There is much comparative theory and evidence on the effects of education on individuals. But there is much less work on educational effects on groups and on societies, and both ideas and evidence are often unclear. The situation arises because in most accounts education works by affecting individuals through traditional socialization mechanisms (e.g., Dreeben 1968), and affects larger units only through a process of aggregating individual outcomes. This is clearly inadequate (see Meyer 1977 for a critique), and it is easy to imagine direct effects of education on the allocation of authority and power in groups or in society generally. Nevertheless, such lines of thought are developed in very



imprecise ways in the field. This is especially unfortunate for comparative research, since the macrosocial effects of education are especially important in considering variations among countries.

#### Individual effects

Four kinds of educational effects on individuals have received substantial attention in comparative research: effects on cognitive knowledge and skills; effects on values; effects on occupational, income, and status mobility; and effects on political authority.

Cognitive effects: All the available research supports the conclusion that education (usually measured in terms of years of schooling) is a powerful force affecting cognitive achievement (for an excellent example, see Holsing 1975). Young persons in schools learn much more, by modern standards of cognitive achievement, than comparable persons not in school.

This effect is substantial in every country in which it has been investigated. There are, however, national variations in its extent. The International Studies in Evaluation compare differences in achievement in a variety of subjects in many countries (for a detailed review, see Inkeles 1977; for a criticism of the research strategy see Eckstein 1977). A major finding is that there are higher achievement levels attained in more developed countries. Interpreting this finding more precisely would be easier had the research included samples of non-students at each of the educational levels studied. Perhaps the lower levels of cognitive achievement apply to both students and non-students in developing countries. Such a finding would tend to deflect explanatory attention from the alleged defects of schools in developing countries.

A second main finding of this major comparative study is that across countries achievement tends to be more highly related to home background factors than to variations in schooling experience (within the educational system). This finding parallels much American research (Jencks 1972). Eckstein (1977) suggests that this reflects the much greater variation in home backgrounds both within and across countries than in the qualities of schooling experience. The general finding of relative homogeneity in the effects of schooling experience has been given varying interpretations: perhaps the schools tend to be similar in "time on task" (Wiley and Harnishfager 1974) and other structural properties of classroom organization - e.g., modal patterns of interaction between students and teachers (Dreeben, 1968); or perhaps they are homogenized by their common moral status in society, which creates homogeneity in anticipatory socialization (Meyer 1977). Comparative research could do much to address this question. For instance, comparative studies suggest that tracking within the schooling system has substantial effects when it is linked to the future opportunities available to students (Kerckhoff 1975; Himmelweit and Swift 1969).

Values: Comparative studies show striking effects of educational attainment on individual values (Inkeles and Holsinger 1974). Even after background and situational factors are controlled, educated individuals in all the countries that have been studied have much more "modern" attitudes and values. They take a much more rationalistic attitude toward life, value new experience, see progress as resulting from political action and science, value rational planning and organization, and take more interest in broader national and international events. They also value social and political action much more. Such findings hold both for more developed (Almond and Verba 1963) and less developed (Inkeles and Smith 1974) countries. Some theories have it that these effects arise from

the particular socializing experiences offered by the schools, but it is as easy to argue that they are partly effects of the schools as legitimated and chartered by the modern system to allocate individuals into the modern order (Meyer 1977; Benitez 1972). Comparative research across more countries, and with more precise research designs, could help to answer such questions. But in any event, the overall effects are large and consistent across countries. As with cognitive effects, studies looking for variations in these effects arising from specific schooling experiences have produced few convincing results.

Status attainment: Comparative research has paralleled American studies of educational effects on individual occupational careers. The findings show that education is universally the factor most directly affecting occupational attainment, and in every studied country has effects that transcend the direct effects of occupational inheritance (though education is, in all the available research, greatly itself affected by class background). Industrial countries tend to show patterns quite similar to American ones (e.g., Treiman and Terrell 1975; Cummings 1979). The effects in developing countries (Lin and Younger 1975) and in Eastern Europe (Meyer, Tuma, and Zagorski 1979) are probably even stronger than in developed ones.

Again, the theoretical issue arises as to how much these effects depend on socialization and how much they are direct consequences of the rules of all modern systems legitimating occupational allocation on educational criteria. The human capital perspective in economics tends to assume that the effects occur through actual educational success in individual socialization (Hansen 1977; Blaug ed., 1968, 1969). But Berg (1971) notes that there is little evidence that school learning is very useful in job performance. Furthermore, Collins (1979)

notes that increased educational requirements for jobs do not reflect upward shifts in technological job requirements. These arguments support the notion that education becomes the legitimated principle of job allocation independent of socialization. The human capital perspective suggests that the demand for schooling as well as the rate of return to schooling should be greater in more industrialized countries. But there is little comparative evidence to support this position (Hansen and Haller 1973; Heynemann 1976). Taken as a whole, the findings on status attainment probably attest more to the allocational power of educational credentials than to the technical or attitudinal advantages of school-based socialization. Comparative research could help greatly in sorting out these possibilities.

Political authority: Many studies show that political elite positions tend to be occupied by the highly educated, both in developed (Dogan 1975) and less developed (Coleman 1965) societies. The finding holds for both established leadership positions and revolutionary leaders. Again, there are socialization arguments that schooling experiences generated the appropriate orientations and skills for elite position. But institutional rules of allocation and legitimacy operate powerfully, too, and the available research does not make possible separate tests of these factors. Throughout the world, the products of the school systems (with the partial exception of some experimentation in Maoist China) enjoy nationwide legitimacy as potential elites, or at the least as citizens with expanded civic virtue. One direct test suggests the power of education as an allocational system. Using Inkeles' data, Igra (1976) shows that while education generates expanded political information in all the studied countries, and further increases the likelihood of political participation, the

more expanded the national educational system the less likely an individual of given education is to be politically active. In other words, the behavior resulting from a given educational level is contingent on the status claims made by others with more education.

Since schooling is required of all individuals in most countries, an effect of education as an institutional system is to expand the authority claims and participation rights not only of elites, but of individual citizens too (Meyer 1977). Thus, in a finding that parallels many others, Ong (1980) shows that more educated consumers in the Philippines perceive a greater responsibility of the state in protecting consumer rights. Studies showing the general effects of education along such lines are needed; presumably effects differ depending on the structural features of national societies.

#### Groups

Studies of the effects of education on the social positions of groups need to take into theoretical account a broader set of mechanisms than traditional socialization ideas. To illustrate this, we briefly review three specific issues: educational effects on the status of traditional elites; effects on income and success available to low status groups; and effects on the social position of women.

Effects on traditional elites: It is sometimes assumed that education always enhances the power and privilege of established elites, protecting and legitimating their dominance. At odds with this position is the view that traditional elites stand to lose through the institutionalization of modern education and therefore tend to resist it: it then becomes unclear why so many traditional elites in fact help in implementing modern educational systems.

Foster (1976, 1966) addresses this issue directly. He finds in Ghana (and elsewhere in Africa) that the emergence of the educational system led to a certain amount of status reversal. Many of the early educated came from subordinated groups, and a confrontation between the schooled and traditional elites resulted, with the former often triumphing. A different pattern is found in India, where traditional elites were the first beneficiaries of British-imposed education. Foster emphasizes the need for comparative inquiry that examines the relation between antecedent societal characteristics and the extent to which various groups benefit from expanded education. Moreover, in former colonies, one can analyze the character and extent of the structural ties linking colonial power with the colonized society, gauging whether these dependency ties influenced the impact of education on traditional elites.

Inequality: Following Jencks (1972) it is now common to argue that education fails to reduce inequality in society (but see Heyns 1978). Much thinking on this topic is limited to the individual level of analysis, and to the inspection of data on educational impacts on individual incomes. But this is clearly fallacious: the effects of education on group inequality can only be ascertained with data comparing inequalities among groups in societies with more or less education. Education certainly allocates individuals to the unequal positions

available in society. What it does to the income distributions attaching to these positions requires comparative or time series analysis of societies. Expanded education can increase inequalities by legitimizing them; but it can reduce them by expanding a variety of services, franchise rights, legal rights, and so on. Using data from Western European countries, Boudon (1974) shows that countries with more educational development are not more likely to show lower levels of economic inequality. Using a larger sample, Rubinson (n.d.) shows that primary and tertiary educational expansion is unrelated to income inequality, while secondary educational expansion seems to lower inequalities.

It is a major failure of the comparative research in this field that so much discussion of educational effects on income inequalities has gone on around individual-level data that logically cannot answer the question, while so little system-level research has been done.

The status of women: Research on educational effects on women mainly follows the individual-level status attainment paradigm (Treiman and Terrell 1975), with the addition of the mother's occupational status to the well-known set of independent variables (Rosenfield 1978). Attempts to replicate such research in many countries are under way. But such analyses cannot directly examine the structural consequences of expanded female participation in the educational system, which may occur through other processes than individual-level effects on women. For instance, as members of a peripheral status group like women gain greater access to elite education, all members of the group may experience an increase in their social authority and participation rights (Ramirez and Weiss 1979; Weiss and Ramirez 1976).

Results of cross-national analyses of the structural consequences of female participation in higher education provide suggestive evidence for a broader view. Countries with greater female to male ratios of tertiary enrollment also show higher levels of female participation in the paid labor force and in the upper echelon administrative and managerial positions (Ramírez and Weiss 1979; Weiss and Ramírez 1976). These effects occur with relevant other factors held constant. Further effects are found on the legal rights of married women over their children and over property; and enhanced enrollment rates lower the negative effects of marriage on female labor force participation (Ramírez 1978).

Since World War II, female participation in tertiary education has dramatically increased throughout the world, relatively independently of national structural variations. The expansion has taken place in both rich and poor countries, in Communist and non-Communist ones. If the world educational revolution requires explanations stressing world system processes, explanations of the altered educational status of women and its effects may also require broader notions.

### Societies

The arguments above make it clear that societal-level effects of education can only be properly demonstrated with societal data. We review the few available studies of the societal effects of educational expansion on political and economic variables.

Economic effects: Evidence from early studies is inconsistent: McClelland (1966) finds that higher levels of tertiary education lead to economic growth (see also Anderson and Bowman 1966), while Steadman (1970) shows positive effects of primary and secondary enrollment expansion. The argument is often



made that higher education might have the most effect in richer countries, while mass education is more powerful in developing ones. The most recent research, however, shows positive effects of both primary and secondary education on economic growth for both rich and poor countries (Meyer, et al., 1979). In this research, tertiary educational expansion has insignificant negative effects in all the types of countries studied. There is no reason to suspect that lower levels of schooling are more successful in enhancing the productivity of individuals, so clearly these effects cannot meaningfully be seen as aggregations of individual level influences. Most likely, they result from the strong linkages of mass education to the productive sector, while tertiary education is more closely linked to political and service sectors (e.g., the professions).

Most research in this area follows the "human capital" tradition in economics, and attempts inferences from individual level data. The assumptions involved are clearly untenable. A few studies in economics have attempted inferences from societal data (often time series analyses), but inadequate assumptions are involved here, too: most often the idea that economic gains not attributable to other known factors can be assigned to education (e.g., Denison 1962). This kind of indirect research is clearly less useful than direct evidence on the economic effects of expanded education at the system level.

Political effects: Political development has been conceptualized as the institutionalization of representative forms of government (Lipset 1959), or as the expansion of the authority of the state (Huntington 1968). In any case, comparative and system level analyses of educational effects are rare. Most

discussions reason from individual level effects to putative aggregate consequences-- a form of argument that is especially dubious in the political arena. It seems obvious that the expanded social rights created by mass education, for instance, might have negative effects on political authority and stability.

A few comparative studies suggest that expanded mass education may have slight positive effects on the maintenance of representative institutions (Ramirez et al., 1973; Thomas et al., 1979). The same studies fail to establish any relation between the expansion of education and the power of the state in society, or between the expansion of education and the type of regime found in the state. State authority has been found to expand rapidly in recent decades (Boli-Bennett 1979; Meyer et al., 1975). Apparently this process is compatible with quite different levels of educational development. Alternatively, practically all modern systems have educationally expanded beyond the required threshold levels.

It is very common to argue that "over expanded" educational systems generate political instability by creating social expectations beyond the power of the political system to meet. Empirical attempts to substantiate this relationship have been fairly frequent. But no effects of this kind have been found (e.g., Gurr 1971; Ramirez et al., 1973). Researchers have often found that dissident elites tend to be educated persons, but seem to have ignored the fact that all elites tend to be educated in modern systems. Presumably expanded education does as much to integrate a political population and authority system as it does to subvert political legitimacy.

## CONCLUSIONS AND INTERPRETATIONS

On method: Most explanatory research in the field of comparative education is organized around individual level theories and research designs. Institutional and organizational issues have been dealt with mostly in more descriptive case studies. This has been very unfortunate, and has led to the deemphasis of the very macrosociological issues that ought to be central in comparative research: the origins of educational systems and the causes of their expansion and change; the sources and consequences of the systemic organizational attributes of education; and the societal effects of education.

On educational origins: No single factor can account for the rise of mass schooling. But clearly the cultural ideologies of the modern system played an important role, linked closely with the expansion of the modern nation-state in the eighteenth century. Whether under the sponsorship of the state or as less centrally organized social movements, processes of nationbuilding were associated with the institutionalization of mass schooling.

In the contemporary and more inclusive world system, nation-building has become virtually indistinguishable from state formation, and education is closely linked with the state. The expansion of the state characterizes the First, Second, and Third Worlds, and so does the expansion of education. This worldwide phenomenon may explain the strong linkages between state and education, and the rapid expansion of mass education throughout the world. Perhaps these connections are historical accidents. It seems more likely that they result from a world culture legitimating nation-states and mandating educational expansion as the modern recipe for nation-building based on individual citizenship.

Universities originated in Medieval Europe long before the formation of a strong state system. None of the general explanations of their rise is convincing. But clearly, their development was more closely linked to the transnational cognitive and moral claims of the papacy than with any set of national goals or interests. To this day they are less closely tied to the state than is mass education. The modern expansion of the university system, as with mass education, seems closely tied to the rise of a transnational world culture, and cannot easily be explained with reference to distinctive national characteristics.

On educational structure: There is a surprising lack of explanatory research on the origins and effects of national variations in educational structure and ideology: this is particularly the case with mass education. At the elite level, historical differences in structure remain, but may be attenuated as systems face similar (perhaps world generated) demands and crises.

Structural differentiation is higher at the elite levels of the system, but there is much cross-national variation. Those tied to the state may be less differentiated, while those responding more to social and market forces differentiate more. The pressures of egalitarian citizenship seem to produce homogeneity at the mass levels.

On educational effects: The individual-level effects of education are consistently large: education tends to be the critical status-determining aspect of the individual career in all societies on which there is research. The rise of educational credentialism world-wide may account for this as much as any socializing effects of education. The phenomenon deserves much more comparative study.

Group and societal effects of education are too little studied, because in part of a theoretical concentration on individual socialization as the main

effect of education. But obviously education can have all sorts of institutional effects: delegitimizing inequalities of more traditional kinds and constructing new ones based on myths of professional and technical authority. Expanded education seems to alter the status of such groups as women, and may empower low status groups in general, but it clearly also helps legitimate new elites.

At the societal level, expanded mass education appears to increase rates of economic growth. Its effects on political structure are less clear. The widely anticipated negative effects on political stability have not been found empirically.

Conclusion: Obviously, the field of comparative education must move away from mechanical efforts to simply replicate cross-nationally various individual level studies. But in so doing, it needs to avoid falling into descriptive historicism. Comparative research designs that are central to the sociological tradition must be innovatively mobilized to cope with problems of institutional explanation in comparative education.

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