Attention is directed in this document to the North Dakota State Department of Public Instruction and its necessary role in refining and implementing a comprehensive plan for educational improvement in North Dakota. The thesis is advanced that expanded leadership at the state level is crucial for educational improvement in North Dakota. It is also noted that the prime function of the state education agency must be to exercise leadership in the management of the state's resources for education. Discussion centers around the following state-level leadership functions: diagnosis of educational problems, formulation of program strategies, demonstration and dissemination of ideas for instructional innovation, management of funds, administration of state and federal funds, administration of the State Foundation Program, planning and evaluation of programs, maintenance of quality controls on education, and development of organization for administrative functions. Related documents are RC 000 179, RC 000 180, RC 004 196, RC 004 197, and EC 004 199. (SW)
Educational Development for North Dakota, 1967-1975

A Product of the Statewide Study of Education

Developing State Leadership for Education in North Dakota

The North Dakota Statewide Study of Education

THE NORTH DAKOTA DEPARTMENT OF PUBLIC INSTRUCTION
THE NORTH DAKOTA LEGISLATIVE RESEARCH COMMITTEE
THE UNIVERSITY OF NORTH DAKOTA 1967
STATEWIDE STUDY OF EDUCATION

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Educational Development for North Dakota:
1967-1975

Developing State Leadership for Education in North Dakota

A Product of the Statewide Study of Education

PUBLISHED BY THE UNIVERSITY OF NORTH DAKOTA
In "Educational Development for North Dakota: 1967-1975," the Statewide Study Team presented a comprehensive plan for educational improvement in North Dakota. The plan was designed to achieve seven specific objectives. These were:

(1) To consolidate and focus the energies of the State's seven public colleges and universities in a dramatic new program of personnel development, research, and service, thereby to make the classroom teacher a vital part of a continuing research and improvement effort.

(2) To prepare and place 1,950 fully qualified and specifically prepared teachers into the State's elementary schools, thereby to improve the quality of education for elementary school children who otherwise would be taught by underprepared teachers (as 23,000 students now are taught).

(3) To place each of North Dakota's 144,000 school children in a reasonably organized and administratively effective school district; each such district would contain at least 12 grades of instruction, and its high school would enroll not fewer than 200 pupils in the upper four grades.

(4) To enlarge the scope, focus and effectiveness of educational services offered by the State Department of Public Instruction, through seven regional service centers; each such center would be designed to energize and facilitate local district study, planning, evaluation, reorganization, and program improvement.

(5) To upgrade the level of financial support for the normal and ordinary recurring costs of education; this requires an improved State Foundation Program that (1) equalizes inequities among local school districts and (2) enables school districts to use local tax funds more freely for program improvements over and beyond the State guaranteed minimum (for example, for public kindergartens).

(6) To shift to state government the responsibility for the extraordinary costs of educational services: the extraordinary costs now are divided inequitably among local districts for such items as school construction, debt service, transportation, and special services for rural isolated pupils.

(7) To employ State funds to reward those local school districts that take the initiative to improve the quality and efficiency of their operations; an appropriate reward would make State aid directly proportionate to the number of fully qualified teachers that a district employs.

When appropriately implemented, this plan for action should guarantee an adequate and equal educational opportunity for every present or future student in the State's education system, regardless of the pupil's place of residence in the State, and without regard to his religion, color, ethnic background, or economic status.

In this document, attention is directed to the North Dakota State Department of Public Instruction and its necessary role in refining and implementing the plan. Historically, that Department's role was
limited to regulatory and service activities. The thesis is advanced that expanded leadership at the State level now is crucial for educational improvement in the State. The Statewide Study Team believes that the potential for an appropriate new state leadership already exists; it now needs to be both nurtured and redirected, consistently and within the framework of the comprehensive plan for educational improvement.

The Statewide Study Team has consulted other state education agencies throughout the nation, to identify the kinds of leadership functions that the Department of Public Instruction in North Dakota should consider before shaping its important role in educational improvement in the State. Briefly, the conclusion is advanced that the prime function of the state education agency—more essential than regulatory and service activities—now must be to exercise leadership in the management of the State's resources for education. The new functions to be emphasized are:

- Diagnose the status of education and the education system's capacity to deal with the persistent and compelling problems of educational development
- Establish a system of statewide priorities
- Formulate appropriate program strategies, on regional and statewide bases, to deal with priority concerns
- Develop broad plans to obtain optimum use of the State's resources for education, while implementing these program strategies
- Establish and maintain appropriate new standards for educational performance, to insure increased excellence in educational programs and services
- Develop and introduce effective means to assess quality, both of the education system itself and of the outcomes of that system
- Disseminate the management information and ideas which local districts and other educational agencies need to plan effectively for their own programs.

Expansion of the state agency's role in leadership need not threaten or distort the traditional responsibility that is borne by local school districts for the conduct of educational program operations. Rather, the quality of leadership herein envisioned is seen to be a necessary precondition to the effective exercise of authority at the local level.

The philosophic assumptions underlying the arguments advanced in this document are of overriding importance, hence deserve to be aired. The Statewide Study Team believes that an ideal situation is produced when there is strong leadership at both local and state levels. This implies well-organized, well-staffed, and well-managed local districts. It also implies a high quality of service and initiative at the state level. With weak leadership locally, school districts lack the capacity to provide quality programs. With weak leadership in the state agency, it becomes difficult, if not impossible, for local districts to obtain needed resources and to develop their basic capacities. Local and state agencies all need strong leadership performance.
North Dakota is a small state and has modest resources. It must invest deliberately in good management and in good management practices, both to conserve its limited resources and to focus its public expenditure for education on the potentially most productive educational programs and services. That investment in management may be even more necessary for North Dakota than it would be for larger or wealthier states.

Until recently, state and local educational agencies here and elsewhere—with notable exceptions—have not been distinguished by their use of modern management techniques and procedures. Agriculture, business, industry, and certain other segments of state government all have progressed much more rapidly than has education in this area called management. Now, however, the complexity of the management problem in the North Dakota education system is so great, and the stakes for citizens so high, that nothing short of the most advanced management capacity should be developed and implemented in the years to come.

For some, this may seem to be too aggressive or too bold. The Study Team believes that the facts make it unavoidable. Traditional state-local relationships may be altered by increased state leadership. The Study Team believes that—again—the logic of the situation makes an alteration in those relationships inevitable. Let the Team be very clear on these relevant points:

* "Education" and "the state system of schools" are different things.
* Education is what a person acquires—through schooling, training and experience—that enables him to perform as a useful citizen and a productive member of the economy, and to realize his potential as an intellectual and social human being.
* The state system of schools (or educational system) is the instrument created by the people of North Dakota to provide each child with a reasonable opportunity to become educated.
* A good system of education strives to make its programs and services as consistent as possible with each child's needs; it does not knowingly or willfully deny any child an appropriate and equal opportunity to grow intellectually and socially.
* A good educational system requires adequate resources, a capability to measure its effectiveness, and the capacity to improve itself or to be improved in relation to other systems. Above all it requires good management.
* In our system of government, the responsibility for the system of schools rests with the state. Responsibility for education, however, rests with the individual child and his family. By delegating authority to local school districts, the state endeavors to make certain that the program and activities of the education system are related as closely and constantly as possible to the education needs of its constituency.
* However, most people no longer live out their lives in the school district in which they received their basic training; the farm child who is schooled in rural North Dakota, for example, most likely will come later to live in one of the great metropolitan areas of our nation.
Hence, local direction of educational programs and activities must reflect state and national concerns. Local control cannot be exercised arbitrarily, or without regard to broader state and national concerns; to do so is to limit the potential usefulness of locally obtained schooling, and ultimately therefore to handicap or injure the very youngsters the local district is organized to assist.

In recognition of this condition, reasonable people increasingly have come to adopt the posture that the business of the educational system requires an active partnership between local and state governments. Like good partnerships in business or industry, the educational partnership should be constructed in ways designed both to promote harmony and to allow for the exchange and consideration of views and ideas that may be widely divergent. To be most effective, each partner should be strong; each contributes a complementary and necessary part to the management of the enterprise.

In this light, the Statewide Study Team proposes that the principal obligations of the State for public education are:

- To establish and maintain a viable system of schools and educational institutions
- To provide resources in support of each child precisely in accordance with his individual needs and requirements
- To set standards of excellence for the performance of each component of the educational system
- To plan for the wise and effective use of the State's resources in support of locally directed educational enterprises.

The principal obligations of local school districts, therefore, would be:

- To diagnose each child's capacities and learning potential
- To design programs peculiarly suited to his learning requirements
- To array educational services effectively and efficiently in support of these programs
- To exercise broad discretion in the choice of best means to accomplish these purposes, given an intimate and professional knowledge of each pupil.

The comprehensive plan for improvement of North Dakota's educational system is focused upon ways to develop these desired capacities at both local and state levels. In this document, specific directions are charted for the development of new leadership capacities at the state level. The ideas herein expressed are deemed to be valid. Moreover, they are feasible of achievement. Now a serious and systematic review of the proposed leadership development activities should be conducted, particularly by the State Department of Public Instruction. Following that review, steps should be taken to modify and implement the plan in order to bring the first vital steps of the plan into reality.
The comprehensive plan for educational improvement reflects the cooperative efforts of three principal agencies. These are:

The North Dakota Department of Public Instruction
The North Dakota Legislative Research Committee
The University of North Dakota

Funds to support the Statewide Study, evaluation, and planning activities upon which this and companion reports are based were provided by the State Legislature, by the federal government—under provisions of Title V, Elementary and Secondary Education Act of 1965—and by the University of North Dakota.

Grateful acknowledgement is given to the many state and local school personnel that generously gave of their time and resources to make the study complete.

Kent G. Alm, Director
Statewide Study of Education
December, 1967
DEVELOPING STATE LEADERSHIP FOR EDUCATION IN NORTH DAKOTA

The State Department of Public Instruction is the principal executive agency for education in North Dakota. To implement any comprehensive, statewide plan for educational improvement, the major responsibility necessarily must rest with this agency.

In the past, the State Department has worked seriously and well for the improvement of education. Under limitations of staff and law, it has administered the State's fiscal and quality control programs. It has endeavored to provide technical assistance to local districts, particularly in rural areas. Its members regularly participate in professional organizations and activities, and they endeavor to provide professional leadership for improvement of curriculum, business administration, instruction, and special education.

The Department also has endeavored to improve the quality of its own staff operations. Under provisions of Title V, Elementary and Secondary Education Act of 1965, the Department materially has strengthened its internal operations. Now it is engaged in a serious management review, with the aim of determining even more effective and efficient means of providing professional leadership in the State.

The Statewide Study Team did not attempt to study the State Department of Public Instruction itself. Rather, it endeavored to determine the kinds of new functions that the Department would need to perform in order to implement the comprehensive, statewide plan for educational improvement. The Team made what it believes to be a proper assumption: given a description of the leadership requirements it should meet, the State Department is the agency that—on the basis of its own studies—is best able to determine the precise means whereby those leadership requirements can be satisfied.

During the proposed development period, the Team believes that the focus of the Department's role should be on statewide leadership. This does not mean that the Department would abandon its traditional and required role as a regulatory body. Rather, it means that its regulatory functions increasingly should become the lesser role; its role as leader in planning and development should increase very materially.

To accomplish this, the Department may need to restudy its present patterns of organization, personnel assignments, and allocation of resources. To the extent that the recommendations of the Statewide Study Team will require departmental expansion, new fully qualified personnel should be recruited, of course.

Leadership Functions To Be Performed

What then are the critical functions to be performed? For guidance, the Statewide Study Team looked to best practice in business, industry, and state government. Briefly stated, the Department's functions are these:

1. To study systematically—and to diagnose—the persistent and compelling educational development problems in the State
2. To formulate appropriate program strategies, so that these problems can be dealt with on a priority basis
To develop and redevelop broad plans for the allocation of the State's resources, to support well-conceived and well-organized local district programs that deal with these problems.

To develop and introduce a system to assess the effectiveness and efficiency of the State's system of schools.

To establish standards of excellence to guide the development and improvement of the educational system.

To develop the capacity to improve the state system through systematic programs of research, development, demonstration, and dissemination.

To manage funds available to education from state and federal sources.

To disseminate new ideas, information, and educational practices broadly throughout the education system.

**The Diagnostic Function**

By joining in the Statewide Study of Education, the State Department of Public Instruction already has helped to establish a comprehensive data base for the continuing study and diagnosis of basic educational problems in the State. This study and diagnostic procedure now should be institutionalized within the Department itself. As data are refined—and as conditions change—the Department should be able to make valuable recommendations for future modifications in the proposed comprehensive, statewide plan for educational improvement.

To institutionalize the diagnostic function within the Department, responsibilities and procedures for diagnosis should be established and formally assigned to qualified personnel. To the same end, a systematic data collection, storage, and retrieval system also should be constructed. The state agency should put itself in a position to ascertain not only where the state, local and federal investment in education is going, but also the impact it is having on pupils and on the education system. These data should be employed by the Department to formulate appropriate ways to deal with the major problems of education in the State; they should be used also to assess the progress achieved as the State implements its comprehensive development plans.

Fortunately, the State Department is in a position to act immediately to develop its diagnostic and strategy-building capacity. Beginning in July, 1968—under provisions of Title III, Elementary and Secondary Education Act of 1965, as amended—the state agency itself is entitled to retain $150,000 of the State's total Title III allocation. These funds are to be employed by the state agency—and an appropriate advisory council—to assess educational needs, to formulate program strategies to meet these needs, to establish objective bases for evaluating educational programs, and to disseminate ideas, information, and new practice broadly throughout the State. The funding mentioned probably will not be fully adequate to these tasks, but it will provide the start.

**Program Development Function**

To implement the provisions of the comprehensive, statewide development plan, the State Department of Public Instruction must devote substantial new effort to program development and plan
implementation. Specific attention must be given to four critical elements of the plan. These are:

- Engage local school districts in a coordinated program of self-study, leading to local district plans for reorganization as Type I districts (those that can enroll no fewer than 215 pupils in grades 9-12) as early as 1969.

- Together with appropriately organized twelve-grade districts: assess the needs for special educational services to pupils who reside in isolated portions of those districts; and to develop and/or support appropriate programs for these pupils.

- Assess needs and possibilities for shared service programs among Type I districts, with particular emphasis upon special education, instructional media, and the development and dissemination of appropriate new instructional materials.

- Cooperate intimately with the State's colleges and universities as they develop and implement their innovative new programs of educational personnel development and placement.

These functions could be discharged most readily through a network of regional education service centers. Educational needs and requirements vary among the several regions of the State, and the regional centers could recognize and treat them most appropriately; moreover, they could assure local district involvement in comprehensive program planning.

Experience in other states suggests that the regional education service centers should not be self-contained or autonomous decentralized units; on the contrary, responsibility for administration of the proposed new Foundation Program is best centralized in the state agency in Bismarck. However, the regional centers would be readily accessible points through which to provide needed professional leadership and to render technical assistance services to the State's local school districts, thereby to facilitate needed reorganization of districts, and to focus and coordinate local district effort on regional (interdistrict) planning, program development, evaluation of educational performance, and dissemination of desired new educational practice.

The Statewide Study Team suggested that seven such centers be established by the state agency. In practice, six or eight might prove to be preferable. Initially, these centers could be funded indirectly through local districts, as an integral part of the State's Title III plan, and from federal funds available to the State for the administration of federally supported programs. However, consideration should be given to the possibility that these regional education service centers might be established legally as "local school districts" in order that they may be supported directly from federal monies. For guidance in their consideration of this possibility, state officials might confer with their counterparts at the Texas Education Agency; in Texas, 20 such education service centers have been funded in whole or in part from Title III funds. To develop the capacity of the regional centers to the fullest, state funds obviously will be required; however, initial development activities can and should be undertaken, when feasible, with funds from the federal sources.

Regional education service centers would be the instruments or
funnels through which to carry out the leadership functions suggested for the state education agency. These include:

- Continuing assessment of educational conditions within the regional service area, particularly the requirements of exceptional children (for example: handicapped pupils) or of exceptional conditions (for example: rural isolation)

- Cooperative program development, with particular emphasis upon the development of "shared service" programs—that is, programs that benefit all or most districts within the region in ways that the individual districts do not have the capacity to provide separately

- Comprehensive regional planning, with particular emphasis upon the design of transportation systems, plans for future school construction, personnel development and deployment, experimental instructional programs, etc.

- Pupil appraisal and evaluation, with particular emphasis upon the development and utilization of objective measures of educational attainment, and the use of evaluative information in program planning and development

- Dissemination of new educational practice, ideas, and information.

Attention should be given early by the State Departm. ai to the possibility that personnel now based in Bismarck may be assigned to the service centers. Special in-service training may be required for some or all such staff, particularly in planning, program development, and evaluation.

**Demonstration and Dissemination Function**

A key function of state leadership is to provide the funds and technical assistance that will enable local districts to demonstrate, and later adopt into standard practice, innovative or exemplary educational programs. Good management requires not only that the educational system set and attain new standards of excellence in educational performance, but that the system develop the capacity to renew or regenerate itself; that is, to improve upon standard practice. As in the field of agriculture, the value cannot be overstated of carefully constructed demonstrations of new technology, new instructional methods or materials, and even new instructional systems. Simply providing information about new practice can be helpful; however, the concrete demonstration and testing of new ideas and systems in selected schools frequently produces more far-reaching results.

To assure constant renewal and improvement in the schools, the State Department should take leadership to develop and implement systematic plans for introducing modern technology into the schools of the State, and for the systematic introduction of instructional innovation into classroom practice. Also, plans should be developed for research and development activities within the state educational system, and for systematically introducing the results of research into the education system.

This will require an extraordinarily high order of leadership from the state agency. It necessarily must be influential in its relationships with the state institutions of higher learning, challenging
them constantly to identify and treat relevant areas of educational research. Through the device of the regional education service centers, state leadership can be brought to bear effectively by challenging local districts to try out potentially beneficial new programs and to incorporate the results of research in their planning and program development activities. Moreover, the education service centers can provide the impetus for local districts to establish needed new programs for the in-service training and retraining of their educational personnel, and can assist the districts in acquiring up-to-date information on research and its potential applications, and in acquiring appropriate new instructional methods and materials.

**Funds Management Function**

A fundamental role of the State Department of Public Instruction is to manage state and federal funds for the support of education. The efficacy of the proposed new Foundation Program, for example, depends upon the skill with which the Department performs this function. The amounts and diversity of federal funding for various categories of educational service are increasing; their use also should be governed and moderated by the state education agency.

The present fiscal system for education in North Dakota is complex. It reflects many years' accretion of separate funds and accounts, and to say that it has grown like "Topsy" is not entirely unfair. However, as the State moves to apply the proposed new Foundation Program, much of the present system will prove to be obsolete. The State Department of Public Instruction therefore can and should rebuild and simplify its fiscal systems related to budgeting, planning, accounting, and reporting. This might be accomplished largely by two steps. These are:

1. Move immediately to consolidate all federal funds for educational programs, which now or subsequently may come under jurisdiction of the state agency for review or approval. This would include: ESRA Titles I, II, III, V, VI, VII; NDEA Title III and V-A; EDPA; and Vocational Education. In legal respects, consolidation—literally and formally—may face obstacles; but consolidation of management and procedure is quite feasible.

2. Eliminate (administratively or through new legislation as required) all special funds and accounts involving state assistance to local districts; to facilitate their administration through the new Foundation Program, treat these as a single fund.

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†A number of Congressional authorizations enable state and local education agencies to receive monies from the federal government and to utilize these monies in support of their educational operations. Most of the funds thus made available to local school districts are administered by the U.S. Office of Education: typically, USOE supplies the monies to the state's education agency, which is responsible for their distribution to local districts. The educational program operations affected by these monies are conducted, of course, by state and local agencies; the federal monies supplement—or are supplemented by—other funds, derived from state and local tax sources. The federal monies provided under authorization of Congressional actions usually are subject to provisions of law and regulation, which prescribe limits regarding the uses which may be made of them; thus, for example, funds provided for instructional costs of commercial education cannot be diverted to other unrelated uses, and funds provided for equipment cannot be used for construction purposes.

Most of the available federal monies are termed "categorical" because their use is restricted to quite limited and explicit categories of educational expenditures.
Administering Federal Funds for Educational Programs

By consolidating the federal funds, it would be possible to receive a single application—for federal funds for all programs—from each local district; the local district then could be held responsible for a single fiscal accounting and evaluation report. By taking this step, the state agency could accomplish several beneficial results, all of which would be welcomed by local districts. These are:

- A local district could plan intelligently for the coordinated use of federal funds within the context of its total plan for educational development. Some districts may lack a tradition or capacity for planning; the challenge to "package" or "meld" their several federal programs into one integrated whole would be a valuable first lesson in planning.

- Paper work for local districts could be reduced. Time now spent in meeting the myriad separate federal program requirements could be devoted to substantive program development and evaluation; these functions now are inadequately accomplished.

- The State Department of Public Instruction could simplify its own rather complex organization for administering federal program funds. The state agency now designates a state education officer to coordinate separate federal programs; this is required by federal legislation in the case of vocational education. The agency, however, has coordinators for ESEA Titles I, II, III, V, and VI, and for NDEA Titles III and V-A, as well. Shortly, it probably will designate an additional coordinator to administer portions of the new Education Professions Development Program.

Officers in the U. S. Office of Education officially are encouraging state education agencies to take steps such as these. Ultimately, the consolidation of federal programs will lead to a major simplification of complex reporting and accounting relationships between Bismarck and Washington, as well as to relief of local school districts. The techniques for "packaging" federal programs in local districts now are being perfected in Washington. One state will consolidate all federal programs in its 1,270 local districts as early as June, 1968. Others undoubtedly will follow suit. North Dakota's State Department should aggressively pursue this course of action.

Administering the State Foundation Program

The proposed new State Foundation Program is designed to minimize administrative red tape. However, it will demand a new and higher order of professional leadership from the Department of Public Instruction; it will be appropriate to increase the Department's funds so that it may exercise this leadership function. An estimated 4% of state funds for education should be available for administration.

The Foundation Program contains two basic provisions: first, a formula for determining local and state shares in support of the normal, recurring costs of school operations; second, formulas for determining the extraordinary costs of education (e.g., capital construction, debt service, and transportation) that—under prescribed conditions—will be borne by the State.
The components of the basic program formula are a GROSS ALLOWANCE or GROSS ENTITLEMENT, and a DEDUCTIBLE MILLAGE. These are described in detail in a companion publication, "A Plan of Public Expenditure in North Dakota," a product of the Statewide Study of Education. Briefly, these elements of the formula may be described as follows:

The GROSS ALLOWANCE is a dollar sum that the state guarantees to each local district primarily for the support of the normal, recurring costs of school operation. The GROSS ALLOWANCE is based upon the number of students enrolled, and upon the number of qualified teachers employed. The allowance rate would be established in legislation, each biennium. To qualify for maximum support, a local district must ensure quality performance by retaining well-qualified personnel, and by providing a ratio of one qualified teacher for each 25 students. The GROSS ALLOWANCE of a district may include provision for extraordinary costs of education—transportation, construction, and debt service—when these are applicable. (In the proposed new Foundation Program, the basis for computing a year's GROSS ALLOWANCE is the sum of $502 per pupil. For each classroom unit of 25 students and a qualified teacher, GROSS ALLOWANCE for normal costs would total $12,542 per year; with a non-degree teacher, the figure would be $8,551. Maximum provision for extraordinary costs could raise the sum per classroom unit to $16,942.)

The DEDUCTIBLE MILLAGE is a uniform minimum local district tax rate, to be levied on property. When applied to an equalized local tax base, the DEDUCTIBLE MILLAGE establishes the local district's required contribution to the GROSS ALLOWANCE for normal costs. If the local district participates in the Foundation Program, the state share of the normal costs of education is the difference between the GROSS ALLOWANCE and the amount provided by the DEDUCTIBLE MILLAGE. The proposed Foundation Program suggests a levy of 46.5 mills, as the initial level of DEDUCTIBLE MILLAGE.

The levels are adjustable, of course, for both GROSS ALLOWANCE and DEDUCTIBLE MILLAGE. Each biennium, the State Department of Public Instruction must make recommendations to the Legislature regarding the optimum levels at which the GROSS ALLOWANCE and DEDUCTIBLE MILLAGE should be established. Other professional groups, of course, may propose alternatives, and the final decision always rests with the Legislature. However, committees of the Legislature should be able to look to the State Department of Public Instruction for reliable analyses of all proposals involving the Foundation Program; from the Department, the committees should receive detailed professional analyses of the advantages and disadvantages of alternative plans.

To implement the Foundation Program, therefore, the Department's central office must develop the organizational and procedural capabilities necessary to manage the program's grants provisions. Four distinct capacities will be needed. These are:

* The capacity to receive, review, and approve local district applications for funding under provisions of the Foundation Program; such applications will include a comprehensive plan, indicating the program of services to be provided locally under
the Foundation Program as well as full supporting legal and financial material.

* The capacity to receive, review, and approve statistical and fiscal reports from local districts; reports must demonstrate the pattern of actual expenditures incurred in support of the program plan, and must contain objective evaluations of program performance.

* The capacity to conduct substantive and fiscal audits of local district performance under the Foundation Program.

* The capacity to analyze the efficacy of the Foundation Program as applied in each local district and to make recommendations for appropriate modifications therein; recommendations may relate to the contents of the Foundation Program and to the formula for allocating Foundation Program funds.

The State Department also should make organizational and procedural arrangements to administer the "extraordinary costs" provisions of the Foundation Program. These include support programs for school transportation services, capital construction and debt service.

In the proposed Foundation Program, state government alone would provide funds to get children to and from school; local and state funds jointly would support the basic instructional program. In administering the transportation portion of extraordinary costs, the State Department should establish appropriate guidelines and regulations whereby local districts—once well organized—will prepare and submit district-wide plans for review and approval by the Department. Better still, the transportation plans of local districts should be reconciled within broader regional plans, developed through the proposed regional education service centers.

The proposed Foundation Program also provides that State government shall absorb other extraordinary costs: those incurred by well-organized local districts for debt service (on bonds issued for prior school construction), and a substantial portion of the costs of future construction when required. To administer construction aspects of the Foundation Program's extraordinary costs, the State Department of Public Instruction should develop the organizational and procedural capacity to review and approve locally initiated building and bonding programs. State funds would support local bond issues as long as such issues receive favorable treatment in the bond market. Alternative means of providing State support should be explored for use if local bond issues fail to receive favorable rates of interest in the market. For best effect, local district surveys for school construction needs should be reconciled regionally through the proposed regional education service centers.

The State Department of Public Instruction also should administer the state funds that are employed to equalize educational opportunities among exceptional children. The proposed Foundation Program recognizes that extraordinary costs will be incurred in order to provide adequate services to children in extremely isolated areas and to children with mental or physical handicaps. To defray these costs, the proposed Foundation Program formula provides additions to the basic allowances for normal and recurring costs of operation.

In administering these funds, however, the Statewide Study Team recommends careful attention to possibilities for regional, inter-
district programs for exceptional children. Further, it recommends that the funds be released to local districts only upon the basis of an approved program plan; to the extent feasible, plans should demonstrate the cost/benefit ratios of proposed programs for exceptional children.

For example, geographic isolation still will be a major factor in the education of some children, particularly in the western part of the State. Administratively, these children will reside in a twelve-grade district; the district's total enrollment should be such as to support a total enrollment of at least 215 pupils in grades 9-12. However, isolation may prevent the district from creating a single high school for 215 or more, simply because some children cannot get to that school within a reasonable commuting time.

Given a situation of this type, that local district—cooperatively with the staff of the regional education service center—should develop alternative ways to extend adequate services to these isolated youngsters. In terms of dollars, time and inconvenience, the cost of each alternative should be weighed against the estimated benefits that might accrue to the children. A plan should be developed and submitted for State Department approval, based on the best of the several alternatives considered. If it approves that plan, the Department would release funds to the district (or to the service center, if it is an interdistrict plan) for the costs of the additional program.

Similarly, arrangements should be made to administer the funds required for extra-cost programs to serve handicapped or disadvantaged children.

**Program Planning and Evaluation Function**

Public education is North Dakota's single largest industry. To guarantee that it is managed with the skill and adroitness required, its principal leadership agency—the State Department of Public Instruction—must itself develop a capability for continuous program planning and evaluation. The comprehensive Statewide Study Plan may serve as an overall guide to near-term action. However, the State Department must develop detailed plans to assure appropriate refinement and implementation.

The principal responsibilities included under "program planning and evaluation" are these:

* Develop the administrative strategies and programs that the state agency must establish and carry out, to achieve the broad objectives of the comprehensive plan
* Establish the criteria by which the management programs of the agency may be assessed regularly
* Consider the various means/ends alternatives available to the agency in achieving these objectives
* Establish specific missions to be accomplished each year over a reasonable period, as for example: a long term mission; intermediate missions (3-5 years); and short term missions
* Delineate the specific functions and tasks that must be performed by the agency to accomplish these missions
* Show how the program of work is to be accomplished: time estimates; schedules; resources to be allocated; critical decisions to be made along the way; progress reports to be required.
As the State Department moves to consolidate federal education programs, to develop regional education service centers, and to administer the new and comprehensive Foundation Program, the value of careful program planning and evaluation will become evident.

Fortunately, the State Department is in a position to develop its planning and evaluation capability almost immediately. By combining its diagnostic and strategy-building team and its planning and evaluation team into a single management unit, it could support that unit's initial development with federal funds received for the administration of federal programs, particularly funds provided under Title III, ESEA. Salary limitations on state agency positions might be too restrictive to secure the quality of professional persons needed to staff such a unit; if so, the component could be built into the first regional education service center, where such limitations need not apply. This is not a recommended procedure, but the need is very great to establish this unit and to man it with high-quality staff.

Quality Control Function

The State Department is charged by law to maintain certain quality controls in the education system. These are: teacher certification; school accreditation; and fiscal control. These functions obviously are continued. However, there should be a marked shift, from passive control to active leadership in the State, particularly in the area of accreditation.

Presently, the state agency accredits high schools according to minimum standards. A Type I school, for example, must enroll no fewer than 215 pupils in the upper four grades. This is the highest standard now held for schools in North Dakota. (Much more rigid standards are enforced, however, for those schools that are accredited under the voluntary and private North Central Association of Secondary Schools and Colleges.) Under the proposed new comprehensive program, the Type I school becomes the minimum standard throughout the State. As presently exercised, therefore, the accreditation function of the state agency will become outdated.

Of greater importance, however, is the challenge to develop performance standards that will permit and encourage all local districts to achieve new levels of excellence in the years ahead. "Performance" standards differ from typical accreditation standards: the former refer to how well pupils achieve, whereas the latter refer to what school districts provide. Both are appropriate estimates of quality, performance standards, however, are almost absent in North Dakota, hence it is impossible to say with any assurance what effect, if any, public education has on its students. It is impossible to estimate the precise effects on pupil performance of the programs and services—individually or in combination—currently offered by the schools.

Performance Standards in the Foundation Program

The proposed Foundation Program contains a system of quality controls. When implemented, these will give the State much better assurances of quality performance than are obtainable under present conditions. These are not "performance standards" which—as noted—should be developed in the years ahead; they do provide relatively reliable guides to quality, although they do not guarantee quality. Specifically, the Foundation Program includes provisions for a full
range of those services to pupils that—on the basis of present evidence and good judgment—are deemed to be necessary and desirable for quality performance. (These services are described in detail in a companion publication, "A Plan of Public Expenditure for Education in North Dakota"). Briefly, the Foundation Program includes provisions as follows:

* One "qualified" or "fully prepared" teacher for an average of 25 pupils
* One "qualified" or "fully prepared" administrator for each 12 full-time equivalent teachers
* One "qualified" or "fully prepared" counselor for each 300 high school pupils (grades 9-12)
* One "qualified" or "fully prepared" librarian for each 500 pupils
* One "qualified" or "fully prepared" para-professional for each six full-time equivalent teachers
* Instructional materials, library materials, audio-visual materials, and related materials, equivalent to $25 per pupil
* Health, recreation, and community services, equivalent to $5 per pupil
* Teacher in-service training, equivalent to $125 per teacher
* Special education services, equivalent to one-and-one-half the level provided for children without marked handicaps
* Research, planning, and evaluation services, equivalent to 1% of operational expenditure each year
* Provisions for teacher retirement, equivalent to 8% of personnel salaries
* Capital expenditures for minor, recurring items, equivalent to 4% of annual operational costs.

Local school districts would enjoy ample latitudes in developing and conducting programs within this framework. By specifying quality controls in the Foundation Program, however, reasonable guarantees for adequate services can be established for all pupils in the State, regardless of local ability.

Measuring Program Effectiveness

Before effective quality controls can be fully established, the State faces the major challenge of defining more concretely the specific objectives it wishes to achieve with its 144,000 pupils. Also, it must contend successfully with the problem of developing and introducing appropriate measuring devices, in order to assess the extent to which these objectives are attained, and in order to illuminate the relative contribution of one program versus another in attaining these objectives.

*The terms "qualified" and "fully prepared" deserve elaboration. For example, a "qualified teacher" is one who has completed a four-year college program in the area of assigned teaching duties; a "fully prepared teacher" has completed the equivalent of a master's degree program in an appropriate field. Factors other than academic background also may be considered, of course. For other categories of positions, the terms have analogous meanings.

This matter is more fully discussed in A Plan of Public Expenditure for Education in North Dakota.
A major challenge for state agency leadership that should be faced immediately is: to cause the best talent within the State to confront the problem of defining and developing criterion measures for educational performance and attainment. Fortunately, other states are moving rapidly in this area; hence, it will not be necessary for North Dakota to break wholly new ground. Moreover, financial assistance for this effort also may be forthcoming after July, 1968, from the federal government, under the provisions of ESEA Title IV.

As the Department moves on toward development of performance standards, specific assistance could be obtained from New York State, which is now completing a major criterion instrument project; from Iowa, which has headed a thirteen-state effort to codify an entire battery of information relevant to assessment of performance in the classroom; and from the U. S. Office of Education, which has funded major projects aimed at the evaluation of programs for the educationally disadvantaged.

The state of the art, at the moment, will permit reasonably valid and reliable measures in two performance areas:

* Basic educational skills development (e.g., reading, arithmetic computation, etc.)
* Occupational skills development.

In other areas, however, progress has been slow and not altogether productive. These include at least two important performance areas:

* Social skills development
* Health and personal development.

While taking initiative to see that needed measures are developed in these areas, the State Department can move almost immediately to develop performance criteria to be employed in the administration of the new Foundation Program. These necessarily will relate to the functions of administration or management to be discharged by local districts that participate in the new program.

**Support Services To Be Developed**

To be effective in the expanded leadership role, the State Department must develop or further refine its management capacities and supporting services. These include:

* Various elements of a complex of management information systems, so that the Department can determine where funds for education go, who and what is affected by the public expenditure, and with what results

* A program planning and budgeting system that will enable the Department to relate expenditures to specific programs, and to plan—and to assist local districts to plan—for the most efficacious use of the public funds for education. The system would be utilized to design alternative ways to achieve desired educational objectives, and to examine all alternatives systematically and scientifically prior to the adoption and introduction of the preferred solution.

* A Personnel Development Program that will enable the state agency to train and retrain the principal professional personnel who will perform the increased leadership and technical functions that the Department is expected to undertake.
Organization for Administrative Functions

A new concept of professional leadership has been described and advanced for the North Dakota State Department of Public Instruction. The Statewide Study Team believes that the Department now should direct its attention seriously to the development of its needed new leadership capacities; indeed, a substantial part of the comprehensive plan depends for success largely upon the ability of the Department to provide essential leadership statewide.

The Study Team also has advanced and described the key executive functions that must be developed by the Department as prerequisites to statewide leadership. Moreover, a major recommendation was made with respect to a new structure for exercising that leadership: the creation of seven regional education service centers.

The organizational pattern of the Department of Public Instruction, at present, may be admirably suited to the Department's traditional regulatory and service functions. Now, however, that structure should be redesigned specifically to equip the Department to perform superbly well each of the management functions which must be emphasized hereafter. Until now a regulatory and service agency, the Department now becomes the managerial and leadership center for designing and fulfilling statewide, comprehensive plans. Its own management review should give the Department appropriate insights into the specific means whereby its present and future resources may be channeled into the required functional areas.

As noted earlier, the Statewide Study Team did not make an intensive organizational and procedural study of the Department, and the Study Team therefore does not advance specific proposals regarding future organizational arrangements. The Team believes, however, that the following discussion might assist the State Department in designing its future organizational, procedural and staffing arrangements.

The practice of modern management requires that provision be made for the performance of several inter-related functions. To perform each function, yet to integrate all functions, is the task imposed upon an enterprise such as the Department of Public Instruction. Some elements of business, industry and government have solved the organizational problem that is involved, and their solutions vary with the nature of each enterprise. In each solution, however, suitable provision is made for the adequate performance of each function. In some cases, attention to a single function is made the exclusive task of one division or bureau; in other cases, an organizational unit performs two functions or more, or a single function is divided among two or more units. However, each function is very explicitly provided for in all cases where the problem is satisfactorily resolved.

The accompanying chart is a schematic diagram, which is intended to illustrate the relationships among functions. It is not intended as a formal organization chart, and is not intended to imply or suggest that the State Department should create a separate division for attention to each function. However, the schematic outline may clarify the organizational problem now posed to the Department. To treat each function, the Department may devise various solutions, utilizing formally organized divisions, offices and other units, and relying also upon inter-divisional, special-purpose teams, task forces and other administrative devices.
FUNCTIONAL ORGANIZATION FOR STATE DEPARTMENT OF PUBLIC INSTRUCTION

A. Education Service Centers

B. APPRAISAL (Diagnosis and Strategy Building)

C. DEVELOPMENT

D. DEMONSTRATION & DISSEMINATION

E. LOCAL DISTRICT COOPERATION

F. BUSINESS OPERATIONS (Funds Management)

G. Management Information System

H. Program Planning and Evaluation

I. Priority Coordination

J. OFFICE OF SUPERINTENDENT OF PUBLIC INSTRUCTION

K. Executive Implementation

L. Public Information

M. Staff Personnel Development
Under the general direction of the State Superintendent of Public Instruction, five key functions would be performed. In the abstract, the flow of work among the functions would be as follows:

**APPRaisal**

The Appraisal function requires two kinds of specialists: first, research and evaluation personnel; second, experts in specific program areas, such as language arts, mathematics, vocational education, etc. Appraisal personnel would develop, or cause others to develop, a broad plan of descriptive research as a basis for diagnosing the persistent and compelling educational problems in North Dakota. On the basis of these diagnoses, they would formulate broad program strategies for alleviating the problems. The strategies would be both general and specific. General strategies would be of the order of the proposals recommended by the Statewide Study of Education; they would treat broad problem areas such as personnel development, district organization, fiscal reform, and instructional innovation. Specific strategies would treat special needs of certain classes of pupils (e.g., handicapped, disadvantaged, or rural isolated) and special needs of various program areas (e.g., basic skills, occupational skills, socialization, health and personal development).

Data and recommendations from Appraisal would flow to the Office of the Superintendent (J) for decision; it must be decided which priority programs are to be implemented. The Superintendent would receive advice with regard to alternative priorities; to render such advice is the reason for the function of Program Planning and Evaluation (H). When priority is clear and program activities are established, there is need for the function of Priority Coordination (I).

**DEVElOPMENT**

Program development specialists—cooperatively with local districts and with personnel of the regional education service centers—would design specific program proposals that might be introduced experimentally into selected local or regional locations, using discretionary funds available to the state agency from state or federal sources. For example, the state plan programs under provisions of federal authority (e.g., ESEA I, II, III, VI and NDEA III and V-A) should be available to support local and regional program development activities thus designed.

**DEMONSTRATION AND DISSEMINATION**

Personnel that are expert in the introduction of new programs into practice in local districts would work directly with local districts and with regional education service centers; their task would be actually to install demonstration programs in priority areas. They would design methods which would cause successful demonstrations to be adopted broadly within the State, so that the total educational system might constantly renew and improve itself. The largest proportion of demonstration and dissemination activity would be accomplished through the regional education service centers.

**LOCAL DISTRICT COOPERATION**

Planning specialists would work directly with local districts and regional education service centers on problems of comprehensive/educational planning. Material assistance would be provided local
districts to design long-range, intermediate, and short-range plans for educational development. Their plans would be the primary basis for participating in the State's proposed new Foundation Program and in the several Federal programs monitored by the state agency. A first target of this Local District Consolidation function would be to consolidate, in each local district, all federal funds available to the district for education. A longer range target would be to focus and coordinate local, state and federal expenditure in a thoughtful, comprehensive plan for development in the district.

Personnel engaged in this function would approve program plan applications from local districts with respect to the State Foundation Program.

BUSINESS OPERATIONS

Specialists in funds management would make payments to local districts on the basis of plans approved by program officers responsible for local school cooperation. They also would be responsible for fiscal accounting, statistical reports, and audit of local district operations.

OTHER FUNCTIONS

To support decision-making by or on authority of the Superintendent of Public Instruction, six additional functions are necessary. These are:

* A management information function, to generate data relevant to program operations, program outcomes, and flow of funds. Program and accounting information would reconcile activities at local, state and federal program levels
* A program planning and evaluation function, to examine alternative programs for use of state resources in education and to enable the Superintendent to base his decisions concerning priorities upon hard evidence and cost/benefit analyses; this function includes development of the state agency's own program plan, which would detail the functions and work tasks to be performed during a specified period by each operating division.
* Priority program coordination among the agency's several programs is a function to be achieved agency-wide. This assures that with respect to each priority area of concern (e.g., rural isolated pupils): relevant data and strategies are generated (Appraisal function); potentially innovative programs are designed (Development function); programs are installed experimentally in local or regional organizations (Demonstration and Dissemination function); and—once field tested and evaluated—programs are introduced into standard practice (Local District Cooperation function).
* Executive implementation is the facilitating function of the Superintendent with respect to internal budgeting, organization, personnel administration, and housing and staff services.
* A public information function, to develop the broad program of news releases, bulletins, public addresses, and professional publications required to disseminate information concerning the agency's several programs, to report the status of
elementary and secondary education within the State, and to report the progress made under new programs.

* To develop and coordinate the State Department's own internal training and retraining activities is the purpose of a staff personnel development function; this function also must provide departmental liaison with institutions of higher learning, for continuing cooperative activities in the area of educational personnel development.

* * *

The ideas expressed here are deemed to be valid and feasible. A serious and systematic review of the proposed plan for developing state leadership in education now should be conducted by all responsible educational agencies and institutions, and specifically by the Department of Public Instruction. Following that review, a coordinated and appropriate new program of administrative action should bring the first vital steps of the plan into reality.

THE STATEWIDE STUDY OF EDUCATION

The published materials of the Statewide Study of Education are reproduced in six volumes. These are:

* PERSONNEL NEEDS IN NORTH DAKOTA PUBLIC SCHOOLS
* PUBLIC EXPENDITURE FOR EDUCATION IN NORTH DAKOTA
* EDUCATIONAL DEVELOPMENT FOR NORTH DAKOTA 1967-1975: OVERVIEW
* DEVELOPING AND PLACING EDUCATIONAL PERSONNEL IN NORTH DAKOTA
* A PLAN OF PUBLIC EXPENDITURE FOR EDUCATION IN NORTH DAKOTA
* DEVELOPING STATE LEADERSHIP FOR EDUCATION IN NORTH DAKOTA

Copies of these documents are available through the Office of the State Superintendent of Public Instruction, State Capitol, Bismarck, North Dakota.