

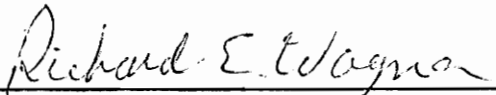
ECONOMIC ORGANIZATION OF PUBLIC EDUCATION
IN THE UNITED STATES,


by

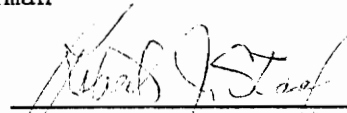
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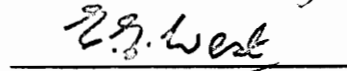
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CHAPTER I

THE ORGANIZATION OF STATE

DEPARTMENTS OF EDUCATION

The school system in the United States represents an institution of growing controversy in recent years relating to its provision of public education. A great deal of dissatisfaction exists concerning the education received by today's youth. Evidence of growing disturbance with the product of the public schools appears in newspaper editorials, feature articles of magazines, and in television commentaries demonstrating that the problems of public education affect virtually all sectors of the population. Many professional administrators of public education view insufficient funds as the cause of distress. Teachers regard the home environment of children as the source of disturbance, and parents feel teachers do not provide an adequate instruction to their children.

In this research we do not attempt to isolate principals, teachers, or parents as a source of disturbance concerning public education. This investigation focuses instead on the institutional structure surrounding the provision of education. Examining the structure from a historical viewpoint, the study establishes the relationship between the type of organization governing educational output, and the actual emerging product.

The institution of American public education began evolving as early as 1647. At that time legislation known as the Deluder Satan Act was passed in Massachusetts, ruling that all towns of fifty or more families were to provide instruction in reading and writing for their children.¹ Private institutions remained, however, as the dominant suppliers of elementary and secondary education in the U.S. until the mid-1800s. Rapid changes marked the American way of life during this time. The economy was changing from an agrarian to industrialized system, with communication and transportation facilities becoming more highly developed. Simultaneously, public education was emerging as a prominent institution in the U.S.

States began to exercise their right to govern public education. The state constitutions which explicitly referred to education, generally provided for the establishment and maintenance of a uniform system of public schools. Some constitutions went much further and described in considerable detail the essential provisions for a system of public education. Others designated the responsibilities of describing the system to the legislature or general assembly. But although the basic elements of provision of public education by the state emerged early in the history of the country, geographic necessity, political mores, and numerous other factors fixed the actual control of education in the local governments.

¹R. Freeman Butts and Lawrence A. Cremin, A History of Education in American Culture (New York: Holt, Rinehart, and Winston, 1968), pp. 100-108.

Throughout the eighteenth and nineteenth centuries, schooling was almost entirely a matter of local option; local interest or local indifference determined what kind of school each district would have. When state governments became more firmly established, they generally encouraged and strengthened local control instead of assuming state control of schools. Beginning in the late nineteenth century and growing more rapidly in the twentieth century, each of the states gradually assumed more state-level control of their educational system and vested more authority in state boards or departments of education.¹

In the remainder of this dissertation we shall focus on the different types of organizational structures which have emerged to govern the states' public education. Historical developments which have tended to transfer more power to the state level of control, particularly to State Departments of Education (SDEs) demonstrate the contrasting effects of institutional structures surrounding the provision of public education. Focusing on differences between states, historical changes illustrate the importance of the organizational structure on the output of education.

The remainder of this chapter will explain the growing role of state control over the provision of public education. With much of the focus on SDEs, fundamental differences emerge between the types of state control. These differences serve to identify elements which demonstrate

¹Kenneth Hansen, Public Education in American Society (2nd ed.; Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963), pp. 31-4.

the expected degree of power held by the SDE in the provision of public education.

The second chapter investigates from a theoretical viewpoint, the important role played by institutional structures from both the consumption and production sides. It offers an alternative to traditional explanations for centralization of public education provision. We build models which focus on the theoretical differences between various forms of state control. The models emphasize the different effects which result from particular characteristics of the state organization. Chapter IV discusses some implications that emerge from these models. It then combines the description of Chapter I with the theoretical framework developed in Chapters II and III to present a cross-sectional study of the contrasts in state control over public education. The structure of the SDE within the state and the degree of centralization of school activities within that state receive a major focus throughout the case studies. Finally, Chapter V presents a summary and conclusions.

Development of State Control of Public Education

The organizational structure of public education constitutes a multi-tiered hierarchy. The federal constitution and federal government are at the top, and have until recent years, exercised little influence on the output of public education. State constitutions and state governments occupy the second tier. Today, in all fifty states, legislative enactments have created State Departments of Education to aid in the provision of education for that state. In some states intermediate

districts usually composed of several interacting local districts represent the third hierarchical level of control. The intermediate units generally serve as a provider of some educational facility which might not have otherwise been provided. These units involve little administrative involvement and do not constitute a major portion of this study. Finally, at the bottom tier lies local school districts. These districts have jurisdiction over boundaries determined by various means of state legislation and are generally headed by a local school board and school superintendent.¹

Interactions between the organizational tiers result in each state's provision of some variety of public education. As noted earlier, the local school district was the dominant policy-making tier in early educational history. But since the early 1900s, and at a more pronounced rate since World War II, the power interaction has shifted in a direction which gives greater control to the state. State legislatures designated the SDEs, or formal state agencies to govern the state responsibilities for public education as early as 1850. This practice grew such that by the 1950s, all states had formally established a SDE. In most states a State Board of Education (SBE), a Chief State School Officer (CSSO), and numerous departmental directors and staffs compose the SDE. The state generally assigns duties to the SBE or CSSO, and at the latter's discretion, they may delegate further divisions of authority within the SDE.

¹Chester Nolte and Robert Simpson, *Education and the Law in Colorado* (Cincinnati: W. H. Anderson Company, 1966), p. 2.

The SBE represents the first formally recognized component of the SDE. Its origin was in New York in 1784, when the Board of Regents was implicitly designated the ex officio SBE. However, not until 1904 did the Board actually gain control over all the public schools of the state. By 1920, thirty-nine states had established a SBE, and Maine became the fortieth state to do so in 1949.¹ Today forty-nine states have a SBE, with Wisconsin remaining the lone dissenter from conformity. New York also established the first state school superintendent, doing so in 1812. By 1900, the forty-eight states had made provisions for a school superintendent, and today all fifty states provide for a CSSO.²

The composition of the bodies making up the entire SDE has changed throughout the century. What began as small, oftentimes informally organized bodies of the early 1900s, have transformed into dynamic, complex organizations employing hundreds of professionals and support personnel. But the alteration of duties and authority that accompanies the changing size and composition of the SDE involves perhaps greater consequence to the provision of public education. Developments in the role of the SDE can be described by stages of evolution.³ The first stage when departments were small and many times informally

¹U.S. Office of Education, State Boards of Education and Chief State School Officers, by Ward W. Keesecker, Bulletin No. 12 (Washington, D.C.: Government Printing Office, 1950), p. 7.

²Ibid., p. 23.

³U.S. Department of Health, Education, and Welfare, State Departments of Education, State Boards of Education, and Chief State School Officers, by Sam P. Harris (Washington, D.C.: Government Printing Office, 1973), pp. 60-5.

organized, was primarily statistical, at which time the main thrust of the SDE concerned the gathering, compilation, and publication of educational statistics. The inspectoral stage, when data collection was augmented by regulatory functions and enforcement of standards, followed the statistical era. In the third stage, the SDE was less concerned with enforcing regulations and controls and more with providing leadership in planning and assistance in bringing about changes in education. The transformation of the SDE in this century has evolved from a position of merely reacting to and reflecting its environment to that of actively taking the lead in shaping it.

The SDE is usually described as the executive or implementing arm of the policy-making state board. In fact, the SDE actually maintains the broad areas of policy-making delegated to it by the SBE, which then exercises minimal administrative oversight. Moreover, the SBE often relies on the SDE to prepare its agenda and provide recommendations. In effect, this state agency is the locus of a considerable amount of authoritative allocation of policies, whether in formulating specific regulations, allocating federal funds to local districts, or executing the more detailed decisions of the SBE.¹ In combination with the SBE and CSSO, the SDE today plays a major role in determining the educational policy of a state. The school laws of each state define the explicit responsibilities and duties of both the SBE and CSSO. In

¹Frederick Wirst and Michael Kirst, Political and Social Foundations of Education (Berkeley: McCutchan Publishing Co., 1972), p. 118.

some states, the CSSO assumes responsibility for financing and policy changes, with the SBE aiding in an advisory capacity. In others, the CSSO merely acts as the head member of the SBE. In all cases, however, education responsibilities involve some combinations of powers of the SBE and CSSO, and their total duties along with those of the remaining branches making up the SDE, have grown in educational programming in recent years.

As professional leadership has advanced during the present century, SDEs have tended increasingly to serve in policy-making roles-- a trend that has greatly accelerated since about 1945.¹ More and more states began preparing policy statements or guidelines for assistance in meeting various educational responsibilities not explicitly spelled out in laws or mandatory regulations. Throughout the twentieth century, we have witnessed a general evolution of power shifts in the provision of public education. Rather than assigning the major portion of authority to local school districts, state legislatures have increasingly assigned duties and responsibilities to the state level of the hierarchal structure. The following chapters examine the subsequent effects of such power shifts on the education provided by the states. First, however, the next section develops the contrasts which have emerged in the various states' forms of educational control. Even though the nationwide trend has been toward more centralization of power at the state level, many divergences remain between states.

¹Lerue W. Winget, Edgar Fuller, and Terrell H. Bell, "State Departments of Education Within State Governments," in Education in the States: Nationwide Development Since 1900, ed. by Edgar Fuller and Jim Pearson (Washington, D.C.: National Education Association, 1969), pp. 38-73.

Characteristics of Various Forms
of State Control

This section features three basic characteristics expressing the variances which exist concerning the structure of state control of education. These characteristics are the method of selecting SDE members, the number of divisions within a SDE, and the degree of centralization in financing school expenditures. The study projects that each of these elements influences the type of educational system which exists in a state. In other words, it suggests that the particular structure of state control affects the provision of public education in the state.

Method of Selecting Agency Members

The first aspect of state organizational structure concerns the mechanism of selecting members of the SDE. We investigate each of the three major bodies--SBEs, CSSOs, and departmental directors and staffs--to determine their various roles in the provision of public education. The first group of concern is the SBE, and the various ways by which states select its membership.

Membership on the SBE can be divided into two general types: (1) those chosen specifically for service on the state board, and (2) members who serve ex officio.¹ Ninety per cent of the states employ either of two methods in choosing members specifically for service. These are election by the people or appointment by the governor.

¹Ex officio refers to a member elected specifically for an office such as attorney general, but automatically receives a seat on the SBE also.

Appointment by the governor constitutes the more commonly used method (see Table 1.1). This method has increased from 30 states in 1947 to 35 in 1972. In these 35 today, the governor appoints all or a majority of members of the SBE. The governor appoints all members in 16 of these states; in the remaining 19, the law designates some ex officio members in addition to the governor's appointees. The appointive power of the governor is usually limited by regulations that require confirmation of his appointments by the state legislature, or one of its houses. Twenty-nine of the 35 states in which the governor appoints a majority of the members of the SBE limit the appointive power in this manner. In New Hampshire, the law actually provides that the members of the SBE be appointed by the governor and council. The council consists of five members elected by its qualified voters on a partisan ballot, one from each district, and acts in an advisory capacity to the governor.

Today only in Florida and Mississippi are the board members entirely ex officio. In 1972, partisan election in Alabama, Colorado, Hawaii, Kansas, Louisiana, Michigan, New Mexico, and Texas selected the SBE. In Nebraska, Nevada, Ohio, and Utah, nonpartisan balloting selected the Board. Representatives of the people elect boards in three states. In the state of New York, the state legislature elects the members; in South Carolina members are elected by legislative delegations of the several counties within the judicial circuit; and in Washington, board of directors of school districts within their respective congressional districts elect the members.¹

¹Sam P. Harris, State Departments of Education, pp. 60-5.

TABLE 1.1

METHODS OF SELECTING STATE AGENCIES

State	Method for SBE	Method for CSSO
Alabama	Partisan Election	Appt. by SBE
Alaska	Appt. by Governor	Appt. by SBE
Arizona	Appt. by Governor	Partisan Election
Arkansas	Appt. by Governor	Appt. by SBE
California	Appt. by Governor	Nonpartisan Election
Colorado	Partisan Election	Appt. by SBE
Connecticut	Appt. by Governor	Appt. by SBE
Delaware	Appt. by Governor	Appt. by SBE
Florida	Ex Officio	Partisan Election
Georgia	Appt. by Governor	Partisan Election
Hawaii	Partisan Election	Appt. by SBE
Idaho	Appt. by Governor	Partisan Election
Illinois	Appt. by Governor	Appt. by SBE
Indiana	Appt. by Governor	Partisan Election
Iowa	Appt. by Governor	Appt. by SBE
Kansas	Partisan Election	Appt. by SBE
Kentucky	Appt. by Governor	Partisan Election
Louisiana	Partisan Election	Partisan
Maine	Appt. by Governor	Appt. by Governor
Maryland	Appt. by Governor	Appt. by SBE
Massachusetts	Appt. by Governor	Appt. by SBE

TABLE 1.1--Continued

State	Method for SBE	Method for CSSO
Michigan	Partisan Election	Appt. by SBE
Minnesota	Appt. by Governor	Appt. by SBE
Mississippi	Ex Officio	Partisan Election
Missouri	Appt. by Governor	Appt. by SBE
Montana	Appt. by Governor	Partisan Election
Nebraska	Nonpartisan Election	Appt. by SBE
Nevada	Nonpartisan Election	Appt. by SBE
New Hampshire	Appt. by Governor	Appt. by SBE
New Jersey	Appt. by Governor	Appt. by Governor
New Mexico	Partisan Election	Appt. by SBE
New York	Legislature Elects	Appt. by SBE
North Carolina	Appt. by Governor	Partisan Election
North Dakota	Appt. by Governor	Nonpartisan Election
Ohio	Nonpartisan Election	Appt. by SBE
Oklahoma	Appt. by Governor	Partisan Election
Oregon	Appt. by Governor	Nonpartisan Election
Pennsylvania	Appt. by Governor	Appt. by Governor
Rhode Island	Appt. by Governor	Appt. by SBE
South Carolina	Legislative Delegations	Partisan Election
South Dakota	Appt. by Governor	Nonpartisan Election
Tennessee	Appt. by Governor	Appt. by Governor

TABLE 1.1--Continued

State	Method for SBE	Method for CSSO
Texas	Partisan Election	Appt. by SBE
Utah	Nonpartisan Election	Appt. by SBE
Vermont	Appt. by Governor	Appt. by SBE
Virginia	Appt. by Governor	Appt. by Governor
Washington	Elected by Local Boards	Nonpartisan Election
West Virginia	Appt. by Governor	Appt. by SBE
Wisconsin		Nonpartisan Election
Wyoming	Appt. by Governor	Partisan Election

SOURCE: U.S. Department of Health, Education, and Welfare, State Departments of Education, State Boards of Education, and Chief State School Officers, by Sam P. Harris (Washington, D.C.: Government Printing Office, 1973), pp. 60-88.

There are three fundamental methods of selecting the more established position of the CSSO--election by the people, appointment by the governor, or appointment by the SBE. Among these methods of selecting the CSSO, appointment by the SBE has continually increased from three states in 1896 to twenty-eight in 1972. The SBE in 29 states selected the CSSO at some time in the 1900-1972 period. During the same period, the people elected a CSSO to office in 35 states for some interval of time. At the end of this period only 19 states were still using the latter method of selection. In 13 of these states, partisan ballot elected the CSSO.¹ Observation of Table 1.2 reveals that the process of selecting the CSSO has sharply reversed itself in the past 30 years. In fact, in 1945 only eight states empowered the SBE to appoint the CSSO. In 1954 eighteen states comprised this group, an average increase of one per year. Of the ten states involved, seven changed from a popularly elected CSSO, and three changed from a governor-appointed CSSO. A majority of the states effecting the change had to amend their constitutions in the process.²

The third division within the SDE, the numerous departmental staffs, differs very little among states with respect to selection. Virtually all states appoint these members. The appointment may come directly by the governor, or through the SBE and CSSO. Oftentimes, the specific duties of the SBEs and CSSOs include the authority to appoint

¹Ibid., pp. 78-84.

²U.S. Office of Education, The State and Education, by Fred Beach and Robert Will, Bulletin No. 23 (Washington, D.C.: Government Printing Office, 1955), p. 32.

TABLE 1.2
 METHODS OF SELECTING CSSO:
 NUMBER OF STATES BY YEAR

Method	1930	1940	1950	1954	1960	1967	1972
By People	33	32	29	25	23	22	19
By Governor	7	8	6	5	5	4	5
SBE	8	8	13	18	22	24	26

SOURCE: Lerue W. Winget, Edgar Fuller, and Terrell H. Bell, "State Departments of Education Within State Governments," in Education in the States: Nationwide Development Since 1900, ed. by Edgar Fuller and Jim Pearson (Washington, D.C.: National Education Association, 1969), p. 94.

additional directors and staffs as deemed necessary to implement the responsibilities of the SDE.

Divisions of Structure

A second element of state control which differs among states concerns the size and complexity of bureaucratic divisions within the SDE. There has been widespread growth in the number of independent bureaus or divisions within the SDEs. A director or supervisor normally heads these divisions and they also include numerous professional and nonprofessional staff assistants.

A comparison of the change in professional positions of nine states during the 1960s provides an example of the growth of these SDEs. Alabama experienced an increase of 226 per cent from 1962 to 1968, with an increase in positions in its State Department of Education from 43 to 140. Minnesota, during the same time period, increased its size from 100 to 154 persons. New Jersey felt a 186 per cent increase compared to New York's 101 per cent. Rhode Island's positions grew from 35 to 61 as South Dakota increased its professional positions from 19 to 58. Texas witnessed a growth of 73 per cent; Utah a 103 per cent growth rate; and Vermont's agency positions grew from 29 to 73. Comparisons show that increases ranged from 54 per cent in Minnesota to 226 in Alabama. The average increase among these nine states was fairly close to the average increase among the totality of the U.S.¹

¹U.S. Department of Health, Education, and Welfare, The State of State Departments of Education (Washington, D.C.: Government Printing Office, 1969), pp. 14-32.

From 1965 to 1972, the professional staffs of SDEs in the U.S. grew from 5,221 to 7,957 persons.

The growing numbers of personnel belong to SDEs which differ in complexity regarding structure. In the mid-1960s, the number of bureaucratic divisions within the SDEs ranged from a low of only three in Kansas, Michigan, Missouri, and Nebraska, to a high of nineteen in North Dakota.¹ The average number of divisions within the state bureaucracy was seven. In all cases these divisions were in addition to that of the CSSO, his assistant, and deputy commissioners. The bureaus cover numerous aspects of educational activity such as the division of research, division of curriculum planning, division of statistics, and division of athletics. Even though the trend has been toward more such divisions for virtually all the states, wide variations in the developmental structure of SDEs between states remain.

Centralization of School Financing

The third characteristic of forms of state educational structure differing among states relates to the source of financing public school expenditures. In the early 1900s local sources of revenue financed almost all elementary and secondary school expenditures. As can be seen in Table 1.3 local revenues accounted for 83.2 per cent of the states' school expenditures in 1919-20. By 1948, this source of

¹This data was compiled from U.S. Department of Health, Education, and Welfare, State Education and Organization (Washington, D.C.: Government Printing Office, 1964), pp. 39-148; Jim Pearson and Edgar Fuller, Ed., Education in the States: Historical Development and Outlook (Washington, D.C.: National Education Association, 1969).

TABLE 1.3

SOURCES OF REVENUE FOR PUBLIC ELEMENTARY
AND SECONDARY SCHOOL EXPENDITURES

Year	Federal (%)	State (%)	Local (%)
1919-20	.3	16.5	83.2
1929-30	.4	16.9	82.7
1939-40	1.8	30.3	68.0
1943-44	1.4	33.0	65.6
1945-46	1.4	34.7	63.8
1947-48	2.8	38.9	58.3
1949-50	2.9	39.8	58.3
1951-52	3.5	38.6	57.8
1959-60	4.4	39.1	56.5
1961-62	4.3	38.7	56.9
1963-64	4.4	39.3	56.3
1965-66	7.9	39.1	53.0
1967-68	8.8	38.5	52.7
1969-70	8.0	39.9	52.0
1970-71	8.4	39.4	52.1
1971-72	8.9	38.3	52.8
1972-73	8.7	40.0	51.3

SOURCE: U.S. Department of Health, Education, and Welfare, Statistics of State School Systems (Washington, D.C.: Government Printing Office, 1963-74).

financing had been dramatically reduced to only 58.3 per cent. The trend has remained downward and in 1972, local sources contributed to the financing of only 51.3 per cent of school expenditures. As localities have lost control, centralized, state financing has steadily become the leading source of school revenues. Along with gradual transformations to state control of financing in general, most states introduced special programs stipulating state aid formulas, which aided in the shift to centralized control.¹

But just as with the two previous aspects of state educational structures, huge differences now exist in the degree to which localities derive finances from state, rather than local sources. Some states have retained a comparatively high degree of financing at the local level. Nebraska, for instance, received 85 per cent of its school revenues from local sources in 1967-68. The average distribution in the U.S. during this period reveals 38.5 per cent of school revenues originating from state sources, with 52.3 per cent of the revenues coming from local sources.

Effects of State Structures on Public School Provision

Thus far we have focused on three factors of state structures governing public school provision. Each of these demonstrated patterns which suggest certain trends: more appointed, as opposed to elected SDE

¹See the Appendix at the end of this Chapter for a discussion of the federal impacts on the changes in educational control.

members; more divisions in the hierarchal structure of state organizations; and more centralization of financing school expenditures at the state level. In this section, we investigate the effects each of these might have on the provision of public education. In particular, this section classifies states according to the relationship between these structural characteristics and the expected degree of control exhibited by the SDE.

The development of the relationship mentioned above begins with an exploration of the first characteristic, or method of selecting members of the SDE. We consider in this case, the differential impacts of the manner in which selection occurs in relationship to the amount of power of the SDE members. In order to facilitate this exploration, we place the analysis in the context of property rights. Emerging conclusions apply to the different systems of education in the fifty states.

The basic authority to choose the members of the SDE involves an assignment of property rights. For illustrative purposes, suppose there exist only two states providing public education for their children. In one of these states, A, the legislature gives the governor of the state the authority to appoint the members of the SDE. In E, on the other hand, selection of the SDE members occurs through a general election process open to all voters of the state. The governor of A, in essence, holds the property rights over the selection of state administrators and policy-makers of public education. Assuming some type of majority rule determines the outcome of elections in State E,

the median voter of this majority receives the right to select its SDE members.

In order to determine whether the different methods of selection affect the provision of public education, we examine the decision-making costs in both cases. With respect to the selection process of SDE members and the output of public education, costs pertain to the ease or difficulty involved in obtaining inputs and reaching agreement for educational decision-making. A system which renders difficulties in obtaining inputs into the decision process involves costs higher than one in which inputs are easily obtainable. An illustration follows which directly relates costs to the provision of public education.

Suppose it is the predetermined time for selection of a new SDE. In the State of A, this means the governor must appoint the members to serve as the educational policy-makers for the next x number of years. The issue becomes more complicated once it is recognized that the governor has few means to gauge the localities' majority views on education. The people elected the governor on the basis of his opinions on a wide range of topics, of which education was only one. We assume he was elected because his views on an entire package satisfied the preferences of the majority median voter. It may be that his sentiments on the specific topic of public education do not reflect the preferences of that same group. There is only a circuitous mechanism, as a result, by which decision-making concerning education is able to incorporate the preferences of the entire state's population. The

link between the voter in the state and the policies pursued by the SDE is an indirect and complex one.

In the case of State E, however, the situation is much clearer. At the appointed time for selection of SDE membership, the median voter process reveals the preferences of the localities. When two persons compete for a single office, the person who more closely approximates the majority sentiments regarding education will be the one chosen. The direct linkage between SDE members and voters in the state eases the difficulty of gauging preferences. If preferences do not continue to be satisfied, SDE members face the prominent probability of loss of election at the next time of selection. Because of this simple link, localities can provide inputs to the decision-making process of public education provision with much less difficulty than in State A.

Viewed in this context the localities' costs in controlling educational output in the two systems are not equal. Because of the numerous complexities involved, their costs in State A exceed those in State E. As a result, we can predict that the provision of public education will differ in the two situations. In the first state, A, decision-making regarding education is made from a centralized perspective, simply because making educational decisions in a manner involving all localities entails very high costs. Consequently, the localities yield less control over the output provided since the

state hierarchy of the organization controls the greater portion of decision-making.¹

The above illustration leads to the derivation of a general rule. The more autonomously structured forms of organization, i.e., those in which members are selected by appointment, are likely to exercise higher degrees of state control over the provision of public education than those forms where property rights remain in the hands of the electors. This will follow as a natural consequence of the variation in decision-making costs in the two systems. In general, the more indirect the link between the localities and the SDE, the higher expected degree of control to be exercised by the state bureaucracy rather than by the localities.

Given these expectations, a classification scheme can be built that indicates the predicted degree of control of the state agency over educational provision. Most states do not strictly fit the hypothetical cases of A and E. Instead, the manner of selecting the SBE and CSSO differs within a state. For instance, one may be elected while the other is appointed. The school laws of the state outline the powers and duties of each component. In many cases, the CSSO is both the chief

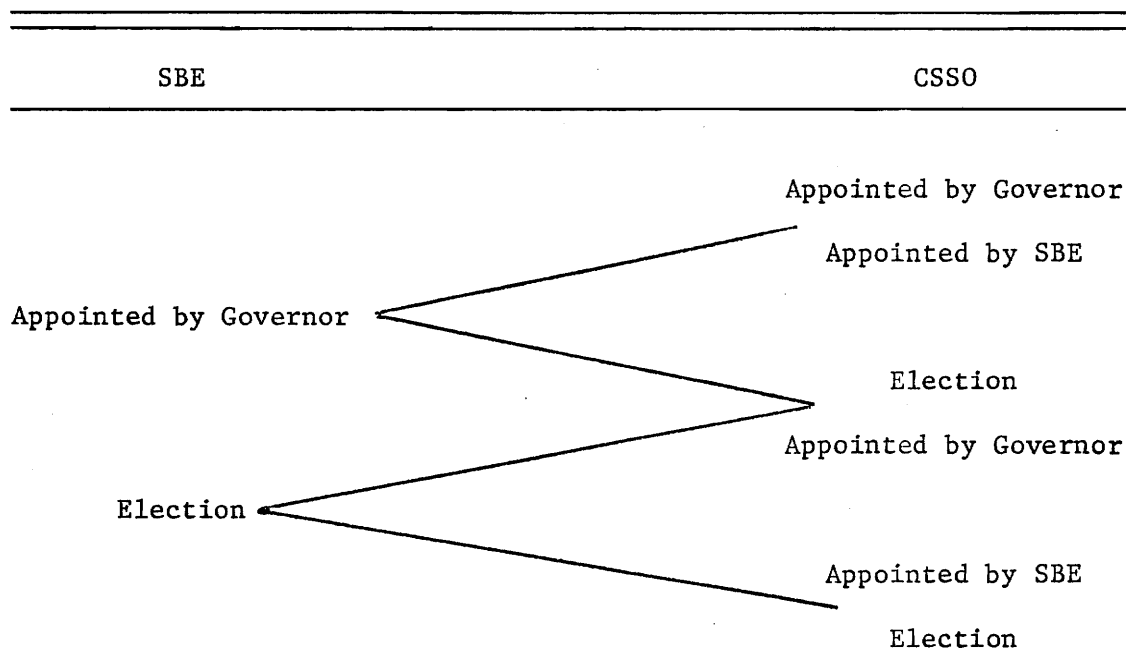
¹In Chapter II, theoretical models demonstrate the fact that bureaucratic provision in general, can be viewed as a monopolistic form of production. The monopolistic tendencies are expected to be curtailed in State E only because voters retain the right to select agency members. Even in this state, there are still numerous supervisors, directors, and staff personnel who do not have the direct link to the people. Some degree of monopoly elements would be observed, therefore, in State E also. These ideas will be more rigorously developed in the next two chapters.

member of the SBE and assumes responsibilities independent of it also. Because of contrasts in the method of selection and the degree of power held by each component, a scheme which indicates the expected role to be played by the SDE must account for both means. In Table 1.4, the scheme ranks from highest to lowest, the expected control of the state agency in relationship to its manner of selection. This arrangement indicates that those agencies in states appointing both the SBE and the CSSO are likely to play a greater role in educational decision-making. Likewise, the SDE in those states electing both parts are likely to play a smaller role in policy-making. We expect a combination of these selection procedures to result in a mixture of control by the state agency and the local districts within the state.

Just as the above suggests that the method of selecting SDE members influences the degree of control exercised at the state level, the number of divisions within the SDE also plays a role in affecting the type of state control. In the case of educational structures, greater numbers of bureaus within the agency indicate more direct powers in the hands of the state as opposed to the localities. At first glance, the greater number may appear to suggest more competition.¹ The illustration

¹For a related discussion of this topic, see William Niskanen, "Bureaucrats and Politicians," Journal of Law and Economics 18 (December 1975):640-3. This discussion differs from that of Niskanen in at least one respect. He proposed a direct correlation between the number of bureaus and degree of competition, when all bureaus produced a single product, such as education. In this analysis, each bureau provides only one aspect of education, such as curriculum guidelines. An increased number of bureaus does not refer to production of the same good, but merely a more highly structured bureaucracy.

TABLE 1.4
SELECTION-POWER CLASSIFICATION



which follows, however, verifies the former suggestion.

Consider a state which divides its organization into two components--the division of elementary education and the division of secondary education. Another state has ten divisions, ranging from division of plant and equipment to division of curriculum preparation. In the first state, the SDE is unable to give a great deal of emphasis to the specifics of public education. Instead, localities retain the jurisdiction over many aspects of providing education in their districts. But in the second state, each bureau focuses on only one aspect of educational provision. As a result, we expect that more guidelines or mandates concerning a wide variety of public education issues would be decided by the SDE.

So just as with the method of selecting membership, the number of divisions within the state bureaucracy can be classified according to the expected degree of power to be exercised by the state. In this case, the classification is simple: the higher number of divisions implies a higher degree of bureaucratic hierarchy, and thus a more highly centralized form of control by the state.

This study also projects that the third structural characteristic, the amount of revenues contributed at the state level, influences the type of state control. Revenues derived from state sources can easily be tied to satisfying certain stipulations set forth by the SDE. The locality's implementation of certain policies becomes a contingency agent for the receipt of state funds for financing school expenditures. The higher degree of control over funds, the more often such actions

can be practiced by the SDE. We expect, therefore, that the higher the degree of state centralization of financing, the less control possessed by the localities.

Using data from 1967-68, the U.S. average ratio of state to local sources of revenue was calculated as .74.¹ Using this as a focal point, Table 1.5 gives the calculated ratio for each state. Those states with ratios higher than .74 can be described as having a greater than average degree of centralization of financing. And likewise, ratios less than .74 indicate relatively low degrees of state control. According to Table 1.5, Delaware and Hawaii rank highest among the states in terms of school financing from a centralized state source.² Nebraska is by far the lowest, with a ratio of only .055. Chapter IV continues this analysis of state methods of financing school expenditures.

The description of SDE structures illustrates a movement toward greater centralization of control in all states. However, the differences emerging between states through the centralization movement receive the major attention of this study. These three factors which characterize the SDEs and predictably influence the degree of power

¹This particular year is chosen because of its compatibility with other data to be used later in this study.

²Hawaii, however, belongs to an extreme case not adequately captured by the generalizations made here. Its system of schooling involves only one hierarchy of control. There is only one local school district--that of the state boundary. It may be said to be at the highest level of centralization, or simultaneously, at the lowest level. As the study proceeds, further distinctions of Hawaii's school system will be discussed.

TABLE 1.5
RATIO OF STATE TO LOCAL SOURCE OF REVENUES

State	Revenue Ratio	State	Revenue Ratio	State	Revenue Ratio
Alabama	2.42	Louisiana	2.01	Ohio	.41
Alaska	1.24	Maine	.49	Oklahoma	.68
Arizona	.54	Maryland	.67	Oregon	.35
Arkansas	1.17	Massachusetts	.33	Pennsylvania	.85
California	.63	Michigan	.80	Rhode Island	.50
Colorado	.35	Minnesota	.88	South Carolina	2.21
Connecticut	.56	Mississippi	1.72	South Dakota	.16
Delaware	3.59	Missouri	.51	Tennessee	1.55
Florida	1.01	Montana	.42	Texas	1.09
Georgia	2.06	Nebraska	.055	Utah	1.20
Hawaii	16.67	Nevada	.70	Vermont	.57
Idaho	.63	New Hampshire	.13	Virginia	.70
Illinois	.38	New Jersey	.40	Washington	1.59
Indiana	.63	New Mexico	.29	West Virginia	1.44
Iowa	.37	New York	.91	Wisconsin	.43
Kansas	.45	North Carolina	.29	Wyoming	.68
Kentucky	1.37	North Dakota	.40	United States	.74

SOURCE: U.S. Department of Health, Education, and Welfare, Digest of Educational Statistics (Washington, D.C.: Government Printing Office, 1968).

exhibited at the state level, form the basis for the central focus of the remaining chapters. The theoretical models constructed in Chapter III incorporate these elements in a manner which illustrates the effects of different SDE structures on the provision of public education. Similarly, the case studies also concentrate on these elements when describing the system of educational control in each state.

APPENDIX, CHAPTER I

FEDERAL INFLUENCE ON THE CHANGING STRUCTURE OF EDUCATIONAL CONTROL

Table 1.3, which reveals the source of financial support for public schools, suggests that in recent years portions of the control of public schools may have been transferred to the federal level of the educational hierarchy. Few federal programs, restrictions, or aid to education occurred before the late 1950s. In 1940 the Lanham Act was passed which provided financial aid to local communities in which war-incurred federal activities created financial difficulty for local school districts. The federal government granted a National Science Foundation research bill, aimed at encouraging scientific research in 1950. The federal level of the hierarchy increased its financial support of education when assistance laws were enacted to aid in the local costs of educating children whose parents live or work on property owned by the federal government.¹

In the 1950s, spurred by a scare from the Soviet's launch of the Russian Sputnik, the federal government provided for grants which would increase interest in the technical sciences. The grants of 1958,

¹Jay Scribner, "Impacts of Federal Programs on State Departments of Education," in Education in the States: Nationwide Development Since 1900, ed. by Edgar Fuller and Jim Pearson (Washington, D.C.: National Education Association, 1969), pp. 513-4.

in support of earlier grants, aimed at encouraging scientific interest, either at the research or high school student level. However, the most fundamental changes in offering financial support and in affecting school programs did not occur until 1965.

The Elementary and Secondary Education Acts of 1965 began with financial assistance for special programs for educationally deprived children. The legislation included provisions to cover school library resources, textbooks, and other instructional materials, supplementary educational centers and services, educational research and development, and finally, a measure was included to strengthen state education departments.¹

The ESEA of 1965 have been characterized as the most impressive legislative feat ever executed by Congress in the history of educational legislation. The federal government allocated more than one billion dollars to local educational agencies to help the children of low income families. However, local applications were subject to approval by the appropriate state educational agency. Thus, this portion of the ESEA known as Title I, gave the state administration the role of reviewing and approving local applications.² So even though the money was federally funded, state agencies had the power to decide where it went within their state.

Under Title II of the ESEA (1967) greater state responsibility and control was afforded as public and private schools were subject to

¹Ibid.

²Ibid., pp. 520-2.

state minimum requirements in order to receive federal aid. Title III initially allowed localities to apply directly to the federal government for aid. The amendments of 1967 made concessions in favor of SDE and state responsibility for the development of programs to meet the needs of the state. The modification of Title III substantially favored state participation and consideration was given to officials at the state and local level who urged leadtime for planning and implementing federal programs.¹

Perhaps most pertinent to this study is Title V of the 1965 Acts, titled "Strengthening State Departments of Education." This legislation apportioned 40 per cent of the federal package equally among the states. It apportioned the remaining funds according to the number of public school children in each state. The goal of the act was to fund more money in areas such that SDE could spend at they felt the need.

Federal programs do not appear to have extracted control away from state educational agencies. Rather, they have contributed to the trend of an increasing role played by a centralized state agency. Local districts may have lost more control with the passage of federal legislation, but the loss has been to the hands of the state, not federal, bureaucracy. The Acts of 1965 and 1967 may in fact have resulted from pressures emerging from politically powerful state educational groups. In any event, the funds have been contributed in such a manner that state agencies could control where it went.

¹Ibid., p. 523.

CHAPTER II

THE ROLE OF INSTITUTIONS

In Chapter I, we investigated the changing structure of the institution surrounding public education provision. The focus on various forms of state organizations governing education output revealed trends toward a greater role for State Departments of Education (SDEs). While this chapter continues to examine institutional structures, the focus shifts to a more theoretical analysis of the importance of the organizational framework for providing education. Various institutional structures will be presented in an attempt to illuminate the effects of variations in the organizational environment on both the consumption and provision of education. We examine different forms of economic activity, ranging from perfectly competitive to purely monopolistic. This institutional examination classifies the economic structure which characterizes a system of state controlled educational provision in terms of a monopolistic bureaucracy.

Private Organization of Economic Activity

Monopolistic Competition

The starting point for viewing institutional structures lies in the private sphere of economic activity. Suppose for illustrative purposes, that only private firms characterized by freedom from artificial restraints on demand, supply, or output price provide education.

We assume all individuals, buyers and sellers, act in a rational, self-interested fashion. The rules which govern the private market specify that education be sold and priced on a per-unit basis. These rules allow each consumer, as a result, to choose a particular bundle of education at a price-quantity combination which expresses his intensity of preference for the good. The rule of ownership of the means of production provides for the transferability of firm shares at the will of those engaged in exchange.

We begin examining education in a framework which is somewhat descriptive of the U.S. setting in the 1600s and 1700s. For illustrative purposes, we call this setting Early History Days (EHD). In the world of EHD, many slightly differentiated forms of education characterize the system. Many firms produce each separate form such that there exists perfect competition within each product type. Some firms produce the fundamental 3R's, another group of firms provides an open classroom form of education, a group emphasizes vocational training at the secondary level, and another concentrates on providing college preparatory coursework. Under the EHD system, educational provision does not take place in industry form, but rather occurs through "product groups."¹

These product groups characterize a monopolistic competition form of provision of education. Theoretically, the pricing-output

¹See C. E. Ferguson, Microeconomic Theory (3rd ed.; Homewood, Illinois: Richard D. Irwin, Inc., 1972), pp. 317-333, for an explanation of this terminology.

policies of the education product groups contain elements of both monopolistic and perfectly competitive industries. A single firm within any group faces a relatively elastic demand curve as in the competitive case. All firms acting in cohesion, however, can behave as a monopolist by following the same pricing policies, and therefore, face a relatively inelastic demand curve. Even with this monopoly threat, a significant element of competition prevails. The factor in the competitive case which compels long run profits to zero--freedom of entry and exit--remains active in the monopolistic competition situation. The existence of long run profits would bring about the entry of additional producers who usually would produce slightly differentiated forms of education. In consequence the elasticity of demand faced by the various educational producers would increase. As suggested by the theory of perfect competition, such freedom of entry and exist would result in the elimination of profits in the long run.

In the world of EHD, we assume the monopolistic components of the structure to be nonexistent so that the situation created is analogous to the perfectly competitive system. The long run output of the product groups providing education will result in a quantity where demand equals marginal cost.¹ Coupling this output policy with an assumption of spatial mobility of consumers enables the attainment of consumer efficiency. There are, in other words, no costs of mobility

¹There is an existing literature of controversy over cost efficiency aspects of monopolistic competition. For the sake of this expository situation, these possible inefficiencies are assumed to be zero. For such discussion see Ferguson, Microeconomic Theory.

which prevent the consumption of a particular type of education due to geographical location. Since the only constraint which exists concerning private consumption of education is the individual's budget, the persons of EHD choose between various bundles of goods and allocate their resources so that the marginal rate of substitution and marginal cost ratio of education and all other goods are just equated. Because of the assumptions made, the EHD world of educational provision and consumption satisfies the preferences of the families.

Pure Monopoly

But let us now alter the EHD world and go to one which allows no exit or entry of producers, in order to begin contrasting the effects of institutional structure. Rather than the diversified products, each produced by many firms, suppose there exists a single firm selling one type of education, which we call Congromeration (Con). The Con industry operates subject to the rules of private markets as stated earlier, but it now employs different price-output policies since it has a monopoly over educational output. The demand curve faced by the Con industry is relatively inelastic over the affected range of output as there are no easily substitutable products the consumer may choose. To maximize profits, the manager of Con equates marginal revenue and marginal cost. In this case, the industry makes long run profits and the institutional framework contributes to an allocational inefficiency. The inefficiency, shown by ABC in figure 2.1, results from the reduced

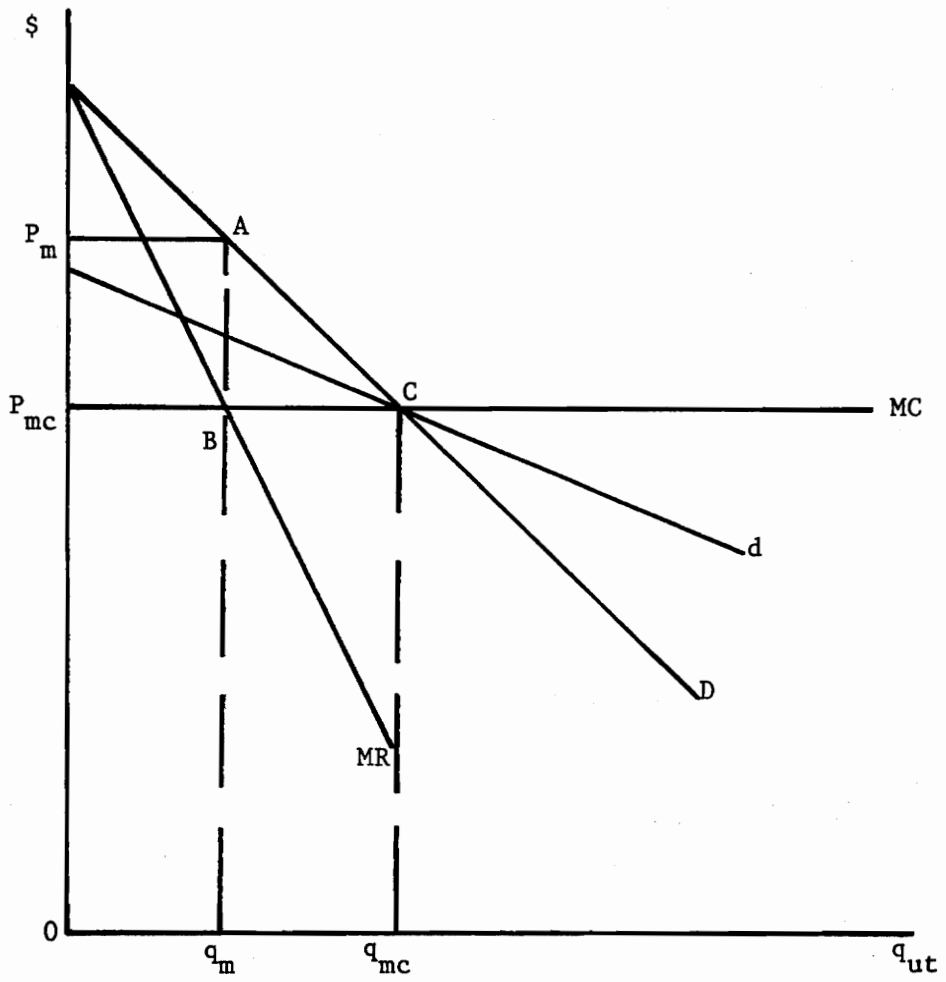


Fig. 2.1. Output under private forms of provision.

quantity and increased price policy followed by the Con producers.¹ At the price P_m , Aq_m depicts the marginal benefit to the consumer of the q_m unit of education, while the marginal cost is only Bq_m . From the viewpoint of the consumer, therefore, an underproduction of education occurs. This inefficiency manifests itself in terms of surplus profits to the producer, given by the area $P_m ABP_{mc}$. With respect to the individual's preferences, the quantity q' in figure 2.2 represents the consumer inefficiency resulting from the underproduction of the Con industry in comparison to the EHD institution.

Quantity variables have formed the basis for comparisons between EHD and Con thus far, but underlying qualitative differences also contributed to the relative elasticity of demand variances. In the Con industry, the limitation of only one type of education product has greatly reduced the mechanisms of exit and voice in signaling the satisfaction of consumers to the producers.² The consumer cannot substitute alternative modes of educational provision when he grows dissatisfied with that produced by Con, since there exist no alternatives other than zero education consumption. The monopoly situation therefore confronts him with an all-or-nothing type case in that he either purchases the Con product or no type of education. In this institutional setting

¹The situations compared are the ideal EHD case which results in zero inefficiencies and the monopolist case which yields consumption inefficiencies.

²See Albert O. Hirschman, Exit, Voice, and Loyalty (Cambridge, Massachusetts: Harvard University Press, 1970), for a complete discussion on the operability of these instruments in political and market activities.

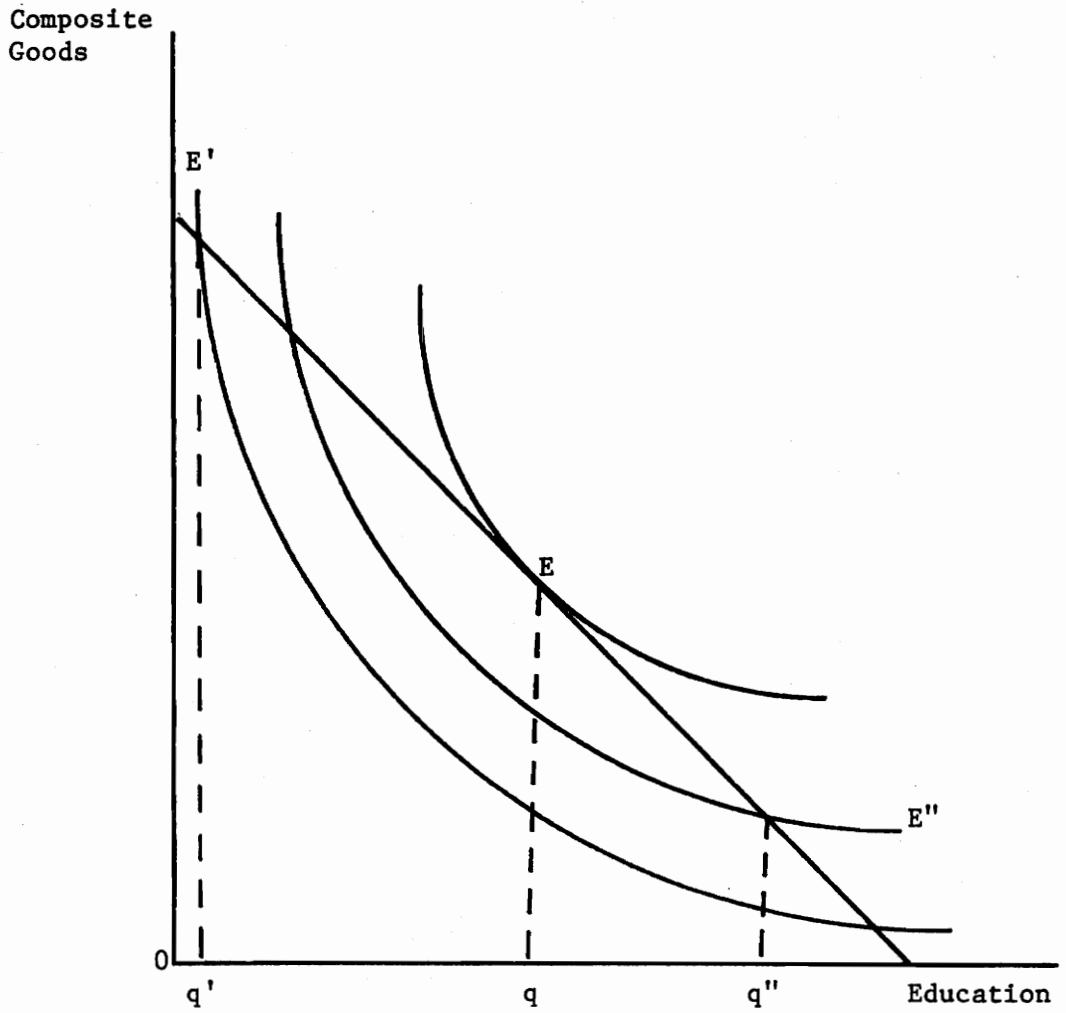


Fig. 2.2. Consumer inefficiencies with different structural organizations.

as with that developed in the EHD world, however, a single individual still remains able to quantity adjust through purchasing his desired quantity at the market price.

Public Means of Provision

The institutions discussed thus far have concentrated only in the realm of private activity. At this point we shift away from private institutions to the public sphere and the collective provision of education. Historically, this model corresponds to the point in time when education was publicly provided under the control of the state. For analytical convenience, we can assume that no competition exists in the form of private education institutions. A specific nonprofit institution in this exposition features that of a collection of bureaus, or a bureaucracy. The bureaucracy in this case refers to the SDE. William Niskanen has perhaps done the most extensive theoretical developments concerning the allocational effects of a bureaucracy, and we base much of the following analysis upon his work.¹

Bureaus, by Niskanen's definition, are nonprofit organizations which do not sell their output at a per unit price as in the private sector, but instead, sell an entire package of output in exchange for a budget.² The budget is granted to the bureau by a passive sponsor

¹William A. Niskanen, Jr., Bureaucracy and Representative Government (Chicago: Aldine Publishing Company, 1971); and William A. Niskanen, Jr., "Bureaucrats and Politicians," Journal of Law and Economics 18 (December 1975):617-644.

²The bureau may sell a portion of its output by unit pricing, but by definition, cannot sell the total output in this fashion.

who knows very little about the production process itself. With respect to education, each state appoints an educational agency with various subsidiaries, thus forming a bureaucracy (the SDE). This bureaucratic agency has the responsibility of providing the educational needs to the youth of the state. The agency provides a package of educational services in exchange for a budget from its sponsor, the state legislature.¹ The agency providing the education has power over the legislature to the extent that it possesses information and knowledge which the legislature does not have. The latter deals with education as only one of many areas of concern and does not specialize in learning about techniques of production. The agency, on the other hand, deals exclusively with education, is aware of its production function and cost curves, and presents only that information which it desires to the legislature. In other words, the SDE may face little incentive to reveal to the legislature, a situation which would result in the imposition of a budget constraining the bureau to its most efficient, or least costly, means of production.

Not only may there be little incentive to reveal information, but the fact that very little information exists to pass along complicates the situation. The exclusive public provision of a good limits information in two manners. In the first instance, the elimination of private sources of provision restricts the amount of choices available

¹It is assumed temporarily, and for simplicity only, that the decision of the legislature is merely a mirror reflection of the preferences of the majority of the taxpayers. Implications of such an assumption are discussed later.

to the consumer. He cannot express his dissatisfaction for the education provided by the bureau through the private market's price signal if there exist no substitute goods. In this sense, the consumer reveals to the supplier only his preference between public education and no education, similarly to that revealed to the private monopolist.¹

The second limitation on information concerns another rule which governs collective institutions. This rule concerns the ownership of the collective means of production. In the private institutions, various individuals who could buy and sell the shares at their own option controlled the ownership shares of the firms. In the case of an educational bureaucratic institution such as the SDE, the owners are the taxpayers of the state. The taxpayer who feels dissatisfied with the output of the bureaucracy cannot shift his tax share to another consumer, unless he migrates to another state and, in effect, purchases shares in another bureaucracy. The tax share, or price of the education consumption to an individual is not necessarily correlated to his demand for the product as in the private market. For this reason, the necessary information provides no signals to the sponsor. As a result, the ownership rule offers a type of protection to the bureaucrat, or member of the SDE. The threat of a takeover bid from another owner does not prevail due to his failure to proceed at peak efficiency as in the private market, so he may feel less incentive to strive for maximum satisfaction of the preferences of the consumers.

¹See Frederick A. Hayek, ed., Collectivist Economic Planning (Clifton, New Jersey: Augustus M. Kelley Publishers, 1975) for a discussion of the general problem involved in collective provision.

The variations in rules discussed above begin to illustrate the important role played by institutional structure. As hinted above, the organizational structure influences the incentive effects on managers of various institutions. Retaining the assumption that individuals act in a rational manner which reflects their self-interest, we now discover that a profit maximization motive no longer exists. In this case, the rate of profit he makes for the bureau does not determine the return to the manager, since by definition there are no profits. Instead, he faces a salary scale based on his position or rank within the bureaucracy, and the power of the bureaucracy itself. For this reason, the bureaucrat will strive to make his bureaucracy a more prestigious one. Expansion of the educational budgets acts as the bureaucrat's mechanism in satisfying his objective, for rank importance and budgetary expansion are generally positively correlated.

In this context, the motivation of the suppliers of education varied with the institutional framework providing the education. In the EHD model, suppliers of school services were motivated to satisfy the preferences of the consumers. In the model representing the emergence of public provision and the trend toward greater state control, the underlying motivation also experienced a phase of transition. The motivation in the latter framework centers more toward making decisions about educational output which will lead to an expanded budget allocated to the SDE.

In order to accomplish his goal of maximizing the budget, the bureaucrat may use different "tricks." As insinuated earlier, he may

undertake projects which prove to be very inefficient over a long period of time. The bureaucrat's interest lies in maximizing the budget only during his tenure in office. As a result, producing education in the manner which is best in the long run, yields no benefits to him. We expect the bureaucrat, therefore, to have a high rate of time preference as a means of gaining power and prestige from an expanding budget.

The situation describing the bureaucracy may be placed in the framework of a bilateral monopoly. The seller of the education, the SDE, is a state agency, and the legislature represents the single buyer. The specific price-output policies pursued will depend on the relative strengths of each bargaining side. For the reasons illustrated above, the bureaucracy seller, or the SDE, is the one more likely to have the greater bargaining power and to, therefore, have a greater influence in determining the output policy.

Two cases describe the possible output policies of a bureau. We begin, still following the analysis of Niskanen, by outlining operation within a budget-constrained region. Rather than equating marginal costs and marginal revenues, the bureau operating in this region, will expand its budget until it covers the total cost of providing a given package of educational services. In figure 2.3, the bureau expands the budget until the area YOq_BW equals the total cost, $OC'Xq_B$, of providing q_B units of education.¹ At the quantity q_B , the marginal cost

¹In the diagram (figure 2.3), CC' represents the increased cost of providing education due to the inefficiencies of the bureaucracy.

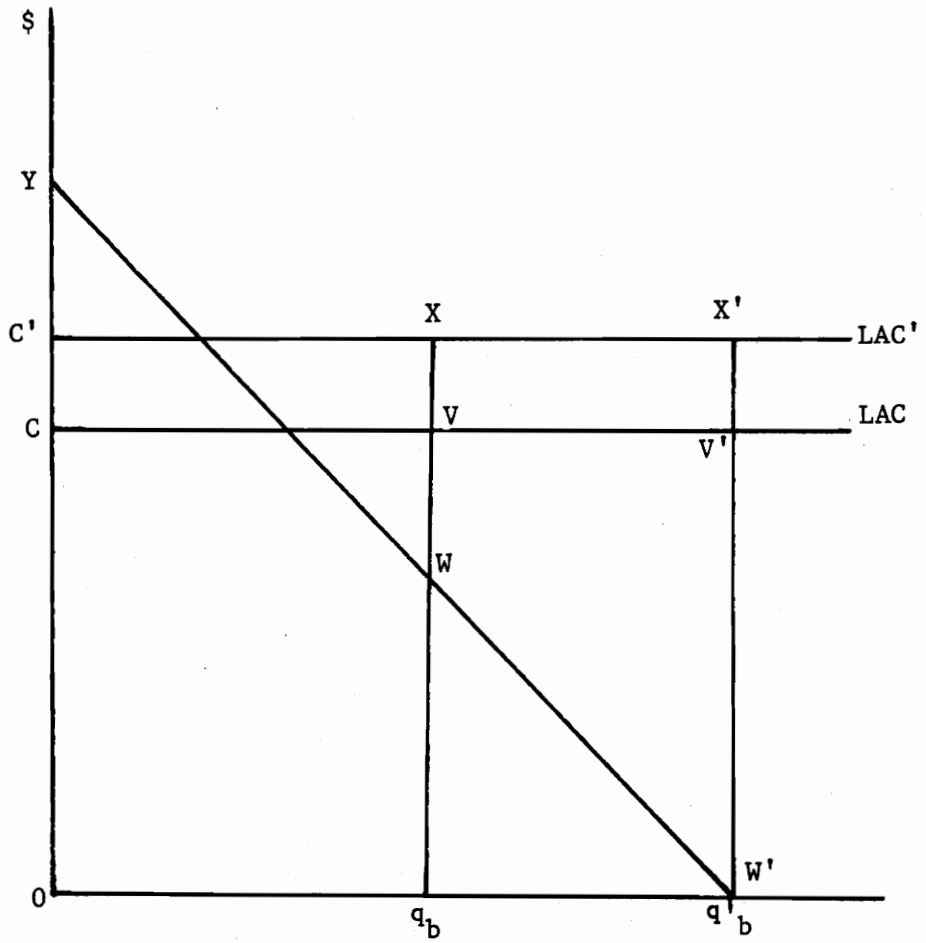


Fig. 2.3. Outputs of public provision.

of education exceeds the marginal valuation to the consumer. A cost inefficiency of XV and a consumer inefficiency of VW emerge at this output.

A demand-constrained region describes another possible region of production for the bureau. In this case the agency expands output until the marginal benefit to the consumer or legislature is zero. The agency cannot persuade an increase in the budget that will lead to a negative valuation of the good to the sponsor. The quantity produced under these circumstances will be q_B' in figure 2.3. In this setting, the consumer inefficiency has increased to V'W' as the differential between marginal cost and marginal benefits has increased.

Comparative Effects of Different Institutions

In looking quantitatively at the inefficiencies created by bureaucratic institutions, we find that the effects on both the consumer and producer differ from that in private institutions. Consumption inefficiencies can be compared by referring again to figure 2.2. The bureau which operated in a demand-constrained region produces education until the sponsor's marginal valuation is zero, or quantity q'' . As compared to the setting of EHD, quantity qq'' indicates the consumption inefficiency due to the variation in institutional structure. The same type of analysis holds true for the budget-constrained region, in which case, the quantity provided will be greater than q

but less than q ".¹ XV in figure 2.3 gives the cost inefficiencies incurred by bureaucratic institutions contrasted to private structures.

But the effects created by different organizational forms and rules cannot be limited to quantitative factors. Qualitative variables also play an important role in elucidating these effects. The EHD model presented consumers with choices regarding the educational product they consumed. The existing alternative types of education made available comparative information which permitted rational decisions to be made concerning the purchase of education which best suited the consumers' desires. The bureaucratic system with its monopolistic characteristics does not allow the same type choices. The consumer is unable to compare various outputs to determine which would most closely satisfy his preferences. Forcing the consumer to purchase the collective output, monopolistic bureaucratic provision reduces his freedom of choice.

As a way of avoiding open consumer defiance subtle indoctrination processes eliminate choices in society. The material in textbooks of public schools transmits certain cultural or social mores to the youth of its society. The bureaucrat can shift the "goodness" of its collective provision to the pupils and eventually to the society

¹Niskanen's bureaucracy theory is not the only basis for hypothesizing expanded outputs under bureaucratic provision. See Robert J. Staaf, "The Public School System in Transition: Consolidation and Parental Choice," in Budgets and Bureaucrats: The Sources of Government Growth, ed. by Thomas E. Borcharding (Durham, N.C.: Duke University Press, 1977), pp. 130-147, for an alternative model. Staaf finds empirical evidence in terms of increasing teacher salaries which provide a motive for bureaucrats' advocacy of more monopolistic production of education.

as a whole, while never actively campaigning for its system. The National Organization of Women, protesting against the portrayal of women's role in society as that of the happy homemaker, illustrates a current example of this type of teaching. This represents the rather hidden fashions in which much of society's value system may reflect the opinion of the politically or socially powerful.

The monopolistic bureaucracy argument above implicitly incorporated the idea that the education system itself may serve in a capacity which influences the legislators' demand for the good. Such a system, however, violates the assumption that legislators act as reflections of the individual demands of its citizenry. Specifically, legislators were assumed to act in a manner which did not actually help to mold preferences of the population. It becomes important, therefore, to determine whether legislators are controlled by the people, by the bureaucracies, or to some degree, by both. Many argue today that in fact, bureaucrats possess so much power that they are able to maneuver the sponsor, or legislature, into the mold desired by them, irrespective of the preferences of the majority of the state's population.¹ Many of the decisions made by legislators, it is argued, are those which lead to the maximization of the bureaucrat's budget and prestige.

¹See Randall Bartlett, Economic Foundations of Political Power (New York: Free Press, 1973); see also Albert Breton, The Economic Theory of Representative Government (Chicago: Aldine Publishing Company, 1974), for a description of the general way in which representative government operates.

Much of the power of the bureaucrats lies in the area of persuasion, both covertly and blatantly. A well-known system of logrolling is believed to be commonly practiced between bureaucracies and their sponsors. This practice involves the reciprocal trading of favors between or among the two groups. For example, a sponsor may give a go-ahead vote for an expanded budget only if he sees direct benefits from the increased spending. Such activity carried on continuously, contributes to an ever expanding budget and thus the satisfaction of the preferences of the bureaucrat.

Randall Bartlett and others assert the infeasibility of the preference-reflection assumption by emphasizing that uncertainty exists not only on the side of the consumer, or taxpayer, but also on the representative of these persons as well. Because of powerful lobby groups and other forms of influence which reach the population's representative (the legislature), the transmittal of the preference of the entire group becomes quite difficult. In addition, because these influential groups play such an important role in the election process, the representative may in fact find it more beneficial to directly satisfy the preferences of the politically powerful.¹ The models of Chapter III discuss such possibilities in more detail.

The sharing of a single quantity and type of product is common to the public provision of a good. In a democratic system without bureaucracies, that single decision will reflect the preferences of

¹Bartlett, Economic Foundations.

the median voter. A uniform output for all members in the particular social, political, or economic unit results from public provision of a good or service. A situation of little or no choice faces all persons in the area. There can be no threat posed to the producer which causes him to be more efficient for fear of loss of patronage. Instead, he knows the consumer has no choice except to purchase his product or go without. He can, therefore, extract consumer surplus just to the point where the consumer would actually choose to forego the product. Inefficiency on the part of the producer and loss of choice on the part of the consumer become the two elements of concern when dealing with public provision of goods and services.

The above discussion helps to explain not only output differences which can be expected to emerge from several institutional arrangements, but also points out the degrees by which the individual can influence the outcome. It is clear at this stage that the private market, competitive system allows the highest degree of individual expression of preferences and, therefore, freedom of choice. Through the signals allowed by the market pricing system, the individual dictates to the provider both his demands for the type of education most preferred and the amount desired of each type.

We expect the greatest degree of complexity in providing a system of choice to individuals to result from the purely collective system. As discussed above, the mechanism of financing costs of provision obstructs the linkage of preference and expenditure by the individual. As a result, it is possible that a single individual's tax price is

totally unrelated to the benefits received from the good.¹ Removing the private market price signal, the individual retains only his vote as the mechanism of signaling preferences to the collective provider. Abstracting from the problems created by nonvoting influences, a complexity remains in the implementation of a decision rule for public provision. In other words, the implicit unanimity rule allowed by the private market is not effective with public provision. The rule commonly adopted for efficiency reasons, and the one to be used in the remainder of this work, is that of majority rule.

Beginning with an educational system approximating a perfectly competitive market, we have demonstrated the important role played by the form of the institution governing output.² Motivations of those persons managing the provision of education depend upon the type of institution surrounding decision-making. Since motivations differ, output and effects on consumers also depend on the institutional framework. In the next chapter we deal more specifically with the organizational aspects of American public education. As in this chapter, the centralization movement of public school provision will be cast in terms of a monopolistic bureaucracy. The next chapter, however, takes a more explanatory approach, looking at contrasts in today's structures.

¹It is possible to achieve a Lindahl pricing scheme with public provision which does directly link tax price and benefits received from the good or service. This is not a commonly utilized device, largely due to demand revelation problems.

²See James M. Buchanan and Richard E. Wagner, Democracy in Deficit: The Political Legacy of Lord Keynes (New York: Academic Press, 1977), pp. 125-144, for further discussion of the role of institutions.

CHAPTER III

MODELS OF FORMS OF STATE CONTROL

OVER EDUCATION

Chapter II demonstrated the differential effects of institutional structures on the consumption and provision of education. At this point we turn more specifically to the different types of bureaucratic structures surrounding the provision of public elementary and secondary education in the U.S. This chapter constructs three models which incorporate varying degrees of bureaucratic influence over the policy-making of public education. The first model displays only very decentralized forms of bureaucracy. The second contains a centralized educational bureaucracy, but one which remains somewhat controlled by localities. And finally, the third model represents the most highly centralized structure of educational bureaucracy. The models relate to the different structures of SDEs described in Chapter I and demonstrate more rigorously than Chapter II, specific impacts of institutional arrangements on the provision of public education. After examining the general consequences of each SDE structure on the output of public education, we extend the models to demonstrate the relationship between the type of SDE and the policies employed by a state concerning school district consolidation.

The models of this chapter through their focus on bureaucratic roles, offer an explanation for the general centralizing tendencies

relating to the provision of public education. The explanation differs from traditional arguments as it adds a factor previously omitted. The added factor concerns the role of the bureaucrat in advocating a move toward greater state control. Before developing the models with contrasting bureaucratic roles, we briefly present the most commonly offered explanations for the movement toward centralized state provision of public education.

The most frequently presented arguments to support state control over education pertain to the cost burden placed on localities. Property taxes generate the largest portion of income received by localities. Not only may reliance on this source of revenue be burdensome, but states' legal and constitutional limitations often restrict the amount of taxes which can be raised in this manner. As a result, increasing physical plant size and facilities have necessitated a role for growth in state financing and provision of education. By shifting the burden to the state which derives its revenues from different tax sources, localities can extend their provision of other local goods and services without reducing that of education.¹

Along the same lines of argument, others propose that it is simply more efficient to provide education through centralized means. Provision of product groups by numerous localities within a state causes

¹See R. L. Johns, "State Organization and Responsibilities in Education," in Designing Education for the Future, ed. by Edgar Morphet and Charles Ryan (2nd ed.; New York: Citation Press, 1967), pp. 245-66; and Nicholas Masters, Robert Salisbury, and Thomas Eliot, State Politics and the Public Schools (New York: Alfred A. Knopf, 1964), pp. 6-7, for this and similar arguments supporting state control of education.

overlapping and duplicating which can be avoided only through the utilization of a statewide producer. Producing in a centralized, as opposed to decentralized, fashion reduces the total costs of providing education in a state.

The existence of externalities provides the basis for another commonly heard explanation for centralization of control. Supporters of state provision argue it is unfair to allow each local district to set its own standards and provide different packages of education. Because of an increasingly mobile, complex society, the students of the poor districts become students and citizens of the wealthier districts. When this happens, these districts to which migration occurs suffer from the others' poor education. The costs of externalities are reduced only through uniform standards applicable to the entire state.¹

Finally, a variation of the externalities' argument advocates that an increased public commitment to education has created the stronger state controls. People no longer view education as a luxury or special benefit, but consider it essential for economic growth and national survival. State organization of education is required, therefore, for effective state and national decision-making.²

But as we consider the usual explanations for the shift to state control of education, there is a missing factor common to each.

¹Masters, Salisbury, and Eliot, State Politics and Public Schools; and Floyd Miller, "State Government in Public Education," in Contemporary Issues in American Education, ed. by F. Robert Paulsen (Tucson: University of Arizona Press, 1967), pp. 89-98.

²Ibid.

That factor concerns the benefits of a more monopolistic position accruing to SDEs as a result of their greater role in educational policy-making. The remainder of this chapter constructs models which incorporate this missing element of the explanation for trends toward state control.

A Model of Competitive Bureaus

The chief purpose of this chapter as stated earlier involves the demonstration of bureaucratic institutional effects on the provision of education. This section develops a model with many competing bureaus comprising the educational systems.¹ The following section builds contrasting forms of bureaucratic structures which allow comparisons of outcomes to be made.

In this model local districts actually control the provision of public education. Local boards of education exist and are elected directly by the families of the districts. A simple majority rule acts as the rule of collective decision-making. Designating the family to be the voter, the family representing the median of the population assumes the role of decision-maker. As a general rule public education in this model is financed through property taxation. However, we assume a family's property valuation to be positively correlated with its income, and the latter, therefore, serves as a proxy for the property

¹This model does not describe the present SDEs structures illustrated in Chapter I. Its real world counterpart rests in the early period of American public education. It serves a useful role in the subsequent analysis for it provides an instrument of contrast for the SDE models developed later.

tax base. Each district is free to tax itself according to its desires, whether it be proportional, progressive, or regressive. The type of taxation chosen will not alter the outcomes of this model.

In the local bureau model, each state divides its school system into units of local school district jurisdiction. The local boards or bureaus, are hereafter designated as the seller of education, and the families of the district, via the median voter, constitute the buying side of the relationship. Even though a SDE exists in this model, its influence is minimal. The actual duties of the state agency, also elected by the families of each district, are largely clerical in nature. Since each district virtually controls its own type of provision, this model of public education approaches a competitive system of schooling. The institutional arrangement of this model promotes competition in various ways. First, we assume each district to provide a distinct type of educational product, as introduced in Chapter II. A second and equally important assumption provides for a law allowing families to consume any district's product, regardless of where they reside. To make such an arrangement technically possible, compensatory tax payments between districts account for nonresidential attendance. Operating in this manner, voters and taxpayers choose the district's product which most closely satisfies their tastes. In turn, each district bureau feels some degree of pressure to provide the education desired by the majority of its residents for fear they will discontinue its consumption.

For purposes of simplicity, the model begins with the introduction of three school districts, or governmental units. We could assume numerous districts characterize the system without affecting the outcome of the model. Three districts, however, sufficiently portray the competition between the local bureaus. The three districts, which we refer to as P, M, and R, are subject to few constraints. One constraint compels the provision of some type of education by each district. This compulsion, created by attendance laws, mandates the consumption of some type and quantity of education, and the collection of taxes for financing purposes. We assume the median voter of P, M, and R differs both in his taste or preference for a particular educational product and in the income accrued during a year.¹

Figure 3.1 gives the median voter's preference mapping between education and other goods and his position created by the income constraint. The figure demonstrates the relative positions created by differences in income and tastes for education. District P, for instance, is composed of a population such that its median voter is a member of the state's low income group, and faces a budget constraint, AA', while District R's median voter is cast in the high income bracket and confronts a budget constraint of CC'. The median family of District M is a member of the state's median income group, which is below that of the average income level. BB' represents the budget constraint

¹The diverse preference assumption is not a crucial feature of the argument but is made for the purpose of an analogy which follows later. The assumption serves as a reinforcement to the use of product groups as opposed to a single, homogeneous good.

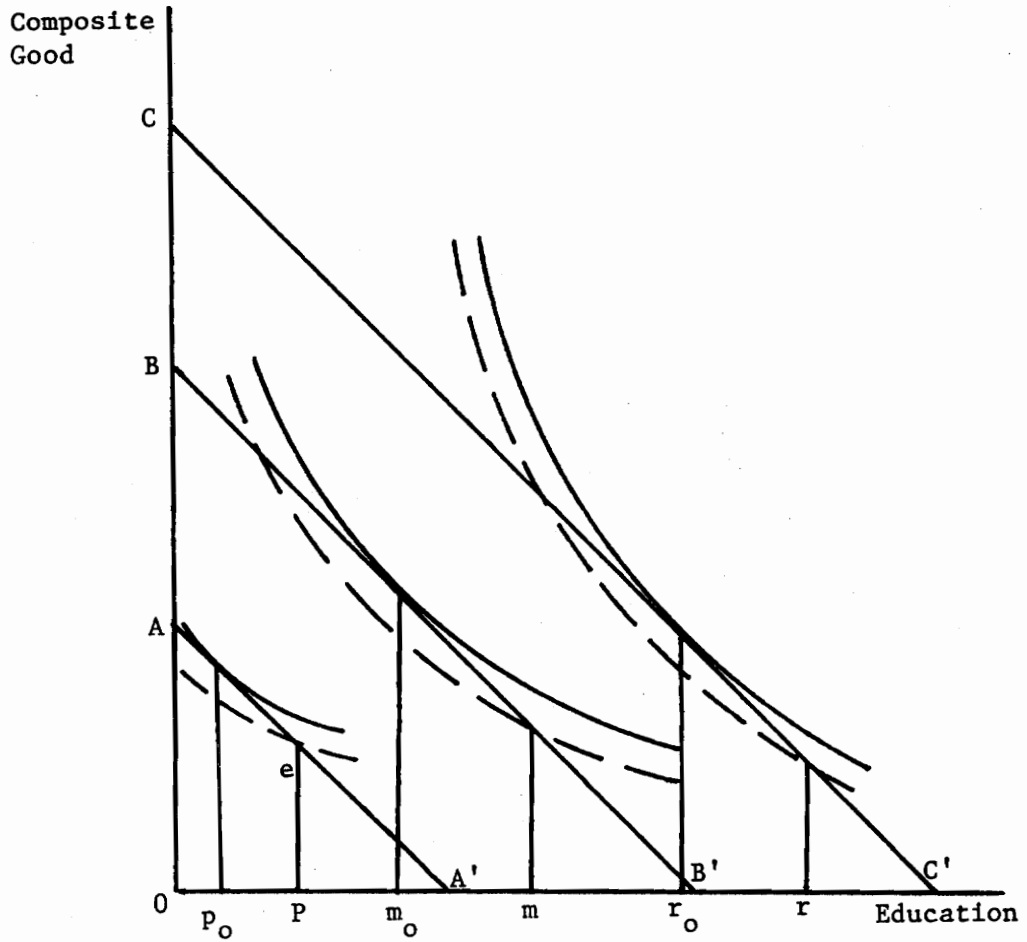


Fig. 3.1. Preference mapping for the three local districts.

of District M. Under a private competitive framework, Districts P, M, and R would choose p_o , m_o , and r_o quantities of education, respectively.

Figure 3.2 gives the demand conditions facing the bureau of each district. The demand curve facing each bureau is for a particular product type of education. For example, the demand curve, d_p , applies to the single product provided by Bureau P. Given the same cost conditions for each bureau (again for simplicity only), the three districts provide p_o , m_o , and r_o units of education if the system operates as the perfectly competitive, private market discussed in Chapter II.¹ However, the bureaucratic influences of this model prevent the provision of the private competitive market output. Instead, it produces output under a competitive collective market.

This model has noted the presence of competition among bureaus throughout its development. The competition becomes an important feature of concern when determining the output provided by a single collective bureau. Because the system is relatively, although not perfectly competitive, a single bureau cannot behave as a pure monopolist. Instead, it faces the relatively elastic demand curves portrayed in figure 3.2. High elasticity exists because of the substitute products the families may consume through the methods described earlier. As a result of this ability on the part of consumers, we do not expect the bureaus to extend output to the point where marginal evaluation equals

¹Again, as in Chapter II, the cost curves given in these models include cost inefficiencies resulting from bureaucratic provision of the good.

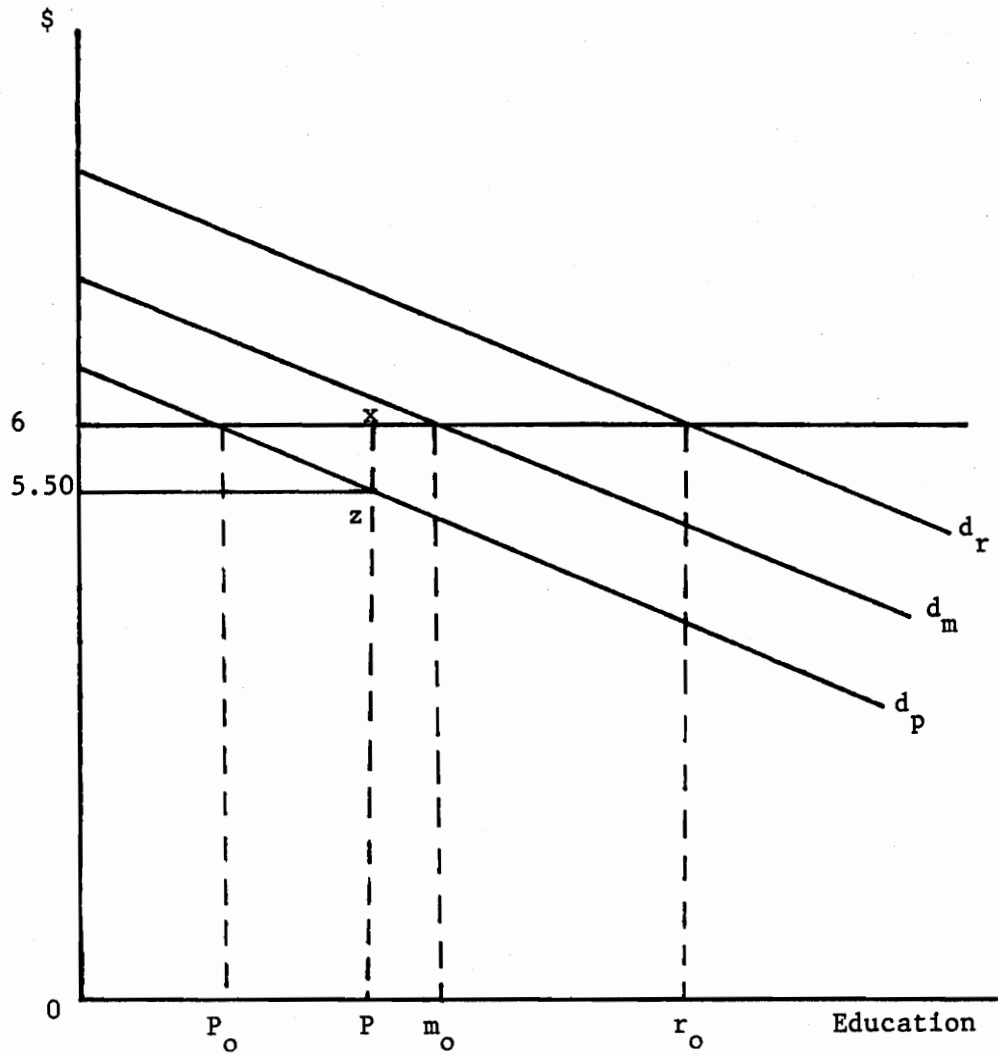


Fig. 3.2. Conditions facing the bureau of each district.

zero for fear of losing some of their participation to another bureau.¹ The consumers observe the provision by other districts and are, therefore, provided with a quantity of information as to what can be expected from their bureau.

This does not, however, imply the bureaus operate in a manner fully analogous to that of the private competitive market, thus providing p_o , m_o , and r_o units of education. Two factors enable the bureaus to continue in operation with some degree of inefficiency. First, cost condition information exists for the bureaus which the buyers of education do not possess. As developed in Chapter II, bureaus are not motivated to provide the output in its least cost manner. Instead, they follow policies allowing them to expand the educational budget even though costly which, in turn, lead to the personal satisfaction of the bureaucrats.

A second factor which allows such violations to continue, lies in the weakness of the decision-making process. The bureaus do not provide the families with voting choices which indicate ranges of expenditure per child for educational services, nor do they provide detailed choices of curriculum offered and textbooks used. The common practice involves a simple yes-no referendum on a packaged deal of services which results in either complete approval or total rejection. This rule, common to most publicly provided goods, limits the ability of the product to satisfy consumer preferences.

¹See Chapter II for a description of the two regions of production applicable to bureaucratic organization.

With some knowledge of the constraints it faces, we expect the competitive bureau to operate within its budget-constrained region rather than extending output to the demand-constrained region.¹ Using District P as an example, figure 3.2 demonstrates the comparison of the output of the budget-constrained bureau in a competitive system and that produced by the private, competitive institution. In 3.2, P Bureau produces p units of education, which results in an allocational inefficiency of xz . This inefficiency measures the amount by which the consumer's tax price for p units of education exceeds his marginal evaluation of the good.²

Figure 3.1 demonstrates the comparative inefficiency experienced by the consumer under a competitive bureaucratic structure as opposed to a private competitive structure.³ At quantity p_0 , the slope of the budget constraint equals that of the indifference curve, and for illustrative purposes, will be 6. This is equivalent to the marginal tax price of p_0 units of education provided by the bureau in figure 3.2. Point e depicts the corresponding position in 3.1, where the

¹In general the demand-constrained region represents a point of output and a budget beyond that of the budget-constrained output. Its inefficiencies, both allocational and consumer, are greater than with the other region.

²Marginal evaluation curves are not, strictly speaking, the public good analogy to private good demand curves. In this analysis, income effects are assumed to be zero in order to approximate private demand curves. Inefficiency defined in this manner corresponds to Richard Wagner's explanation. See Richard E. Wagner, The Public Economy (Chicago: Markham Publishing Company, 1973), pp. 112-123.

³Inefficiency in this context refers to the divergence between the amount of output leading to maximum consumer satisfaction, and the output actually purchased from the bureau.

slope of P's indifference curve intersecting AA' is equal to $5\frac{1}{2}$. In terms of the consumer, therefore, the quantity p_0p gives the inefficiency created by the bureaucratic means of provision. The same type of analysis can be applied to the other districts.

Even with these inefficiencies created by bureaucratic provision, we expect the competitiveness of this system to yield results which would be judged somewhat favorably by the families of the state. A wide range of choices is available to the families so that each can consume both the quantity and particular type of educational product it chooses, to a degree. Professors who desire to have their children receive a college-oriented education have this option. A family who thinks such an orientation is trivial and desires, instead, to seek training for vocational purposes also has an opportunity to do so. The model describes the closest approximation to the EHD-competitive system as is possible with the existence of collective provision.

Models of SDE Control

An Elected SDE Model

The model developed above represented a highly decentralized structure of educational provision. This section continues the exposition with the construction of a model representing a state similar to E in Chapter I, or one which represents an actual SDE structure today. This model incorporates a more powerful role for the SDE than did the competitive model. However, it retains some degree of local control through the selective process of the members of the SDE. The voters

of State E directly elect the agency members as was the case in Chapter I. By building the model in a manner which illustrates the role of the SDE members in the centralization of public school provision, we shall examine contrasting effects on output created by the institutional structures which characterize the two models. The third model will continue the same type of analysis.

As indicated above the first model of an active SDE begins with the assumption that its members are elected by the families of the localities. As a result, a low-cost direct link between localities and the SDE insures the inclusion of local preferences in the productive process of public schooling. However, working within a bureaucratic framework, the members are motivated by the budget-maximizing, prestige-seeking goals discussed in Chapter II. The existence of these goals compels the SDE members to pursue an active role for their agency. The more active role leads to a fulfillment of the fundamental objectives of the bureaucrats.

In this model, the structure of the SDE enables the members to procure a greater role in school policy-making than did the local bureau structure. One way in which the SDE assumes the greater role is through responsibilities such as setting guidelines for the type of educational services to be provided by each district. With increased responsibilities of this nature, the SDE is better able to convince the legislature of its worthiness and, therefore, to secure its desired budget expansion. The guidelines may be quite comprehensive and include prescribing curriculum standards applicable to all localities, specifying

textbooks to be used, setting qualification standards for all teachers, and constructing building codes for the physical structure of the schools.

But the SDEs do not behave in a manner conflicting with the desires of the localities. For in this model, similarly to the previous one, the members must respond to the signals received from the localities concerning their educational preferences. The direct link between the people and the SDE guarantees this responsiveness. Other factors are present not found in the previous model, which allow the SDE members to demonstrate a more powerful role.

The means of financing school expenditures illustrate one element which contributes to the different role of the SDE in this model. The state, rather than local bureaus, possesses the greatest deal of control over school finances. As a result of statewide financing of school expenditures, an implicit redistribution of resources occurs in this model. The SDE proportions aid inversely to the income status of the district thereby reducing the income differentials between districts. Further exploration of this factor takes place in the explicit contrasts of models described by figures 3.3-3.5.

We expect the different role of the SDE to yield predictable outcomes with respect to the educational system of the state. For the purposes of exposition, consider each bureau (school district) to be an automobile seller. Under the earlier competitive model, numerous sellers of several models of automobiles existed (analogous to many school districts) providing slightly differentiated outputs of

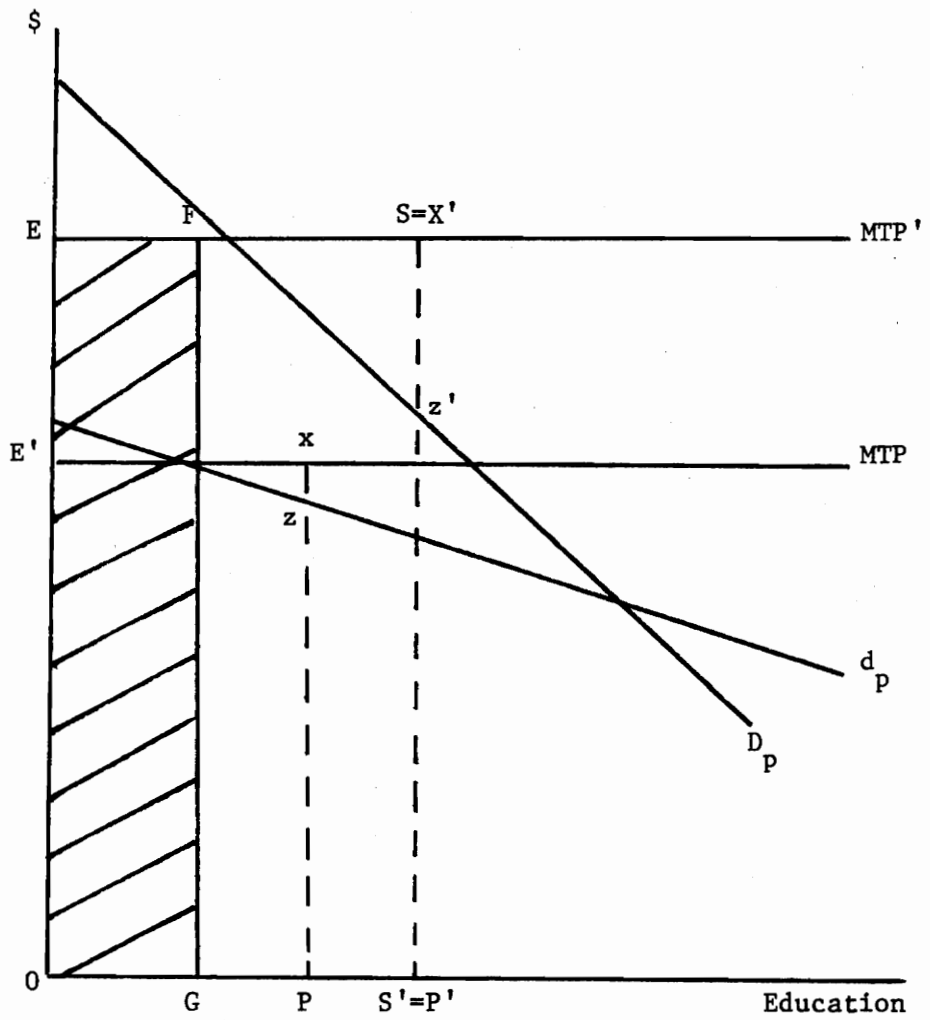


Fig. 3.4. Change in conditions facing Bureau P.

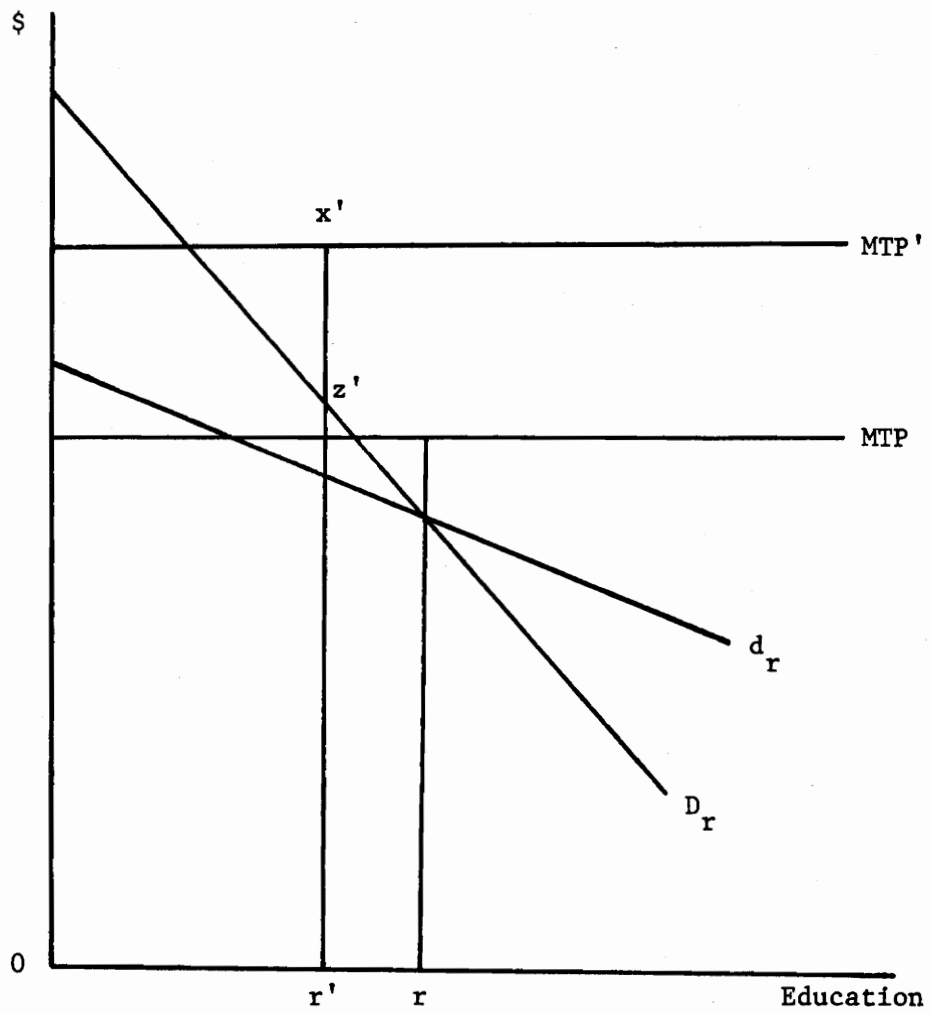


Fig. 3.5. Change in conditions facing Bureau R.

education. For instance, a single state possessed a Ford, Chevrolet, Volkswagen, Cadillac, and Oldsmobile dealer. Consequently, the availability of substitutes for a single type of automobile promoted competition among the sellers. Consumers with diverse preferences were able to choose different models of autos and, therefore, satisfy their preferences. But suppose the situation changes due to the introduction of a new licensing procedure. To be an accredited automobile dealer, the state allows the dealer to sell only Chevrolets. In effect the Chevrolet industry which purchases the dealership shares from all other industries represents the state educational board as it imposes standards and guidelines on all local districts. The Chevrolet industry eliminates potential sources of competition and establishes itself as a monopoly seller of automobiles to the consumers of the state. The demand curve facing the Chevrolet industry becomes relatively less elastic, and thus contributes to an increase in allocational inefficiency.¹

The takeover purchase by one industry would be analogous to a state's successful implementation of complete standardization or uniformity of education provided throughout the state. A duopoly or oligopoly automobile environment represents variations in the success of these attempts. The existence of ten or twelve industries might be reduced to two or three in the case of less than perfect uniformity.

¹The analogy does not attempt to offer an explanation for the existence of few producers of automobiles. It merely clarifies the analysis relating to education.

Under either set of circumstances, nevertheless, the expected consequence involves a relatively less elastic demand curve facing a single industry.

Returning to the model depicted in figures 3.1 and 3.2, we shall contrast the effects of the elected SDE model with that of the local bureau model. Suppose the agency imposes a minimum output level of SS' in figure 3.3. Along with the minimum, the standardization process restricts the districts to specified course offerings, teacher qualifications, and textbook requirements. We expect the districts to face an increased marginal tax price, given by MTP' in figures 3.4 and 3.5 as a result of adhering to the state-imposed standards. The SDE, however, can counterbalance the effects of an increased tax price by introducing subsidy payments to the less than average income districts. The state, deriving its revenues from all districts' incomes, introduces subsidy schemes which are implicitly redistributive in nature. It, therefore, gives to Districts P and M (in this case) what it extracts from District R. OEFG in figure 3.4 illustrates the lump-sum subsidy received by District P.¹

Before comparing the output provided under the cost conditions

¹The figure 3.4 could with only minor adjustments, also represent District M. The overall effects on the two will be the same, differing only in specific quantity. For the same reason of simplicity, District M is omitted from the analysis of figure 3.3. There is no inherent reason why the state proposal will cause the subsidy-cost conditions to affect Districts P and M in the same manner. Other variations could be constructed which affect Districts M and R similarly. In effect, the subsidization plan may differ from this, but still result in the same outcome regarding the control gained by a centralized agency.

of this model to that of the local bureau model, we consider possible effects on the demand conditions facing the bureau. Following the state guidelines at least minimally, the local bureaus necessarily provide less diverse types of education. As a result, fewer products for substitution purposes confront the families when dissatisfaction is incurred for the product they consume. Another factor in this model also affects the choices a family makes. Along with the subsidization mechanism, rules restrict consumption of the education to the district in which residency is established.¹ The SDE, however, does not require complete uniformity among all localities so the variations which remain promote at least some degree of competition in this system. Overall, however, a single bureau faces a less elastic demand curve in the SDE model and exercises greater monopoly powers over educational provision. In figure 3.4, D_p depicts the demand curve facing District P.

We assume the bureau of District P continues to operate in its budget-constrained region as in the previous model. This results from the fact that state bureaucrats do not extend their powers as far as that implied by additional output; in other words, they do not produce in the demand-constrained region described in Chapter II. With a limited degree of control over finances and the fact that the members are elected by the people of the localities, the agency remains

¹According to Tiebout's model, this restriction reduces families' ability to "vote with their feet." See Charles M. Tiebout, "A Pure Theory of Local Expenditure," Journal of Political Economy 64 (October 1956):416-24.

somewhat responsive to the districts' concerns for education production. In this case, nevertheless, the bureau provides p' units of education, or that meeting state requirements. The SDE passes the subsidy to the consumer, but this factor does not cause the output of education to differ from the previous model. The standardization proposal of the educational bureaucracy, and its effects on cost and demand conditions, result in the different outputs. The allocational inefficiency increases to $x'z'$ with the expansion in educational output, compared to only xz before.

In 3.3 we examine the effects of an active SDE from the viewpoint of the consumer. District P faces a budget constraint AA'' as a result of the SDE restrictions on local bureaus. The nature of the subsidy by the state, however, results in an expansion of the constraint such that the consumer faces AJA^* . Deriving the consumption quantity as before (i.e., the point where the slope of the indifference curve intersecting AJA^* equals OE' in figure 3.4), the median voter of District P consumes p' units of education and is located at an indifference level indicated by e' in the elected SDE model. Comparing his post-standardization position at e' to that of no SDE interference, e , we find District P to be at a more satisfactory position in the SDE model.¹

We can apply the same procedure to District M. Because it also receives the subsidy, the members of the District are in a better

¹For simplicity, the figure 3.3 has left the shape of the indifference map unchanged by the alterations in the state. The conclusion reached by the districts is not altered as can be proved by comparing the consumer surplus effects in 3.4 and 3.5.

position than with the local bureau model. A similar outcome is not the case for District R, however, as it receives no subsidy, but instead, experiences the increased cost of the standardization program and a loss of purchasing power due to its subsidy contribution. In 3.5, R Bureau in its decision-making, faces the consumer's marginal tax price of MTP' , the more monopolistic demand curve D_R , and thus provides a reduced quantity, r' units of the educational product. $X'Z'$ represents allocational inefficiencies and exceeds those of the previous model. Figure 3.3. demonstrates the effects of the SDE policies on the consumers of the bureau's product. The costs of the programs resulting from standardization shifted the R budget line to CC'' . The additional effect created by the upper income group's contribution to the subsidization program caused a further, parallel shift of the constraint to C^*C^{**} . The indifference curve analysis locates the median family of District R at a level indicated by i' . Contrary to the welfare of the other districts, the two models indicate that the members of R are moved to a worse position by the state's programs.

Comparing the local bureau and elected SDE models, we see that a majority of districts perceive welfare gains from the more active SDE. In this context, our explanation for state control over education begins to emerge.¹ Even though the perception of welfare gains

¹Even though this explanation emerges, this research does not involve a full scale analysis of the dynamic path followed by SDEs in their historical gain of power. Instead, the major emphasis is on the cross-sectional variations which exist between present SDE structures.

leads to approval by localities, an institution of greater state control directly enhances the monopoly position of the bureaucracy. From the models presented thus far, we observe greater output of education in the SDE model. But of greater benefit to the SDE members, the second model also displays a larger educational budget. The third model makes further comparisons of the effects of the structural organization of education on its provision.

An Autonomous SDE Model

The third model developed to illustrate differential effects of institutional structures on public education provision, represents the most highly centralized form of SDE described in Chapter I. The governor of the state appoints the SDE members, virtually all school revenues originate from state sources, and the bureaucratic structure is quite complex. This section examines the provision of education under this third, extremely autonomous bureaucratic structure and finally compares the contrasting effects of the three models.

For reasons similar to those in the previous bureaucratic structure, the SDE members in the more autonomous state play a very active role in the policy-making of the local school districts. For, as before, the greater responsibilities represent an enhanced monopoly position for the bureaucrats. The monopoly element renders benefits to the SDE in terms of budget maximization and increased status.

The expected effect of state control in this more autonomous model differs, however, from the outcome of the elected SDE model. As discussed in Chapter I, the indirect link between an appointed SDE and

the families of the localities creates a complexity in the SDE's utilization of local districts' inputs into the decision process. As a result of the different inputs in decision-making, we expect the provision of public education to differ under the two structures.

When discussing these differences, we must again consider those factors which enable the SDE to behave in a more monopolistic fashion. In addition to the circuitous route between local feedback and the appointed SDE, the state agency in this model controls financing of school expenditures to a greater extent than in the elected SDE model. As a result, the SDE can maneuver the redistribution of resources in an extremely subtle fashion.

For purposes of simplicity, we again focus on District P. As before, OEFG in figure 3.6 indicates the subsidy received by the lowest income district in the model.¹ The guidelines and requirements and thus, the minimum accepted output for District P do not yield p' units of education as in the elected SDE model. Instead, the SDE exercises its powers and imposes standards for localities such that District P will provide p^* units of education. The SDE causes output to be provided at that point where the taxpayers would refuse to purchase an additional unit of education.² The greater output has been reached

¹The subsidy contributed to the low income districts may actually be greater in this setting than the previous one. In order to make more explicit comparisons, we assume the subsidies are equal. Allowing it to be greater would reinforce the conclusions emerging from this analysis.

²In terms of Chapter II, the SDE is operating within its demand-constrained region in this case.

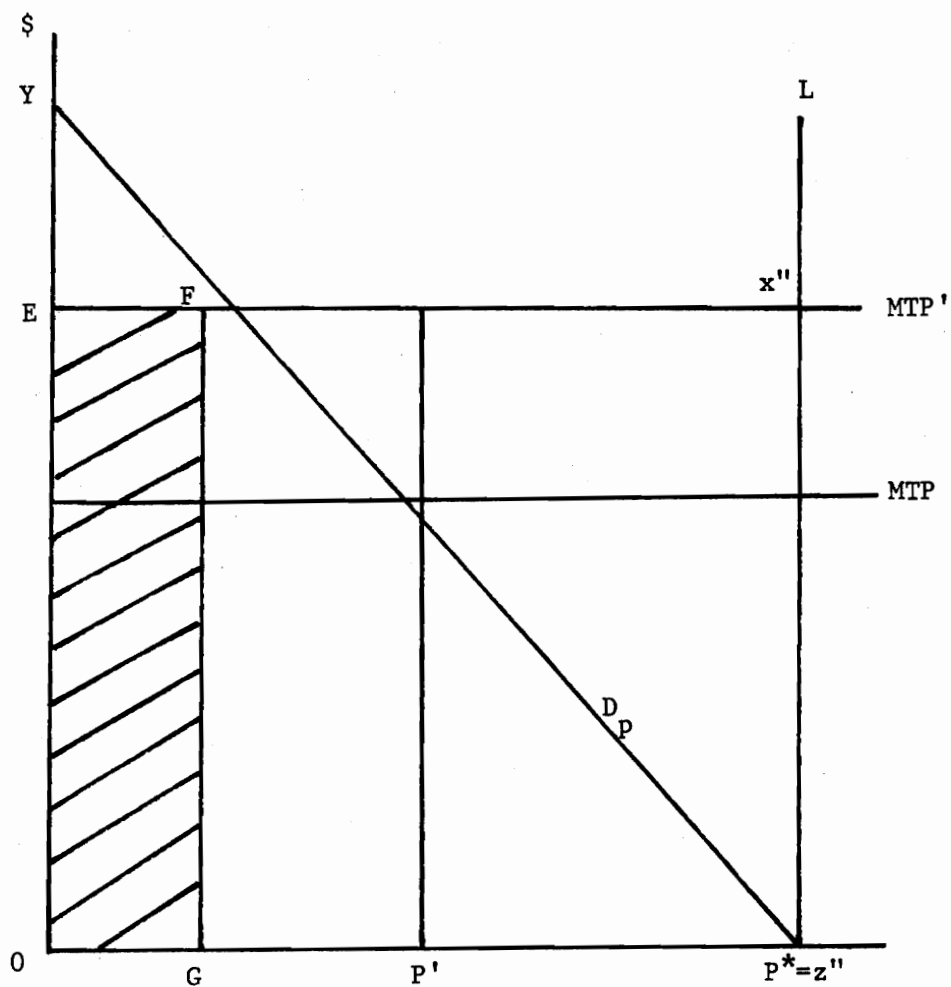


Fig. 3.6. Output resulting from autonomous bureaucracy.

largely because of the weaker link to the localities, and also because of the greater hierarchy of SDE structure. These factors allow provision of public education to reflect the interests of the bureaucrats to a larger extent than in the previous model. Since (as discussed in Chapter II) the underlying interest of the bureaucrat is to maximize the budget, the extended output aids in meeting his objectives.

X"Z" represents the allocational inefficiency at p^* resulting from the more monopolistic bureaucratic provision. OYP* illustrates the budget received for educational purposes. The expanded budget symbolizes an enhanced position for the SDE. Since the size of the budget is generally the measure of success for the bureaucracy, the SDE in this model achieves a more desired status. In general, the more autonomously structured SDE occupies the higher status position because of its ability to extract the largest educational budgets.

An examination of the third model reveals variations in educational provision relative to both the local bureau and elected SDE models. The local bureau model, with its real world counterpart only in a historical context, led to an output of education nearly approximating that of a private competitive market. The introduction of a more monopolistic bureaucracy model with its elected SDE members demonstrated an extension of educational output, greater inefficiencies, and an increased budget accruing for educational purposes. Finally, the most autonomous structure, or that with the most monopolistic bureaucracy provided the highest quantity of educational output, experienced greater allocational inefficiencies than either of the two previous

models, and extracted the greatest budget of the three institutional arrangements. From these models, we predict a direct relationship between the structure of the agency and the educational output provided. The higher the degree of bureaucracy and the more monopolistic structures result in both the larger quantities of education provided and the greater budgets allocated to education.

Thus far this chapter has described contrasting effects on public education resulting from three institutional frameworks. Through these theoretical models, the SDE was regarded as desiring a greater role in educational provision because of the monopolistic rewards accruing to the bureaucracy. The greater degree of monopolization and, thus, the higher rewards belong to those SDEs which are structured in the most autonomous manner.

The construction of these models adds an element of explanation to the previously discussed centralization movement of school control. That element concerns the enhanced monopoly position for the SDE. As seen here, the members of the SDE have a motivation to secure greater powers in the realm of public education. For through the acquisition of greater responsibilities, bureaucrats satisfy their objective of budget maximization. The next section extends the idea of the SDEs' role in centralization of school control as it focuses on the relationship between SDE structural organization and school district consolidation policies employed by the various states.

The Bureaucracy Models Extended:
School District Consolidation

This section examines an additional facet of educational policy-making which we project to contribute to the monopoly-enhancing movement of SDEs. The area of interest here is school district consolidation and its link to the type of SDE structure in the states. In particular, we consider the role of SDEs in advocating consolidation, and the influence of SDE organization on the consolidation policy utilized by the state.

The states, acting through the legislatures possess the power to create whatever type of local school administrative organization they desire. The local organization, or local district, is classified as a quasi-corporation, as distinguished from a corporation proper. The state creates the local school district as an instrument to facilitate in the administration of educational services. In addition to creating school districts, the legislature may abolish them, or alter their boundaries as public policy dictates.¹ The legislature of each state, therefore, determines the mechanism through which its local school districts may consolidate. Commonly, however, the policy chosen by the legislature is that recommended by the SDE. The remainder of this section looks at the effect of SDE structure on the specific policy of consolidation enacted by the legislature.

¹Lee Garber and Newton Edwards, The Law Relating to the Creation, Alteration, and Dissolution of School Districts (Danville, Illinois: Interstate Printers and Publishers, 1962) pp. 3-4.

Before looking at the legal methods describing ways in which consolidation can take place, we investigate the overall effects of consolidation in order to ascertain its desirability to SDEs. Consolidation is a form of district reorganization which joins two or more districts in the formation of a single district. Either portions of each component district's rules govern the new district, or the consolidated district adopts an entirely new set of rules concerning its provision of public education. Under either setting, the consolidated district represents a more centralized means of educational provision than previously existed.

In the above context, SDEs may desire consolidation as a means of increasing their monopolization over the output of public education. As the number of competing local districts is reduced, localities have fewer means to gauge the performance of the bureau providing their education since families face fewer alternative educational products for substitution purposes. As a result, the bureaucracies are able to reap the gains of a more monopolistic position. Consequently, SDE members have an incentive to pursue the consolidation of local school districts. Because of the monopoly-enhancing incentive, we predict SDEs will advocate policies which result in consolidation of school districts.¹

The above analysis indicates that a monopoly-enhancing incentive motivates the SDE to advocate consolidation of school districts.

¹Again the Staaf argument in The Public School System in Transition offers an additional explanation for the bureaucrats' advocacy of consolidation in terms of the relationship between salaries and district size.

In the first model discussed in this chapter, a SDE existed in name only. The educational policy-making was controlled by the individual localities. As a result, the model lacks the monopoly motivation compelling SDEs to advocate consolidation.¹

But the two SDE models provide a framework conducive to consolidation proposals. Since consolidation of school districts originates in the state legislature, the SDE must first convince the legislature to institute laws providing for district reorganization. The legislature depends on the SDE as its chief adviser concerning education and usually enacts policies which correspond closely to those recommended by the SDE.

The effectiveness of the consolidation legislation, however, depends on the type of policy introduced by the legislature. There are three general types of consolidation--mandatory, permissive, and semi-permissive.² The first gives the SDE authority to plan and approve consolidation procedures. Under the second form, all aspects of the reorganization are determined by the localities. The last type gives the SDE authority to plan for consolidation, but localities must give the final approval for the SDE's plans.

¹This does not imply other motivations to consolidate are non-existent. For instance, economies of scale may induce the localities to merge. At this point, however, we are examining only the monopoly incentive.

²U.S. Department of Health, Education, and Welfare, School District Reorganization Policies and Procedures, by C. O. Fitzwater (Washington, D.C.: Government Printing Office, 1957), pp. 23-5.

Mandatory legislation describes the type giving the SDE the greatest degree of control over consolidation. But no automatic device guarantees that this type of legislation will be passed by the legislature. In order to insure the passage of this form, the SDE is expected to exercise its influence as much as possible. The autonomous SDE described in the previous section, possesses the highest degree of bureaucracy status. Consequently, its power with the legislature is quite strong with respect to the securing of desired policies. As a result, we expect the autonomous SDE to be best able to persuade the legislature to enact mandatory legislation.

The elected SDE model portrayed an agency with less bureaucracy status than the autonomous one. It will, therefore, have less influence with the state legislature. Its recommendations still provide a source of reference for the legislature and will be instrumental in securing consolidation legislation. Even though the state may give the SDE authority to plan for consolidation, its weaker status is likely to result in legislation giving it less power over the procedure than the autonomous structured SDE (i.e., the legislature may enact only semi-permissive means of consolidation).

The outcome of consolidation proposals does not depend entirely upon types of reorganization legislation. For instance, the degree of centralization of financing--only one aspect of SDE power structures--also affects the consolidation procedures. The elected SDE which is able to secure only semi-permissive legislation, can influence the localities' decisions on consolidation plans through alterations in

the school financing plans. By changing the subsidy-tax price of education, the SDE can provide schemes which would cause a majority of localities to vote favorably concerning consolidation.

Arguments given above indicate that a monopoly-enhancing incentive motivates SDEs to advocate consolidation. From this, we predict the local competitive bureau model to experience less consolidations than the SDE models.¹ Even though the analysis illustrates that the more autonomously structured SDE is able to secure legislation guaranteeing consolidation, the elected SDE is also expected to be influential in securing consolidation. The difference in the extent of consolidation in the two models depends on the latter's ability to introduce financial schemes along with its consolidation plans which gain the approval of a majority of the state's districts. The next chapter discusses consolidation along with the differentiations emerging from the previous sections of this chapter concerning SDE roles from an empirical perspective.

¹As before, we are abstracting from economies of scale arguments in order to focus on the role of the SDE in advocating consolidation.

CHAPTER IV

THE STRUCTURE OF PUBLIC EDUCATION: ROLE OF STATE DEPARTMENTS OF EDUCATION

Chapter III has given a theoretical explanation for state differences in the provision of public education. The variations depend on the extent of monopoly powers exhibited by a centralized agency of control. The degree of monopoly power in turn is influenced by the type of structure of SDE within a state. This link between SDE structure and the provision of public education establishes the framework for the case studies conducted in this chapter. Before looking at specific states, however, we briefly present certain implications emerging from the previous models. The case studies section then incorporates the implications as related to the specific states observed here. The final section tests the implications in a more general fashion to demonstrate the nationwide applicability of the analysis given of the four states.

Implications of the Model

From the models derived in Chapter III, certain implications regarding the provision of public education emerge. In this section, we consider three types of implications. The first concerns the relationship between the type of organizational structure surrounding

education and the expenditures for school purposes; the second type concerns the role of the SDE in prescribing policies to which all localities must adhere; and finally, the third set of implications deals with the effect of the SDE on school district consolidation.

Both the general theory of bureaucracy developed in Chapter II and the models developed later indicated a positive correlation between the size of the budget and the monopoly power of the SDE. The members of the SDE desire the large budgets for this provides one mechanism through which their personal goals are generally fulfilled. Consequently, certain expectations emerge with respect to expenditure patterns of public elementary and secondary schools. First, as a result of the nationwide trend toward greater roles for SDEs, or as developed in this dissertation the extensive monopolization of public school output, we predict school expenditures to show increases throughout this century. But secondly, and more importantly in terms of the theme of this study, the model also implies that the rate of expenditure increases in the various states will be correlated with the degree of monopolization that has taken place in an individual state.

The first expenditure implication needs little discussion. It is virtually commonplace knowledge that school expenditures have increased tremendously in this century. In Table 4.1, we present the extent of this growth pattern through data on real per pupil current expenditures. In 1919-20, the U.S. spent an average of \$134 (adjusted according to 1973-74 purchasing power) per pupil in elementary and secondary schools. Increasing steadily throughout this century, real

TABLE 4.1

CURRENT EXPENDITURES PER PUPIL IN ADA IN
PUBLIC ELEMENTARY AND SECONDARY SCHOOLS

Year	Expenditures ^a	Expenditures/ per capita GNP
1919-20	133.66	.06
1929-30	236.25	.12
1939-40	293.97	.12
1949-50	411.29	.11
1959-60	595.50	.13
1965-66	784.85	.14
1967-68	902.23	.15
1969-70	1,007.65	.17
1971-72	1,121.79	.18
1973-74	1,207.21	.18

^aAdjusted dollars 1973-74 purchasing power.

SOURCE: U.S. Department of Health, Education, and Welfare, Statistics of State School Systems (Washington, D.C.: Government Printing Office, 1976); and U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States (Washington, D.C.: Government Printing Office, 1970-5).

expenditures per pupil increased by approximately 800 per cent by 1973-74, to an average expenditure of \$1,207. Perhaps more revealing with respect to the rise in educational expenditures, the last column of Table 4.1 gives expenditures per pupil as a proportion of per capita income. The data indicate that this ratio has tripled over the past fifty years from only .06 in 1919-20 to .18 in 1973-74.

But even though these data generally support the monopoly argument, many other factors have contributed to increasing expenditures for education. To demonstrate that the changing structure of SDEs is an important contributing factor to the growth in expenditures, the analysis requires more specific information. In particular, the model hypothesizes that certain structures of SDEs will more likely lead to monopolistic behavior on the part of the bureaucrats than will other structures. The greater monopolistic tendencies will be present in the more autonomously structured SDEs. As a result, we predict greater expansions in budgets for the state with high, centralized, power-structure characteristics. Testing of this prediction will take place in the case studies and concluding sections of this chapter.

In addition to the explicit expenditure implications discussed above, a more general type of implication also emerges. This refers to the number of restrictions imposed on the localities by the SDEs. The more autonomously structured systems lead to a greater centralization of policy-making for the states' schools, for SDEs use this as a means of increasing monopoly power. Along with centralization of decision-making comes less variability in education as the output more

closely resembles that of a single producer. The effects of centralized decision-making take the form of requirements or regulations which tend to "standardize" the public schools within a state. As with expenditure implications, this chapter's case studies and the more general, concluding section examine this expectation.

As revealed in Chapter III, consolidation of school districts represents an additional mechanism through which SDEs can increase their monopolization over the provision of public education. The SDEs are motivated to advocate consolidation largely for this reason. The models suggested that the general tendency toward centralization would be accompanied by more states passing semi-permissive or mandatory reorganization legislation. In the 1945-1966 period, seventeen states used some form of mandatory legislation, and nineteen states introduced semi-permissive legislation as a means of accomplishing consolidation.¹ This illustrates a general idea of the widespread usage of legislation giving the state bureaucracy the major role in approving consolidation.

The models implied, in addition, that distinctions in SDE structure influence consolidation. They predicted that the degree of centralization of financing was an important factor in securing consolidation's adoption. Through changes in state aid to the localities, SDEs were better able to "persuade" the local districts of the desirability of consolidation. But even more encompassing, the model suggests

¹C. O. Fitzwater, State School System Development: Patterns and Trends (Denver, Colorado: Education Committee of the States, 1968), pp. 23-5.

that state structures, organized in the most autonomous manner, will most likely achieve consolidation.¹ The overall type of structure, therefore, is likely to affect the probability of consolidation, both because of the inherent motivation to reorganize, and the ability to secure means to accomplish its approval. The remaining sections of this chapter consider the consolidation implications along with those presented previously.

State Case Studies

This section focuses specifically on the SDE within four states. Rather than observing all fifty states in abbreviated fashion, we chose to analyze four states in a detailed manner. The different geographic regions of the states eliminate bias which might be introduced with respect to various sections of the country. The studies incorporate the descriptive evidence of Chapter I with the models constructed and implications suggested by Chapters II and III. We consider, in other words, the characteristics of the SDE in various states in the context of the expected degree of power they yield to the agency. The studies then relate the classification of power of the state's SDE structure to the relative extent of centralization of responsibilities and duties existing in that state. In effect, this concerns the division of authority allocation between the SDE and local school districts with

¹High autonomy includes the centralization of financing discussed in the previous implication, but also includes the other factors of SDE power--membership selection process and degree of hierarchy in the bureaucratic structure of the agency.

respect to educational decision-making. Examining the states from a historical perspective, the case studies analyze both the broad and more specific implications discussed in the previous section.

Mississippi

The case studies begin with an examination of the state of Mississippi. We give a very brief history of the first school laws in the state in order to trace the origins of school control. Enactment of Mississippi's first statewide school law occurred in 1846. The philosophy of the 1846 law focused on the idea of local control of schools. It established a general school commissioner in the state, but his chief responsibilities consisted of keeping statistical reports. County superintendents and county board commissioners were employed to adopt by-laws, issue licenses, and employ teachers for that county. Legislation gave the Board of Police in each county the power to levy school taxes, but only if they had the consent, in writing, of a majority of the heads of families in that district.¹

The next major law passed in Mississippi with respect to education came in 1870. This law made the initial break from a system of local control and established the path for the development of an ultra-central control. The legislature outlined a plan for a public school system and for a SDE. A state superintendent retained not only his previously statistical duties, but also gained general supervision of

¹Robert W. Griffith, "Mississippi," in Education in the States: Historical Development and Outlook, ed. by Jim Pearson and Edgar Fuller (Washington, D.C.: National Association of Education, 1969), pp. 647-676.

all school interests of the state. The plan provided for the state superintendent's election to office, but the other members of the SDE were ex officio. The attorney general and secretary of state, serving their designated offices and as members of the SBE, completed the composition of the Board.

The 1870 Law retained county boards to make by-laws, issue licenses, etc., but changed the determination of school taxing. The Board of Supervisors could levy a special tax for school purposes as estimated by the county school board, provided it did not exceed 15 mills. Such direct taxation imposed on the people caused considerable resentment among those who blamed nontaxpaying legislators, and also among persons who simply feared too much central control.

From 1870 to the 1940s, there were few dramatic changes in Mississippi's public education system, yet slow, gradual alterations in the provision mechanism were consistently occurring. For instance, as early as 1896 the legislature created the State Board of Examiners within the SDE, for the purpose of certifying teachers. Financial roles began to be entertained at the state level as early as 1890. At that time the Constitution provided state funds to be allotted according to the population of educable children. In 1919, an amendment voted by the people, established an equalizing fund which would provide a minimum school program to all local units in the state.¹ In terms of restrictive behavior to be followed according to state dictates,

¹Ibid., p. 654.

the actions of the state superintendent in 1930 decreased the flexibility allowed among local districts. Although school accreditation was not formally a SDE responsibility, the Superintendent took it upon himself to lay down a full set of rules and regulations which schools would have to follow to become accredited. At the same time, he advocated stronger teacher certification laws, and much greater consolidation of schools. Although the actual source of control over accreditation of schools might be debatable, formally, the State Accrediting Commission and Mississippi Accrediting Commission shared the responsibility for elementary and secondary public schools.¹

These changes merely marked the background for the extensive revamping of Mississippi public education which began in the early 1940s. Limitations on local school districts began to be more rigorously implemented with the passage of the free textbook law in 1940. The legislature established a state textbook rating and purchasing board, composed of the governor, the state superintendent, and three members appointed by the governor, and prescribed its duties. In addition, detailed plans were made concerning how the books were to be selected, adopted, purchased, distributed, cared for, and used in all schools through the first eight grades. Two years later, the law was amended to include all twelve grades. Since then a rating committee has also been established which appraises the books considered

¹Mississippi State Department of Education, Standards for Accreditation of Elementary and Secondary Schools: Bulletin 171 (4th ed.; Jackson, Mississippi: State Department of Education, 1976), p. 1.

for adoption and recommends them to the Purchasing Board. The Board adopts and furnishes textbooks only for use in those courses established by special acts of the legislature, or courses of study adopted by the SBE. In selecting books for all other subjects, the local school district may be allowed to select any adopted state textbook without being restricted to a single declared adoption.¹

In 1942, a new School Code was adopted specifically spelling out the duties of a reorganized SDE. Not only were its duties expanded, but the physical make-up of the SDE was enlarged to maintain these added responsibilities. In addition to the ex officio SBE which previously existed, the SDE was expanded so as to include the state superintendent, the assistant state superintendent, six division directors, and various aides. In addition the role of the Board was to regulate all matters arising in the practical administration of the school system. The duties of the state superintendent were to remain largely supervisory in nature. Since the ex officio SBE was delegated a much greater proportion of duties than the CSSO, Mississippi's classification on the basis of SDE selection, falls in the category of high degree of expected power.

The 1942 reorganization provided extensive duties to the state educational agency. Direct powers given to the SBE were such that the board was (with minor amendments enacted in 1953) and still is,

¹Mississippi, A Compilation of the School Laws of Mississippi (Jackson: State of Mississippi Department of Education, 1973), sec. 37-43-3 to 37-43-31.

"authorized, empowered, and directed to adopt and promulgate rules and regulations governing the issuance of all teachers' certificates and to administer said rules and regulations."¹ The School Code also strengthened the textbook laws of 1940 and 1942 by giving the SBE authority to appoint a curriculum committee for the purpose of making recommendations to the Board.² In line with this authority, legislation was passed in that same year which defined the required curriculum of both the grammar and high schools of Mississippi. Thus, with the power to certify teachers, the authority to determine what courses to be taught, and the right to adopt the textbooks from which they were taught, the SDE had gained a tremendous amount of control over the public schools' output.

Along with changes taking place within the organization of the SDE, the 1940s brought a structural change in the method of financing public school expenditures. Since the early laws establishing state aid for schools, state sources had contributed increasing proportions of the revenues received by local districts. By 1939-40, this proportion had grown to 37.5 per cent. However, localities remained the chief contributor of finances with 59.7 per cent of elementary and secondary revenues originating from local sources. As can be seen in Table 4.2, however, the next decade brought many reforms in this area. Over the ten year period, 1939-1949, local contributions declined by

¹Ibid., sec. 37-9-9.

²Ibid., sec. 37-13-9.

TABLE 4.2

% SOURCE OF MISSISSIPPI ELEMENTARY AND
SECONDARY PUBLIC SCHOOL REVENUES

Year	Federal	State	Local
1939-40	2.8	37.5	59.7
1941-42	5.7	35.2	59.1
1943-44	3.2	46.5	50.3
1945-46	2.9	46.7	50.0
1947-48	6.9	50.8	42.3
1949-50	8.5	47.8	43.6
1955-56	7.7	51.9	40.4
1957-58	7.0	53.5	37.8
1963-64	8.2	57.0	34.8
1965-66	16.8	50.4	31.4
1967-68	22.1	48.8	28.3
1971-72	27.8	48.5	23.6
1973-74	23.8	52.6	23.3

SOURCE: U.S. Office of Education, Biennial Survey of Education in the U.S. (Washington, D.C.: Government Printing Office, 1940-1958); and U.S. Department of Health, Education, and Welfare, Statistics of State School Systems (Washington, D.C.: Government Printing Office, 1963-1974).

16.1 per cent, or to only 43.6 per cent of school revenues. Continuing this trend throughout the fifties, by 1963-64 state sources accounted for 57 per cent of school financing. By 1973-74, only 23.3 per cent of school funding was from local sources, which is another reason to expect a strong system of state control over education in Mississippi.¹

The effects of the growing centralization of financing school expenditures, and a more autonomously structured SDE in terms of bureaucratic hierarchy can be seen in events which have occurred since World War II. School district consolidation illustrates one such effect which demonstrates the growing monopolization by the state agency. Until 1953, Mississippi had a permissive law governing school district organization. Consistent with the relationship developed in Chapter III, a stronger role gained by the SDE in the 1940s led to the passage of an indirect mandatory reorganization law in 1953. The law established an Educational Finance Committee within the SDE to supervise and approve the district organization proposals presented by county boards.² In addition, it authorized and required the county boards to reorganize local districts in each of their respective counties in a manner that would meet the approval of the state agency. The provision making it possible to deny state school building funds to any county until a plan of districting was presented which met the approval of the state agency

¹Since the late 1960s, the federal government has also played a role in reducing school funding at the local level. Mississippi, because of its low per capita income, has been affected more than most states by these funds.

²Griffith, "Mississippi," p. 657.

made the requirement effective. As a result of this legislation, the 1,417 school districts in Mississippi in 1953 were reorganized into 150 districts by 1961. The huge number of consolidations placed Mississippi highest in the nation over the period 1946 to 1966 with a 96.4 per cent reduction in the number of school districts. The law which so successfully accomplished consolidation, did not provide for a referendum by the electors to approve or reject the proposals but provided only that they be presented and reviewed with hearings at the local and county levels.¹

Mississippi bases its present institution of public education a great deal on the type of organization developed in the forties and fifties. The ex officio SBE delegates the thrust of the educational policy-making to various division directors.² The directors of the various divisions such as finance and administration, and division of instruction, are selected by and hold office subject to the will of the superintendent.³ But the CSSO still holds little actual power in policy-making. The School Code as enacted in 1973 assigns specific duties to eight division directors in the department. Among these, the director of the division of instruction is perhaps the most

¹A. L. Summers, Effective Legislation for School District Reorganization (Jefferson City, Missouri: Missouri State Department of Education, 1968), pp. 10-11.

²Even though ex officio selection was not included in the classification scheme in Chapter I, its effects are analogous to that of governor-appointed methods. This is because of the same indirect links to localities' preferences on education, since the ex officio members were elected on the basis of their views on an alternative matter.

³Mississippi, School Laws, sec. 37-3-13.

comprehensive in authority with duties ranging from teacher training, certification, and placement, to the supervision of curriculum services.¹

Some of the most recent changes come in the areas of curriculum prescriptions and accreditation procedures. Following the delegated power to determine courses for schools, additions to the general requirements were made in 1953, 1962, and 1964. By 1966, Mississippi ranked fifth highest in the nation with respect to its number of curriculum prescriptions by specifying 26 items of instruction. The grammar school curriculum ranges from the basic reading, writing, and arithmetic, to the courses such as civil government and history which strive to instill a sense of national loyalty, to the more unusual courses such as forestry and community sanitation. High school requirements are somewhat similar in that they cover a broad spectrum of courses and are quite comprehensive in coverage.

As an additional step, beginning with the 1970-71 school year, the SBE assumed full responsibility for accrediting schools as required by legislation enacted in 1970.² Nonpublic schools could ask to be accredited by the same institution, but there were no restrictions on the valid existence of other accrediting agencies. Guidelines and minimum requirements under the accrediting process included student enrollment, professional personnel, and curriculum requirements. Several

¹Ibid., sec. 37-3-21.

²Ibid., sec. 17-1 to sec. 17-9.

miscellaneous, yet quite strenuous mandates, are concerned with such seemingly trivial matters as providing various colors of craft paper to elementary students. In one section of the standards, requirements are made which require student records to be kept on file "in a fire resistant unit bearing the Underwriters Laboratories Inc., 'C' Label."¹ The accreditation requirements, have in other words, developed to such an extent that the most insignificant matters are now determined by state regulations.

The institutional changes have followed a particular path throughout this century. A greater magnitude of changes characterized the structural reorganization over the past thirty-five years. Observation of Mississippi's growth in per pupil expenditures clearly indicates that the changes have been of a monopoly-enhancing nature. Expenditures increased from 1950 to 1970 by 495 per cent compared to a nationwide average of 275 per cent. But in addition Mississippi's public schools are standardized and governed at the state level in seemingly every aspect of its provision. The deviation from the uniform system appears totally stifled. As a result, local districts play very little role in determining policies for the provision and consumption of public education. When considered in the perspective of the state's form of educational organization, we do not find the high degree of standardization to be surprising. As seen in Chapter I, the three basic factors concerning the type of structure (selection of SDE

¹Mississippi SDE, Standards for Accreditation, p. 9.

members, complexity of the educational bureaucracy, and centralization of financing) cause Mississippi to be placed among those states predicted to possess the greatest amount of SDE power. The analysis of Mississippi's educational history clearly relates the changing structure of the state organization to expanded powers and control of the public schools. The relative degree of power displayed at the state level in Mississippi emerges in a more obvious fashion as additional states are examined.

Nevada

From Mississippi we go to a different geographic region of the U.S. and examine the educational system of the state of Nevada. The constitution of Nevada, adopted in 1864, provided for a system of public schools. The legislature established a SBE in 1865 composed of the governor, an elected state superintendent, and the surveyor general of the state. In 1931, the legislature altered the membership of the SBE to include the governor, the state superintendent, and one elected representative from each of the school districts, a structure lending itself to a relatively high degree of control by the localities.¹ A 1907 Act constituted the only major school act to be passed during this period. It established a commission composed of the SBE and five appointed lay members to adopt textbooks. The same act also named the SBE as the teacher certifying agency of the state, even though hiring and much discretionary power still remained at the local level.

¹Harold Brown, "Nevada," in Education: Historical Development, ed. by Pearson and Fuller, pp. 767-785.

Very few substantial changes occurred in the state's institution of education between the 1930s and 1955. But in 1956, Nevada formally organized a SDE. It consisted of the elected SBE, the state board of vocational education, the state textbook commission, and such other agencies and offices needed to perform the educational duties of the state.¹ Legally, the SDE was given the power to perform all administrative functions of the state relating to the supervision, management, and control of schools not conferred by law on some other agency. It explicitly assigned the SBE the responsibility to prescribe and cause to be enforced the courses of study for the public schools.² In addition, the SBE appoints the state superintendent who, in turn, appoints deputies, associates, and professional staff. Since its recognition in 1956, the SDE has assumed numerous responsibilities and rights concerning the educational duties of the state as will be demonstrated later.

Along with the establishment of the SDE in 1956, a reorganization of school financing plans also occurred. A new plan known as the Peabody Formula, levied a state sales tax with a designated part of its revenues going to public school support. There was much opposition to the tax and many proposals to increase its amount were rejected by the voters. Much of the opposition arose from the fact that local financial support of schools represented a Nevada tradition. In 1945, for instance, local sources accounted for over 75 per cent of the school

¹Nevada, Revised Statutes, sec. 385.010.

²Ibid., sec. 385.110.

revenues (see Table 4.3). The Peabody Formula erased this tradition throughout the period of its effectiveness (1956-1967).

Along with the development of the SDE and the change in financing school expenditures in the mid-1950s, mandatory legislation dissolved the 186 existing school districts in the state and established the county as the local unit of school administration.¹ The 17 counties in the state, therefore, each became a local school district. Again, as developed in the models of Chapter III, the mandatory legislation accompanied structural changes yielding more power to the state bureaucracy.

Until the reorganization of the 1950s, the governing of schools in nearly all aspects constituted primarily a local matter. Previously, there could be a superintendent of the county or district high school when there were ten teachers employed, and an elementary school superintendent with the equivalent number of teachers. Two entirely different philosophies of education might exist in the same geographic area, one pertaining to the secondary school and another to the elementary. Similarly, different manners of financing applied to secondary and elementary education. But the reorganizations of the 1950s considerably weakened the local system of schooling in Nevada.²

Even though in 1967 the SBE received authority concerning the final selection of textbooks, Nevada does not assign its SDE the

¹Summers, Effective Legislation, p. 7.

²Brown, "Nevada," p. 777.

TABLE 4.3

% SOURCE OF REVENUES OF NEVADA ELEMENTARY
AND SECONDARY PUBLIC SCHOOLS

Year	Federal	State	Local
1939-40	3.9	22.0	74.1
1941-42	3.4	19.9	76.7
1943-44	5.9	17.7	76.4
1945-46	3.6	18.7	76.4
1947-48	7.0	37.1	55.9
1949-50	8.5	36.5	63.7
1955-56	15.2	41.2	43.7
1957-58	9.4	45.6	45.0
1963-64	7.4	49.8	42.4
1965-66	10.4	45.5	43.7
1967-68	8.4	37.6	53.4
1971-72	9.0	38.9	52.1
1973-74	6.9	37.1	56.0

SOURCE: U.S. Office of Education, Biennial Survey of Education in the U.S. (Washington, D.C.: Government Printing Office, 1939-1958); U.S. Department of Health, Education, and Welfare, Statistics of State School Systems (Washington, D.C.: Government Printing Office, 1963-1974).

responsibility or right of accrediting the elementary or secondary schools. In fact, no accrediting association exists solely for the state of Nevada. Nor are the curriculum prescriptions adhered to by all public schools as stringent as those existing in Mississippi. The 1966 survey shows approximately the U.S. median number of prescriptions, or ten course requirements to be applicable to the public schools. Among the restrictions, the most prominent prescribed courses contribute to national loyalty and good citizenship. For instance, statutes since 1956 added American history, the history of Nevada, and high school instruction in citizenship.¹ Following the national movement of environmental awareness, the 1971 legislature required that instruction be given in both elementary and secondary schools on environmental protection and conservation of resources.² It also required instruction in American government not only in the public schools, but also in the private. Furthermore, all nonpublic schools in Nevada must conform to SDE requirements in order to secure approval to operate. Other restrictions are also imposed on the private schools in order to certify their students as fulfilling compulsory attendance requirements.

In a relative sense, consumers of education in Nevada face more variability than those in Mississippi because of the fewer regulations

¹Nevada, Revised Statutes, sec. 389.030 - sec. 389.080.

²Ibid., sec. 389.110.

³Helen Jellison, ed., State and Federal Laws Relating to Non-public Schools (Silver Springs, Maryland: Bascomb Association, Inc., 1975).

imposed by the SDE. Expenditure data provide further evidence of less monopolistic tendencies in Nevada. For over the same period examined for Mississippi, Nevada's per pupil expenditures grew only 212 per cent, much below that of the U.S. average.

Even though centralizing tendencies have occurred, state control over public education is not as total and comprehensive as that found in Mississippi. But again, this supports the theory developed throughout the dissertation. The centralization efforts which did occur, took place when the form of state organization changed in a manner that removed the direct link to the localities. But shifts in organization again occurred in 1967, when legislation returned financing responsibilities to the localities. According to the classification of Chapter I, Nevada's three-component structure indicates that SDE power in Nevada would be relatively less than in other states. Based on the two states thus far observed, we see the emerging relationship between structural form and degree of monopolization of school provision demonstrated by the theoretical models.

Pennsylvania

At this point we shift our observations to another geographic region of the country--that of the northeast--to the state of Pennsylvania. The School Code of 1911 granted the first formal recognition of a SBE. However, its structure was revamped only ten years later with the establishment of a State Council of Education. The ex officio state superintendent headed the Council, which was composed of nine members

appointed by the governor.¹ Only two years later, in 1923, the Edmonds Act gave the the state control of all teacher training and certification. The Act also gave the State Council the right to prescribe high school studies, the beginning of a responsibility for curriculum requirements that has increased throughout this century. Even though the General Assembly passed the Act, its increased centralization created controversial stirs among supporters of local control of schools. At the center of the attacks were teacher certification requirements, increase in salaries, and interference in such administrative matters as sanitation, attendance, and construction.²

After Pennsylvania provided for a SDE in 1929, major changes did not take place in its public school system again until the mid-1940s. At that time, the General Assembly introduced a new pattern of state aid to local school districts. It created a State Public School Building Authority and established the State Tax Equalization Board to help determine local wealth for school tax purposes. As can be seen in Table 4.4, the trend away from local control of finances began rather slowly in the 1940s. By 1955-56, Pennsylvania actually fell behind the national average in terms of the amount of funds contributed by local sources. According to the theory of this dissertation these changes established the foundation for the development of stronger state

¹Samuel N. Francis, Pennsylvania School Law (Cleveland: Banks-Baldwin Company, 1970).

²Patricia Rosenbaum, "Pennsylvania," in Education: Historical Development, ed. by Pearson and Fuller, pp. 1031-59.

TABLE 4.4

% SOURCE OF REVENUES OF PENNSYLVANIA ELEMENTARY
AND SECONDARY PUBLIC SCHOOLS

Year	Federal	State	Local
1939-40	.7	21.0	78.3
1943-44	.5	26.7	72.8
1945-46	.5	26.9	69.5
1947-48	1.1	35.9	63.0
1949-50	1.2	35.1	63.7
1955-56	2.2	46.0	51.8
1957-58	2.4	44.8	52.6
1963-64	2.6	42.9	54.3
1965-66	7.7	42.1	49.8
1967-68	7.4	42.4	49.8
1971-72	6.8	47.0	46.2
1973-74	8.6	46.2	45.2

SOURCE: U.S. Office of Education, Biennial Survey of Education in the U.S. (Washington, D.C.: Government Printing Office, 1939-1958); U.S. Dept. of Health, Education, and Welfare, Statistics of State School Systems (Washington, D.C.: Government Printing Office, 1963-1974).

control. And such appears to be the case, for along with the financial changes implemented by the 1946 Assembly came a mandated reorganization of school districts. It by no means represented a comprehensive consolidation success, because it did not penalize for failure to comply with the mandate.¹ In addition, massive changes also occurred in curriculum regulations for the public schools as the General Assembly included these in its legislative acts.

The next sweeping reorganization occurred in 1961 with proposed alterations in the State Council of Education. Even though passed at that time, the legislature repealed the changes only two years later. Proponents of local control strongly resisted the 1961 Act and as a result many legislators favoring the changes were unseated at the next election. Major changes within the state's organization of public education quickly followed the repeal in 1963. The abolition of the State Council was included among the changes. In its place the legislature established a SBE, composed of seventeen members, either ex officio or appointed by the governor with the advice and consent of the senate.² The reorganization reduced the powers of the state superintendent, newly established as the secretary of education, and transferred it to the SBE. As a result, the SBE became the top policy-making body in state education as it reviews policies, standards, rules, and

¹Ibid.

²Francis, School Law, p. 8.

regulations, adopts broad policies and principles, and establishes standards governing education of the Commonwealth.

Along with the fundamental revamping of the state agency, the legislature made other alterations signifying a greater shift of educational control to the state agency. In support of the consolidation models in Chapter III, Pennsylvania became the twenty-fourth state to enact mandatory district reorganization in the same year its SBE was reorganized. The indirect mandatory school district reorganization act provided for county boards to submit district reorganization plans to the state board within a required time limit and in conformity with approved standards. The penalty for failure resulted in the preparation of plans by the SBE.^{1,2} This act finalized district consolidation efforts which began in Pennsylvania in the 1940s.

But soon after the basic movements toward greater centralization of control, a further reorganization occurred within the SDE. In 1966 the legislature formally charged the SDE with the responsibility of administering and servicing the total educational program of the state. By this time, it had developed into a complex organization of more than 1200 employees and managed an educational budget of over a billion dollars. The SDE consists not only of the SBE, the CSSO, and his deputies and commissioners, but also numerous directors heading the various bureaus within the department. Each of the bureaus has

¹Summers, Effective Legislation, p. 16.

²This type of planning and penalizing is typical in states initiating consolidation either through mandatory or semi-permissive legislation.

been delegated certain responsibilities to carry out within the agency.¹ The agency has developed into one able to exercise a great deal of power over the output of public education in Pennsylvania. Our theory would predict that this structure of the SDE was conducive to the development of stringent, statewide controls.

Continuing to work in strengthening curriculum development, the SDE added economics and world cultures to high school graduation requirements in 1963. To the elementary curriculum, it also added earth and space science and four years of language study. In addition to courses required for high school graduation, by 1973 the SDE required all senior high schools to offer at least ten additional courses, including such areas as conservation and family survival. It also required instruction in five areas such as women's studies and intergroup courses. Any additional courses to be offered by a district, are first subject to authorization by the SDE.² So Pennsylvania appears to have developed a highly rigorous system of monitoring the coursework done in its public school system, particularly over the last decade.

Today, just as in most other states, the SBE in Pennsylvania grants teacher certificates and establishes qualifications for their approval. The one deviation presently allowed to local districts is the selection of textbooks at their own discretion. But even with this

¹Francis, School Law, Chapter 25.

²Pennsylvania, State Board Regulations: Curriculum Requirements (Harrisburg, Pennsylvania: Pennsylvania State Department of Education, 1973), sec. 5.1-sec. 5.25.

one discretionary move left to localities, centralization of school activity has increased tremendously over the past thirty-five years. These changes within the educational institution can best be summarized by the following:

Pennsylvania's public education programs have shifted gradually from an intense local control to a state and local partnership during this century. The state's desire throughout these years has remained constant: to offer equal educational opportunity to all children. Alternatively, it has tried to gain cooperation by offering money and advise and to compel it by law.¹

The trends observed in Mississippi and Nevada appear in Pennsylvania also. An undeniable pattern toward greater control of schools at the state level has marked the post World War II period. Based on the extent to which the control covers all policy-making, we can now classify Pennsylvania's system similarly to that of Mississippi. The decisions of the SDE influence almost all areas of school activity in Pennsylvania. And, just as in Mississippi, the comprehensiveness of the powers of the SDE came with a reorganization of the state bureaucracy. First, financing of school expenditures shifted to a more centralized, state responsibility. Secondly, the legislature reorganized the SDE in a manner that both strengthened and expanded its bureaucratic powers. Next, the SBE used these powers to secure mandatory consolidation of school districts and to expand the various policy prescriptions affecting virtually all aspects of public education.

¹Rosenbaum, "Pennsylvania," in Historical Development, ed. by Pearson and Fuller, p. 1045.

Along with the numerous changes, the benefits of monopolization appear in Pennsylvania's growing school budget. From 1949-69 it experienced a 306 per cent increase, which was above that of the national average of 276 per cent. This, along with the extensiveness of its restrictions, indicates Pennsylvania has reached a high degree of monopolization with respect to its public school system. The pattern observed in Pennsylvania relative to that of other states, again supports the three-fold classification scheme projected in Chapter I.

Colorado

The state of Colorado exhibits some interesting characteristics regarding its institutional organization of education. Even though Colorado established a SBE when it became a state (in 1876) its existence in the form of today did not emerge until 1948. Since that time, the board members have been elected by the constituents on a district basis, and the SBE appoints the CSSO. According to the model developed earlier, the structure of the bureaucracy at the highest managerial level indicates that fewer monopolistic tendencies would be shown here than in other states. This is in addition to the fact that control of financial support of schools has remained a much stronger local element than with the average state in the nation. Through 1945, at least 90 per cent of school expenditures were financed through local support. As late as 1957-58, local revenues consisted of 72.1 per cent of the schools' support. Even in 1973-74, a drop to 57.9 per cent local funding was 7.8 per cent above that of the national average.

Even though a program of school standardization began in 1914, the SDE did not assume responsibility for such operation until 1952. Today, school districts coming under the program of accreditation do so on a voluntary basis. This is quite contrary to that of most states where schools must be accredited in order to receive state aid. The program which does exist contains one option which allows a contract to be entered directly between the local board and the SBE.¹ Specific curriculum offerings ordered for all school districts (7 in 1966) fall slightly below that of the national average.

Some move toward centralization began, however, as early as 1937. Until then, the authority to examine and certify teachers belonged to county examiners. At that time, the legislature placed the authority in the hands of state teachers colleges and the SDE. In 1961 a reorganization of certification considerably raised the standards for teacher certification and granted the sole authority of the process to the SDE.² In the meantime, other changes also indicated a move toward stronger centralization of school affairs. School district consolidation efforts began in 1947. Strong local opposition to a law of 1949 providing for consolidation produced the enactment of an amendment in 1951. A new bill passed in 1957, also with the opposition of many. Again supporting the models developed previously, Colorado

¹Colorado Department of Education, Rules-Accreditation of School Districts (Denver: Colorado Department of Education, 1974).

²Edgar Williams, "Colorado," in Education: Historical Development, ed. by Pearson and Fuller, pp. 146-176.

provided that consolidation proposals be approved by the localities. With this plan, the redistricting resulted in a 39 per cent reduction of school districts between 1948 and 1953, and a 70 per cent decrease between 1953-1961.¹

In a relative sense, the centralization of control has not been as total in Colorado as other states observed. We see this especially in its method of voluntary school accreditation and its low level of curriculum prescriptions. Nevertheless, Colorado demonstrates a similar trend to that of other states. The state educational agency has exhibited more prominent monopoly elements in the past thirty years. The takeover of accreditation authority by the SDE in 1952, school district consolidation acts in 1949 and 1957, and stricter teacher qualifications in 1961 serve as evidence to the trend experienced in the educational systems of other states.

The power in the hands of the localities places Colorado in the category of Nevada, which is opposite to that of Mississippi and Pennsylvania. Again, the form of the state structure greatly influences the degree of state control. In both Colorado and Nevada, contrary to Pennsylvania and Mississippi, the structure of the state system retains the direct link between localities and the state bureaucracy. For in Colorado, each district elects its representatives to the SBE. Only seven separate bureaus make up the SDE system; and the system of

¹American Association of School Administrators, School District Organization--Journey That Must Not End (Washington, D.C.: American Association of School Administrators, 1962).

financing school expenditures remains chiefly under the control of the localities. We expect, therefore, the degree of state control to be of relatively less magnitude in this state. And, just as with Nevada, we have less evidence of monopolistic benefits accruing to the SDE than in the other states. For example, over the twenty-year period observed, per pupil expenditures grew only 216 per cent, well below that of the national average. The total responsibilities concerning educational provision remain largely in the control of the localities. Once again structural characteristics tend to serve as indicators of the degree of monopolization over public schools in the state.

In this survey, we have concentrated on only four states. But from these historical case studies, evidence of contrasting systems of public education emerge. The study explicitly links the method of selecting SDE members, the centralization of financing school expenditures, and the degree of hierarchy within the bureaucracy to the authority and responsibilities possessed by the SDE. The duties of the SDE in turn enable the bureaucracy to enhance its monopoly powers over educational budgets. In the next section we continue testing this projected link by examining more general evidence from all fifty states. The evidence demonstrates that the four states just observed, accurately represent the nationwide variations which exist between states.

Empirical Confirmation of the Models

Testing of the implications began in the last section with the somewhat detailed investigation of states. In this section, we continue

testing the implications, but in a more general, more inclusive manner. This section examines three types of implications discussed earlier. We begin first with expenditure testing.

Expenditures for School Purposes

As noted earlier, the true test of the monopoly hypothesis in terms of expenditures for education lies in the contrasts between states. Even though there may be a combination of factors contributing to the overall increase in expenditures, by looking at variations between states we can relate the effect of the SDE structure to school spending patterns. As discussed before, we predict states with more autonomous structures to have developed greater monopolization over education, and thus to experience larger increases in the educational budget.

To look at expected differences between states, Table 4.5 categorizes states according to the projected degree of power exhibited by the SDEs. The table gives the power structure of the SDEs. The three structural characteristics--method of SDE selection, centralization of financing, and hierarchy of bureaucratic structure--describing SDEs in Chapter I are the elements forming the power classification. To avoid separate consideration of each dimension in the empirical analysis, the classification combines the three elements into a single dimension describing the overall power of the SDE in each state. A state with every element individually categorized as contributing to high expected degree of state control, naturally falls in the high aggregate classification grouping in Table 4.5. States with combinations of categoric

TABLE 4.5

EXPECTED DEGREE OF STATE CONTROL, BY STATE

High	Average		Low
Alaska	Alabama	New Hampshire	Colorado
Arkansas	Arizona	New Jersey	Indiana
Delaware	California	New York	Kansas
Georgia	Connecticut	North Carolina	Michigan
Minnesota	Florida	North Dakota	Montana
Mississippi	Hawaii	Oklahoma	Nebraska
Pennsylvania	Idaho	Oregon	Nevada
South Carolina	Illinois	Rhode Island	New Mexico
Tennessee	Iowa	South Dakota	Ohio
West Virginia	Kentucky	Texas	Wisconsin
	Louisiana	Utah	
	Maine	Vermont	
	Maryland	Virginia	
	Massachusetts	Washington	
	Missouri	Wyoming	

elements, i.e., some high and low or average and low, etc., belong to the group which represents a weighted median for the state.

In general, the less autonomously structured system of the SDE and, therefore, the less expected power of the state agency places a state in the low classification grouping of Table 4.5. In contrast, the more highly structured systems belong to the high grouping of SDE expected power. According to the table, we expect ten states to display greater monopoly powers than the average state, and likewise, we predict ten states to display less than average control at the state level. We must remember that average state control refers to a variable condition in educational history. A state classified in the highest category in 1900 may now belong to the average, or even low group. This depends, of course, on changes occurring in the structure of the SDE in each state.

The data in Table 4.6 provides the remaining information necessary for testing the relationship between the size of educational budget and the structure of the SDE. Column 1 lists current expenditures per pupil in 1949-50 for each of the fifty states. Column 2 lists the same data for the year 1969-70.¹ In Column 3 the percentage change of per pupil expenditures for the twenty-year period is indicated for each

¹The year 1949-50 was chosen for it captures the beginning of the massive centralization movement. The twenty-year time span was selected arbitrarily.

TABLE 4.6

CHANGES IN CURRENT EXPENDITURES PER PUPIL IN
AVERAGE DAILY ATTENDANCE BY STATE

State	1949-59	1969-70	Percentage Change
United States	209	783	275.6
Alabama	117	438	274.4
Alaska	317	1083	241.6
Arizona	241	766	217.8
Arkansas	118	534	352.5
California	165	922	458.8
Colorado	220	695	215.9
Connecticut	255	882	245.9
Delaware	259	793	206.2
Florida	181	710	292.3
Georgia	123	600	387.8
Hawaii	215	851	295.9
Idaho	186	629	238.2
Illinois	258	803	211.2
Indiana	235	624	165.5
Iowa	231	890	285.3
Kansas	219	721	229.2
Kentucky	121	612	405.8
Louisiana	214	620	189.7
Maine	157	685	336.3

TABLE 4.6--Continued

State	1949-50	1969-70	Percentage Change
Maryland	213	882	314.1
Massachusetts	236	753	219.1
Michigan	220	842	282.7
Minnesota	242	883	264.9
Mississippi	80	476	495.0
Missouri	174	714	310.3
Montana	268	822	206.7
Nebraska	217	527	142.9
Nevada	246	764	211.6
New Hampshire	211	692	228.0
New Jersey	280	963	243.9
New Mexico	222	724	226.1
New York	295	1237	319.3
North Carolina	141	609	331.9
North Dakota	226	621	174.8
Ohio	202	680	236.6
Oklahoma	207	540	160.9
Oregon	272	891	227.6
Pennsylvania	216	876	305.6
Rhode Island	240	904	325.5
South Carolina	122	555	354.9

TABLE 4.6--Continued

State	1949-50	1969-70	Percentage Change
South Dakota	230	657	185.7
Tennessee	132	560	324.2
Texas	209	581	178.0
Utah	179	600	235.2
Vermont	193	934	383.9
Virginia	146	691	373.3
Washington	248	743	200.0
West Virginia	150	626	317.3
Wisconsin	230	875	280.4
Wyoming	263	810	208.0

SOURCE: U.S. Department of Health, Education, and Welfare, Statistics of State School Systems (Washington, D.C.: Government Printing Office, 1970).

state.¹ As seen in the first row of Table 4.6, average expenditures in the U.S. increased 275.6 per cent over this period.² However, as indicated above, we are not concerned with the average increase, but instead, the differences between states contain the most relevance for our models.

To test the expenditure hypothesis, we calculated the average increase in spending over the twenty-year period for each of the three SDE power categories. Approximately equal the average increase for the entire U.S., the states included in the average category showed an increase in expenditures of 269 per cent between 1950 and 1970. Applying t-statistic testing to the difference between the average mean of the category and the average mean of the entire U.S., we conclude no significant difference between the two (see row 1, Table 4.7).

Those states falling in the grouping of high expected degree of bureaucratic control showed a 325 per cent increase over the same time period. This suggests an expansion of budget in the high SDE power states of more than 50 percentage points over the average group states. Testing for the difference between the mean of this category and the U.S. mean, the t-statistic indicates the two are significantly different at a 90 per cent level of confidence (see Table 4.7). Furthermore,

¹Percentage growth was utilized as a means of holding constant the numerous variables affecting state spending levels. Similarly, per pupil spending was used to isolate any changes resulting from enrollment redistributions.

²This represents unadjusted dollars. The real increase (1967 dollars) was 135.1 per cent. The data for all states are in nominal dollars; therefore, the magnitude of difference between states is unaffected.

TABLE 4.7
 TESTING FOR DIFFERENCES BETWEEN MEANS

Test	Average	High	Low
Group Mean vs. Mean of all States	.5 ^a	1.90 ^a	4.06 ^b
Difference Between Group Means		1.93 ^a	2.51 ^b

^aThese values are significant at the 90 per cent level of confidence.

^bLevels of significance were 95 per cent in these cases.

testing the difference between the means of the average and high categories (second row of Table 4.7) also supports the finding of significant variations among groups. Again, the difference is significant at the 90 per cent level of confidence.

Those states in the low classification with respect to projected SDE power demonstrated increases in per pupil expenditures on only 220 per cent, or approximately 50 percentage points below those of the average grouping. Applying the same tests as with the high category states, we again discover significant differences among the means both with respect to the U.S. mean and with respect to the sample means. In this case, the means of both tests were statistically different at the 95 per cent level of confidence (see Table 4.7).

The evidence and tests of expenditure data tend to support the central theme of this study. Differences in the structural organization of SDEs influence the degree of power exercised by the agencies. SDE structures predicted to induce more monopolistic tendencies on the part of the bureaucracy belong to those states experiencing the greatest expansions in educational budgets since World War II. The budget expansions as discussed in this study represent the monopolistic benefits of the SDE.

Standardization of Schools

The second implication stated earlier, which we now consider, concerns the SDE's desire to standardize schools as an additional means of enhancing their monopoly position. The move by states to standardize their schools began as early as 1897. At that time, the legislature

of Minnesota enacted a law entitling schools outside of incorporated villages and cities to receive state aid for the support of education, after meeting minimum requirements established by the SDE. The requirements related to the length of operating term, qualifications of teachers, safety of buildings, and supply of equipment. In 1901, Wisconsin followed the lead of Minnesota. In 1907, Illinois added a qualitative improvement by inaugurating the concept of door plates for superior schools.¹

One of the first powers affecting local district control given to SBEs or other commissioned boards within the SDE, dealt with authority to certify teachers. However, in the early part of the century, the state certification comprised merely one type of teacher qualification which could be obtained. Furthermore, discretion remained with the local boards to determine whether a certain type of certification was necessary for the hiring of a teacher in that district. Historical changes, however, have altered this policy. In most states, the state certifying board holds the authority to determine qualifications for all teachers hired in the state. Local boards cannot legally employ a teacher who does not possess the certificate required by the state. In Delaware, the SDE not only certifies teachers but, in addition, it directly pays all teachers according to state schedules.

¹George Collins, "Constitutional and Legal Basis for State Action," in Education in the States: Nationwide Development Since 1900, ed. by Edgar Fuller and Jim Pearson (Washington, D.C.: National Education Association, 1969), p. 14.

In addition to stipulating who can teach in the public schools, states also demonstrate varying powers over the determination of what textbooks are to be used by the local school districts. Fines, or other such misdemeanor type penalties face local districts failing to use the textbooks prescribed by the state. In 1968, 47 states practiced some degree of centralized control of textbook usage. One state prohibited changing textbooks more frequently than each six years.¹ In the aggregate, influence concerning textbooks has become common practice in the states' educational system.

Another area in which states have played increasingly greater roles pertains to the curriculum content of the schools. By dictating that all school districts must offer the same courses to their students, the SDE reduces the variability between local districts' educational product. Various studies have been carried out on the initiation of curriculum prescriptions and their purposes.² From these studies a uniform system of schools appears to be the generally accepted role of these requirements. The trend with respect to the focus of the prescriptions raises some interest. In the 1930s for example, prohibitions characterized the nature of curriculum intervention by the SDE. Since 1950, the regulatory direction has revolved from prohibitive to prescriptive and the number of requirements has been increasing.

¹Ibid., pp. 10-6.

²For one such study, see Roy Cox, "Establishing Curriculum Requirements," Educational Leadership, 21 (December, 1963):171.

As indicated above, statewide curriculum prescriptions reduce the locality's ability to determine what is taught in its schools. The governor of Oregon believes this is the true basis of the taxpayer's revolt in his state during the 1976-77 school year. Many Oregon parents grew up under the influence of the lumber mills and went to work immediately after high school. They feel the exotic curriculum offered to their children--French, art, etc.--neglects the basic skills required in everyday work life. Since Oregon's school funding program virtually guarantees an annual tax referendum in every district, the localities have refused to increase spending as a means of expressing their discontent with the curriculum mandates.¹

In addition to certifying teachers, selecting textbooks, and prescribing curriculum, SDEs have extended their responsibilities to include the establishment of building and equipment standards for the localities. Enforcement of the standards has been eased by the SDEs' ability to control state aid to the localities. In Delaware, for instance, a state which developed a highly autonomous SDE in the early 1900s, the state pays sixty per cent of the cost of school construction in most cases.² The fact that ninety per cent of school revenues were derived from state sources in Delaware as early as 1941 has greatly contributed to its strong SDE.

¹Merrill Sheils and Gerald Lubenow, "Revolt in Oregon," Newsweek, December, 1976, p. 72.

²Paul H. Johnston, "Delaware," in Education: Historical Development, ed. by Pearson and Fuller, pp. 207-231.

Today, the typical SDE has to a greater or lesser degree, extended its responsibilities to include numerous aspects of education provision. Among these are: compulsory attendance; certification of teachers; enforcement of health, welfare, and safety standards; mandatory content of the curriculum; and provision of textbooks, transportation, and buildings.¹ As seen throughout this section, the greater role in all areas of educational decision-making observed in the case studies describes the general pattern followed in all states. Just as with the expenditure evidence, the material presented concerning the standardization of schools by the SDEs serves as reinforcement to the monopoly explanation for greater state control over education. But of greater importance to this study, the structural organization of SDEs once again explains variations in the strength of control exercised by the different states' educational bureaucracy.

School District Consolidation

The study also projected earlier that a positive relationship exists between the type of state organization over education and the move toward consolidation of school districts. Table 4.8 indicates the massive trend toward school district consolidation in recent years. However, testing of the monopoly hypothesis requires a further investigation of data concerning variations between states. The four states observed in the case studies reaffirmed the model's prediction. Next,

¹Kenneth Hansen, Public Education in American Society (2nd ed.; Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963), pp. 31-4.

TABLE 4.8
 REORGANIZATION OF SCHOOL DISTRICTS
 NUMBER OF DISTRICTS

State	1932	1948	1953	1961	1964	1968	1974
Alabama	112	108	111	114	118	118	126
Alaska	17	23	28	30	32	28	32
Arizona	500	322	329	297	310	297	283
Arkansas	3193	1589	423	418	412	394	385
California	3589	2429	2018	1650	1488	1097	1048
Colorado	2041	1884	1147	341	205	181	181
Connecticut	161	174	172	176	177	181	165
Delaware	126	126	115	92	79	49	24
Florida	67	67	67	67	67	67	67
Georgia	272	189	203	199	196	194	188
Hawaii	1	1	1	1	1	1	1
Idaho	1418	1011	216	118	117	117	115
Illinois	12070	11061	2607	1552	1396	1279	1060
Indiana	1292	1196	1144	888	507	357	305
Iowa	4870	4856	4558	1391	1097	460	450
Kansas	8748	5643	3903	2303	1745	330	310
Kentucky	384	256	227	207	204	195	189
Louisiana	66	67	67	67	67	66	66
Maine	518	493	491	462	426	306	300
Maryland	24	24	24	24	24	24	24

Table 4.8--Continued

State	1932	1948	1953	1961	1964	1968	1974
Massachusetts	355	351	351	438	392	408	402
Michigan	6965	5434	4736	1981	1373	654	594
Minnesota	7773	7606	5298	2420	1957	1013	442
Mississippi	5560	4194	1417	150	150	148	150
Missouri	8764	8422	4331	1735	1230	761	572
Montana	2439	6800	1201	1025	945	806	643
Nebraska	7344	6991	6276	3348	2700	2013	1238
Nevada	266	211	185	17	17	17	17
New Hampshire	244	239	235	230	202	173	167
New Jersey	552	561	557	588	595	593	601
New Mexico	98	104	100	99	90	89	88
New York	9467	4609	2961	1280	1011	849	758
North Carolina	200	172	172	173	171	157	151
North Dakota	2228	2267	2111	1066	627	479	360
Ohio	2043	1583	1365	840	777	648	617
Oklahoma	4933	2664	1888	1255	1110	705	634
Oregon	2234	1363	893	510	425	364	339
Pennsylvania	2587	2540	2502	956	886	617	505
Rhode Island	39	39	39	41	41	40	40
South Carolina	1792	1737	103	109	108	93	94

TABLE 4.8--Continued

State	1932	1948	1953	1961	1964	1968	1974
South Dakota	3433	3409	3385	1964	2618	1203	231
Tennessee	194	150	150	154	152	150	146
Texas	7932	5145	2146	1539	1381	1244	1135
Utah	40	40	40	40	40	40	40
Vermont	268	268	263	262	268	281	274
Virginia	125	125	127	131	130	134	139
Washington	1792	628	551	419	385	339	313
West Virginia	450	55	55	55	55	55	55
Wisconsin	7762	6385	5463	1967	691	465	436
Wyoming	400	359	322	212	195	165	60
U.S. Total	127649	105971	67075	36402	29391	20440	16561

SOURCE: U.S. Department of Health, Education, and Welfare, Statistics of State School Systems (Washington, D.C.: Government Printing Office, 1963-74); American Association of School Administrators and Department of Rural Education of the National Education Association, School District Organization--Journey That Must Not End (Washington, D.C.: American Association of School Administrators, 1962).

however, we look at all the states in an aggregate fashion to ascertain whether the four states are representative of that which has occurred nationwide.

To test the relationship between the type of SDE structure and the degree of school district reorganization, we again employ the power structure classification given by Table 4.5. Table 4.9 contains data indicating the degree of concentration of pupil enrollment on a district basis. The enrollment data give the ratio of the total number of pupils enrolled in a state to the total number of districts in that state.¹ The higher ratios indicate the greater concentration of pupils which consume a single district's product. In contrast, the lower ratios signify more producers of public education for the state. The average ratio for all states was 7,603 pupils per district. Those states classified as exhibiting low centralized SDE control have an average ratio of only 2,773, signifying a much smaller concentration of pupils per district. The ratio for the high and average categories combined is 8,811 and is over three times that of the low classification.²

The models of Chapter III implied that the degree of control of financing held by the state would differentiate the outcome of

¹This ratio gives only an approximate measure of consolidation. This, however, is a better measure than the number of districts per se, which is influenced by changes in numerous variables to an even greater extent than the above ratio. The change in number of districts also serves as a poor indicator for some states consolidated school districts through mandatory legislation as early as 1914 (i.e., a period for which data are not available).

²Average and high classifications alone do not establish the basis for consolidation differences. More explicit information concerning financing is necessary and is investigated next.

TABLE 4.9
 CONCENTRATION OF ENROLLMENT IN LOCAL
 SCHOOL DISTRICTS, 1967-68

State	# Pupils/ # Districts	State	# Pupils/ # Districts
Alabama	7291	Maryland	35688
Alaska	2400	Massachusetts	2677
Arizona	1431	Michigan	3180
Arkansas	1155	Minnesota	875
California	4071	Mississippi	4053
Colorado	2962	Missouri	1355
Connecticut	3471	Montana	221
Delaware	2473	Nebraska	167
Florida	20802	Nevada	7355
Georgia	5783	New Hampshire	829
Hawaii	169430	New Jersey	2449
Idaho	1577	New Mexico	3201
Illinois	1732	New York	3917
Indiana	3309	North Carolina	7600
Iowa	1473	North Dakota	324
Kansas	1680	Ohio	3640
Kentucky	3598	Oklahoma	879
Louisiana	13076	Oregon	1327
Maine	753	Pennsylvania	3745

TABLE 4.9--Continued

State	# Pupils/ # Districts	State	# Pupils/ # Districts
Rhode Island	4349	Vermont	329
South Carolina	7161	Virginia	7861
South Dakota	146	Washington	2306
Tennessee	6046	West Virginia	7752
Texas	2103	Wisconsin	2013
Utah	7642	Wyoming	525

SOURCE: U.S. Department of Health, Education, and Welfare, Digest of Educational Statistics (Washington, D.C.: Government Printing Office, 1968).

consolidation proposals under the average and high categories of SDE power. For this reason, we extended the relationship tested above to include the link between revenue sources and concentration of pupil enrollment. Table 4.10 gives the revenue centralization data (a duplicate of Table 1.5 in Chapter I).¹ We then calculated a correlation coefficient between revenue centralization and enrollment concentration. In support of the consolidation models, the calculation resulted in a +.942 relationship between the two variables.

The general data pertaining to consolidation in the U.S. add to the verification of the hypotheses developed in this study. Just as with budget information for all states and with the standardization discussion, the consolidation tests reaffirm the applicability of the four states observed in the case studies section, to the situation existing in the entire U.S. In other words, the structural organization of the SDE exercises a great deal of influence over a state's provision of education. Indicated by the tests of this section, the more powerfully structured SDEs display behavior of a more monopolistic bureaucratic nature. The next chapter summarizes the findings of this research and derives conclusions from the analysis.

¹Again the data on Hawaii indicate its unique organizational structure. The high ratios of centralization of financing and pupil concentration result from its one local district, or lack of division between the state and local administrative units.

TABLE 4.10

RATIO OF STATE TO LOCAL SOURCE OF REVENUES

State	Revenue Ratio	State	Revenue Ratio	State	Revenue Ratio
Alabama	2.42	Louisiana	2.01	Ohio	.41
Alaska	1.24	Maine	.49	Oklahoma	.68
Arizona	.54	Maryland	.67	Oregon	.35
Arkansas	1.17	Massachusetts	.33	Pennsylvania	.85
California	.63	Michigan	.80	Rhode Island	.50
Colorado	.35	Minnesota	.88	South Carolina	2.21
Connecticut	.56	Mississippi	1.72	South Dakota	.16
Delaware	3.59	Missouri	.51	Tennessee	1.55
Florida	1.01	Montana	.42	Texas	1.09
Georgia	2.06	Nebraska	.055	Utah	1.20
Hawaii	16.67	Nevada	.70	Vermont	.57
Idaho	.63	New Hampshire	.13	Virginia	.70
Illinois	.38	New Jersey	.40	Washington	1.59
Indiana	.63	New Mexico	.29	West Virginia	1.44
Iowa	.37	New York	.91	Wisconsin	.43
Kansas	.45	North Carolina	.29	Wyoming	.68
Kentucky	1.37	North Dakota	.40	United States	.74

SOURCE: U.S. Department of Health, Education, and Welfare, Digest of Educational Statistics (Washington, D.C.: Government Printing Office, 1968).

CHAPTER V

SUMMARY AND CONCLUSIONS: THE BUREAUCRATIC MONOPOLIZATION OF PUBLIC EDUCATION

In this study we have examined the American system of elementary and secondary public education by investigating the institution which surrounds its provision. Focusing on the state hierarchy of control represented by State Departments of Education (SDEs), we have emphasized the important role of institutions in affecting output. The institutional roles have been examined by relating various types of SDE structures to the output of public education in the respective states. Even though all states have followed a path toward more centralization of control, the degree to which centralization has actually occurred differs between states. The contrasting degrees have been a major concern in this analysis. In this chapter, we summarize the hypotheses offered in this study and briefly recapture the findings related to them. Then we place these findings in the context of an analogy which reiterates, perhaps somewhat pointedly, the theme of this dissertation. The analogy extends into concluding comments concerning the economic organization of public education in the U.S.

Forms of State Structures

In this analysis three basic features of states' organization of education capture the actual structure of the institution of educational

control. The first relates to the method of selecting the members of the SDE, the agency delegated to govern public education. Many states select members through methods of appointment, while others employ an election process. The second feature concerns the degree of bureaucracy within the SDE. In particular, this entails the number of bureaus or divisions comprising the entire complex of the SDE. Finally, the last characteristic defining the type of educational organization in a state, relates to the centralization of financing school expenditures. States differ according to the source of school revenues. Some derive virtually all revenues from state sources, while others receive a greater proportion of revenues from local sources. Utilizing these structural differences among states, a classification scheme categorized SDEs according to an expected high, medium, or low degree of power. In general, the more autonomously structured the SDE, and thus, the more indirect its link to the localities, the greater the degree of power expected to be exhibited by the SDE.

As the analysis progressed, the degree of control of the SDE discussed above was equated with the degree of monopoly power displayed by the educational bureaucracy--the SDE. Analyzing structural differences from this perspective, a new explanation emerged regarding the movement toward a more centralized form of educational control. This explanation describes the movement as a monopoly-enhancing effort on the part of the SDEs. Increasing their responsibilities and authority with respect to educational policy-making, SDEs achieve their budget-maximizing, prestige-seeking objectives.

Specific relationships between organizational structures and the degree of centralization of school activities were constructed through case studies of particular states. More general support of the monopoly-enhancing explanation came from school expenditure data. The degree of monopoly power expected according to state organization was directly correlated with the increase in expenditures for education in that state.

The Evolutionary Process

The contrasting structures of public education provision have related to present variations in states' systems of school control. However, as indicated in Chapters I and II education provision constituted a competitive, private market institution in its initial stage of development. The system, at its time of origin, could be described in terms of that which existed in ancient Greece in a city called Athens. According to historians, Athens was submerged with a sense of intellectual spirit and an urge for cultural enrichment. Cooperation and harmony were found throughout the city, but they were not the result of a conscious development of particular mechanism of education which existed throughout Athens. Instead, the responsibility of education was placed on the family, and all schools were private.¹ Schoolhouses were quite commonly owned by the masters themselves, so families were able to choose that which conformed most closely to their preferred manner of schooling.

¹Paul Monroe, A Brief Course in the History of Education (New York: McMillan Company, 1907).

The formal education in Athens usually included training in music and gymnastics.¹ Music education, however, varied from basic reading and writing to a mastery of Homeric writings. In Athens, the system of education attributed not to the complete suppression of the individual, but to his development. Because of the great freedom in the means of attaining education, there existed wide divergences in its organization and details in Athens. The system of education was such that individuals were free to choose that which they desired.

At that same time in history, however, there existed another city in Greece, known as Sparta. But in contrast to Athens, Sparta's educational system represented extreme government control, created through constitutional rulings, and placed great emphasis on the educational functions of various social institutions.² Spartan education was almost identical with Spartan life in general. It consisted of almost wholly physical and moral teaching. The educational training was narrow but intense, and above all, meant the production of individuals wholly subject to the state. After reaching the age of seven years, the boys of Sparta were placed in charge of selected state officials who were responsible for their physical and moral education. The boys were trained in companies, and the training consisted of a definite system of exercises and games which were of a more military character after the age of twelve, and wholly so from the eighteenth or twentieth

¹Paul Monroe, Source Book of the History of Education for the Greek and Roman Period (New York: McMillan Company, 1904).

²Paul Monroe, A Brief History.

year. The moral training aimed to produce self-control in action and speech, endurance, reverence, a spirit of patriotic self-sacrifice, dignity of action, and subjection of all emotional expression. In this elaborate state education, there was little provision for the intellectual element save as it was incidental to the physical and moral training.¹ Instead, the educational system served the purpose of promoting the goals established by the state.

Two extreme forms of education existed in Athens and Sparta. As mentioned above, the initial structure of education in the U.S. resembled that of Athens, but through history, an evolution has occurred in America's educational institution. The competitive, private institutions gradually transformed into competitive, public institutions. The latter institutions then began evolving into more monopolistic, public institutions. The system today, differs by degrees between states, but can be generally cast in the framework of monopolistic bureaucracies.

Only in those states with the most highly developed bureaucratic structures, would the educational system be analogous to the Spartan state. The case studies suggest that, in fact, states such as Mississippi, Pennsylvania, and Delaware may be nearing an approximation of the Spartan system through their promotion of state goals. And we can conclude from our study that these states have gained their extensive powers and

¹Paul Monroe, Source Book.

control as a result of the type of structure surrounding the provision of public education.

Conclusion

The Athens-Sparta analogy to the evolution of public education in the U.S. represents an extreme version of the description illustrated throughout this study. Nevertheless, it serves as a useful reference in demonstrating the influence of institutional structures. Through this perspective, we are better able to understand the general changes in the product of the public school system and the differences which exist between states. The analogy reinforces the central theme of a relationship between SDE structure and type of educational provision. Its extreme contrasts in structure promoted individualism through the education system on the one hand, and totally suppressed the individual in an effort to promote the cause of the state through an opposing system. Even though present day variations lie between these extremes, we can conclude from this study that the structure of the institution surrounding public education plays an important role in influencing the type of output provided.

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ECONOMIC ORGANIZATION OF PUBLIC EDUCATION

IN THE UNITED STATES

by

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(ABSTRACT)

This dissertation examines the American system of public education by focusing on the institution which surrounds its provision. Structural aspects of State Departments of Education (SDEs) receive the major emphasis in an effort to ascertain the relationship between structural organization and the output of public education in the fifty states. Three features of the SDEs' structure--method of selecting its members, hierarchy of divisions within the bureaucracy, and the degree of state centralization of financing--form a classification mechanism which describes the expected degree of power held by the SDE in controlling the provision of public education.

Models portraying local school districts demonstrate the theoretical consequences of various structures of SDEs in affecting the localities' provision of education. Approaching the analysis of SDE structure from a bureaucratic perspective, a motivation on the part of bureaucrats to develop a more powerful agency emerges. The motivation lies in the monopolistic gains accruing to SDE members as a result of their ability to secure bureaucratic goals of expanded budgets and greater prestige.

Four states are examined in order to test the hypothesized relationship between SDE structure and the provision of public education. After the state case studies, implications of the models are tested in a more general, yet more inclusive, manner. The implications tested concern the spending patterns of different structured SDEs, the degree of standardization requirements imposed on the localities of a state, and the effect of SDE structure on consolidation of school districts. In all tests, the conclusions support the central hypothesis of a relationship between the organization of SDEs and the system of public education in a state.