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ANALYSIS OF FEDERAL AID TO RURAL SCHOOLS. PART II. SPECIAL NEED--ETC(U)

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SPECIAL NEEDS OF RURAL DISTRICTS

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**The Rand Corporation
Santa Monica, California 90406**

ANALYSIS OF FEDERAL AID TO RURAL SCHOOLS, PART II:
SPECIAL NEEDS OF RURAL DISTRICTS*

INTRODUCTION

In a paper delivered at an AERA symposium in San Francisco in 1979,¹ I reported preliminary results of a quantitative analysis of federal aid to rural schools. The present paper describes the findings of the second phase of that research, a qualitative analysis that was based on fieldwork visits to rural districts in four states. The study was supported by the Office of the Assistant Secretary for Education in the Department of Health, Education and Welfare and by the National Institute of Education.²

This research was motivated by the claims of rural advocates that rural students do not get their fair share of the federal education dollar. Unfortunately, there has been little analysis that sheds light on claims of antirural bias in the allocation of federal education funds. Earlier studies use nonmetropolitan status (a category that includes cities of up to 50,000 people) as their indicator of ruralness, which might mask the fact that smaller rural districts receive a disproportionately small share of federal funds.

The first phase of this study examined, for six states (Vermont, North Carolina, Georgia, Kansas, Maryland, and California), the distribution of fiscal year 1977 funds between rural and nonrural school districts for two state-administered federal programs: Libraries and Learning Resources (ESEA Title IV, Part B), and Educational Innovation and Support (ESEA Title IV, Part C). These two programs represent the two basic types of federal funding mechanisms--formula-based (Title IVB) and grants competitions (Title IVC).

For the purpose of this study, we accepted that there is no perfect definition of rural. In addition to using the metropolitan/nonmetropolitan distinction used in other studies, we performed analyses using three finer-grained definitions of ruralness. Our criterion of equity in the quantitative analysis was whether rural districts were receiving the same number of dollars per student from the federal program as were nonrural districts.

* This paper was presented at the symposium, "Why Study Rural Education?," at the AERA Annual Meeting held in Los Angeles in April 1981.

In our sample states, Title IVB funding formulas were operating to provide rural districts with at least a proportional share of program funds and in most cases somewhat more. This finding must be understood in the context of rural needs and costs, however. Even with a greater per capita share of Title IV dollars, a small rural district can purchase fewer library books or pieces of instructional equipment than can a populous district with a lower per capita grant. Given that the locally supplied instructional resource base may also be poorer in the small rural district, rural students may remain in a relatively disadvantaged position (in terms of access to learning materials and equipment), despite their greater share of Title IVB funds.

A different picture emerged from the competitive grant system of Title IVC. Using our least refined definition, nonmetropolitan districts received a proportional or higher share of Title IVC funds in our sample states. However, results using finer-grained definitions revealed a mixed pattern. Rural districts in California, Kansas, and Vermont received Title IVC per capita funds that were below and, in some cases, considerably below the amount received by nonrural districts; the reverse held true for Maryland, Georgia, and North Carolina. It appears that rural districts fare more poorly in those states that award fewer, larger-sized Title IVC grants. State systems that award a greater number of smaller-sized grants, whether for project adoption purposes or locally developed improvement efforts, apparently enhance participation by rural districts.

SPECIAL NEEDS OF RURAL DISTRICTS

The quantitative analysis examined whether Federal Title IV funds are distributed fairly according to the standard of equal funding per student. The results suggest that Title IVB funds are fairly distributed and Title IVC funds have some inequities in their distribution. But that analysis just treats the allocation of equal funds without taking into account how needy rural areas may be. A recent report by the Department of Agriculture suggests that rural residents have serious educational disadvantages. It concluded that rural/nonmetropolitan

residents, as compared with urban/metropolitan residents, are more likely to: attend public schools that spend less for instruction, enroll in school later, progress through school more slowly, complete fewer years of school, score lower on national assessment tests, and become functional illiterates. Conversely, rural/nonmetropolitan residents are less likely to: attend public schools with supportive services and personnel, complete four years of school, plan a college education, enter college, receive vocational training, or enroll in adult education programs (Fratone, 1978).

There is, in short, a prima facie case that rural districts, particularly isolated districts in sparsely populated counties, may have severe, unmet educational "needs," whether judged in absolute terms or in comparison with the average urban or suburban district. In those cases where rural districts are relatively deprived, the provision of equal per student funds to rural and nonrural districts might be judged to be "unfair" for it would leave the disparity between them unaltered. In other words, a systematic assessment of the fairness, as well as the effectiveness, of federal policy in this area requires that needs or disadvantages of rural districts be determined and compared to nonrural districts.

At a conceptual level, it is easy to describe how such a needs analysis might be done. First, the needs of students, the cost to districts of meeting needs, and the district's ability to pay for the cost would be defined. Second, operational measurements of the definitions of needs, costs, and ability would be developed and applied so that appropriate data could be collected. Finally, rural and nonrural districts could be compared according to their relative ability to meet their needs. Thus, policymakers would have the information to judge whether a compensatory formula to aid rural districts would be needed and how it might be constructed. (It is, of course, quite another step to decide whether a compensatory policy would be desirable and feasible.)

Such an analysis is difficult to carry out at the level of the school system, however.³ We concluded, after examining the work of analysts who have attempted needs analysis, that needs, costs, and ability are extremely slippery concepts to define and even harder ones

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to measure. These difficulties are so substantial that the time, money, and research energies required to conduct such a comprehensive study precluded any attempt to do so at this point.

We believed, however, that a simpler approach might yield preliminary research findings on which sensible, short-run policy recommendations might be based and more extensive research on the needs problem might be designed. In particular, we reasoned that an appropriate and feasible first step for this pilot study was to identify conditions of rural schooling that might put rural school districts at a relative disadvantage in using federal programs as well as in developing and maintaining an acceptable level of schooling. If these conditions existed and could be identified, policymakers could be given a more specific grasp of rural problems than the usual broad gauged arguments about how needy rural areas are on the average. In addition, federal and state officials could be informed about particular strategies that might help ameliorate specific needs. We hoped such exploratory information could be used to design future research that would determine how extensive school system needs are in rural areas and how they are distributed in different states, regions, etc.

Thus, we decided to pursue the modest objective of identifying conditions of rural school districts that represent specific needs. By thus focusing on the rural areas, we had to forgo making direct comparisons with special needs and problems of nonrural areas. Though such comparisons are essential to ultimate judgments about how fairly federal policy deals with rural districts in comparison with urban and suburban districts, we felt justified in thus narrowing our objectives for two reasons. First, our limited resources did not permit an analysis of both rural and nonrural needs. Second, the problems of certain rural areas may be great enough in absolute terms or relative to other rural areas (particularly ones that are less isolated or more populated) to merit policy initiatives independent of urban or suburban problems. Our data strongly suggest this is so.

Before continuing, we would like to emphasize that, despite our concern with identifying special needs and problems of rural districts, we recognize that many rural districts provide their clients with fine

educational services despite such constraints. Small district or school size may impose certain limitations on the educational enterprise, but it also entails certain potential advantages--more personalized relationships among administrators, teachers, and students; closer ties with parents and community. Our hope is that our findings can assist federal and state policymakers to take actions that would enable rural districts to solve some of their present problems while building on their unique strengths.

IDENTIFICATION OF DISTRICT NEEDS

To investigate qualitative questions about the operation of federal programs in rural districts, we conducted telephone interviews and field visits to state departments of education, substate regional agencies, and local education agencies (LEAs). All state departments in our six sample states were contacted by telephone. In addition, three were visited in person. We also visited regional agencies and LEAs in four states (California, Georgia, North Carolina, and Vermont). State department and regional agency officials, as well as informed observers outside the formal system, suggested candidate LEAs for visits. We asked these informants to identify a number of rural districts that would reflect a range of demonstrated ability to attract and utilize federal funds. We did not want to see either all "model" districts, or all districts that had serious problems with federal funding.

In selecting districts for fieldwork, we concentrated on rural districts that met our stricter definitions of rural, in terms of population sparsity and isolation.⁴ Our objective was to identify some characteristics of such rural districts that (a) hamper efforts to maintain adequate programs or to improve the quality of schooling and (b) might be amenable, either directly or indirectly, to federal policies.

During this exploratory investigation, we focused on the systemic needs of district organizations that arise because of small size and remoteness, rather than on the needs of students per se or of the population served by rural districts. It quickly became apparent, however, that the constraints imposed on an educational system by small size and

remoteness were compounded in some of the districts we visited by high concentrations of poor and minority children and severe economic stagnation in the local community. We term these districts "stressed" rural districts to differentiate them from rural districts that are not in severely needy communities.⁵ Though the systemic needs discussed below were found to varying degrees in most of the districts visited, they tended to represent more severe obstacles to maintaining adequate programs or to efforts to improve the quality of schooling in these more stressed districts.

We have grouped the special needs of rural districts into three categories: financial constraints, difficulties of attracting staff, and administrative limitations.

Financial Constraints

The financial status of any school district depends on the state's school finance laws, its ability to raise educational funds locally, and its eligibility for various categories of federal education monies. Though we did not conduct a systematic analysis of the complexities of school finance in our sample states, our conversations with rural educators did uncover certain common concerns about existing school finance patterns and unusual cost factors in rural districts.

If there was a single dominant theme of our fieldwork, a message that rural administrators sought time and again to convey, it was that allocation of funds on a per pupil basis places rural districts at a disadvantage. As explained in our discussion of Title IVB, a small rural school or district often incurs a higher per student cost to provide a particular learning resource or service, because of diseconomies of small scale. (We saw a good example of this in a small island school off the coast of North Carolina, with 100 students in grades K-12, that had just purchased a new duplicating machine; as its principal pointed out, the same machine could have adequately served a school five times as large, so their per pupil cost for purchasing it was much higher.) When state finance formulas allocate funds on an equal per pupil basis without recognizing these higher per pupil costs, rural districts are forced to provide a more limited program than their more

populous urban counterparts, unless they can compensate for the shortfall through local taxes, which poorer rural districts have difficulty doing.

Most states peg their contribution to local school budgets to the district's average daily membership, or attendance, though the mechanisms for allocating the state aid differ from state to state.⁶ In two of the states we visited, Georgia and North Carolina, the state allocates teaching positions to districts on the basis of enrollment and pays for teacher salaries according to a state-established salary schedule. Local districts may, however, both provide supplemental teaching positions and supplement teachers' salaries out of locally raised funds. Typically, urban and suburban districts are better able to do so than rural ones.

For example, several of the rural districts we visited in these states had no locally supported teachers and offered none or only token salary supplements above the state base. Administrators in these districts spoke of the difficulties of running an effective, comprehensive program with limited staff. One superintendent bemoaned the fact that given the small enrollment of his district (about 850 children) and the state's allocation of funds for particular services on a per pupil basis, his system had not been able to generate sufficient funds to hire either a librarian or an elementary physical education teacher. Nor could the district afford an art teacher. Moreover, a decline in enrollment of twenty-three students the previous year had meant a loss of four teachers (out of a total of approximately fifty).⁷ In larger districts, staff losses also cause problems, but there is often sufficient organizational slack to substitute comparable personnel and thereby minimize impact on the program. When a district such as this one operates so close to the margin, however, the loss of a single teacher can mean the elimination of an entire component of the curriculum. This superintendent reported that he had warned state officials: "If you cut me one more teacher I'll have to cut out business ed." He summarized his frustration with the existing school finance system this way: "To adequately fund small rural districts wouldn't take much money, but we need a subjective criterion. We need to stop playing the numbers game and figure out what are the basic requirements to run a school and let the formula build from there."

In addition to financial constraints related to basic state school finance laws, for some low wealth rural communities, local resource limitations prevent schools from taking full advantage of state or federal programs that entail local matching requirements. For example, to qualify for federal vocational education funds, districts must contribute a portion of the costs from local dollars. Federal guidelines encourage states to vary the required local contribution to reflect local ability to pay. In North Carolina, for instance, depending on wealth, districts must pay from 28 percent to 32 percent of the vocational education budget. North Carolina allocates vocational education staff on the basis of district enrollment, with a floor of 80 staff months (8 teachers) regardless of enrollment. However, we were told that some rural districts must relinquish part of this base allocation because they cannot afford the minimal 28 percent local share of the salaries. Several of our informants felt strongly that the range between minimum and maximum local contribution should be greater, to more accurately reflect disparities in districts' abilities to pay. A related example came from a county commissioner of a depressed rural county whose school district had sought federal recreation funds for a park--there were no parks in the county. Inability to meet the local matching requirements, however, precluded receiving a federal grant.

We want to emphasize that higher per pupil costs in rural districts are not restricted to the instructional program. One superintendent of a county-wide district noted that "all support systems--transportation, food services, building maintenance--cost more on a per pupil basis in rural areas." Rural districts often cannot afford to maintain the full retinue of support personnel, e.g., plumbers, electricians, carpenters, that one is likely to find in an urban district. Routine repairs therefore require the services of an outside contractor, often involving high travel costs, delays in obtaining parts or materials from distant suppliers, and so on.⁸ In recent months, rising fuel costs have hit rural districts particularly hard, given their need to transport children long distances to school.

In sum, diseconomies of small scale, both in the instructional program and in the provision of various other services, as well as special

cost factors related to geographic isolation and low population density, combine to create special financial constraints for some rural school districts that interfere both with the quality of their basic education program and their ability to avail themselves of special federal programs.

Difficulties of Attracting Staff

Administrators of some districts we visited expressed concern that their inability to offer teachers salaries comparable to those in urban and suburban districts reduced their ability to attract high caliber teachers to their districts, despite the fact that higher salaries in larger districts are usually offset to some extent by higher living costs in such communities. Beyond any financial barriers to acquiring good staff, however, they cited other factors that make attracting and retaining good staff a major problem for some rural districts.

Particularly for young, unmarried teachers, life in some remote rural communities holds little appeal. There are few opportunities for making social contacts, and what social life does exist takes place under the scrutiny of a small and often judgmental community that regards teachers very much as public figures. Housing, while inexpensive, may be barely adequate and not readily available. Libraries, theaters, museums, restaurants are a long drive away.

The elementary school principal of one very poor southern district with virtually 100 percent black enrollment expressed frustration at the high rate of teacher turnover in his school. He was especially dismayed that the more talented beginning teachers, whom he works with and watches develop through their difficult first few years, typically move on to other districts as soon as a better job becomes available. He reflected: "There is nothing here to hold them." The difficulties of building a cohesive faculty with high morale under such circumstances seem obvious.

Interestingly, the superintendent of an adjacent county with very different racial composition (80 percent white, 20 percent black) reported: "We've been fortunate to be able to attract top notch teachers and don't have much turnover." Even this district, however, had been unable to find a speech therapist willing to accept a job in the district, despite the availability of special education funds to cover the salary. This

situation should be particularly noted by federal policymakers, because many rural districts may be in the difficult position of trying to comply with new federal mandates to meet the educational needs of special groups (handicapped, bilingual) without being able to attract qualified specialists to work in their communities.

As we discuss at greater length later in this section, regional agencies in some states offer the services of consultants and special education teachers, who help compensate for the staffing gaps of rural districts. But, as one state department official noted, the same factors that make it difficult for local districts to attract highly qualified staff in isolated regions--such as limited access to educational and cultural institutions--militate against the regional agency's acquiring outstanding personnel. Thus the following ironic situation may result: Those districts that need help the most tend to be served by the weakest regional agencies.

Administrative Limitations

The administrative organization of school districts varies across the states we visited. California has many tiny rural districts (the median ADA of the state's 1000 school districts is about 800 students) with only one school; in such situations, the same person often serves as principal and superintendent, possibly also carrying out teaching responsibilities as well. Vermont's many small rural communities also have their own individual LEAs with elected school boards, but these local districts are organized into supervisory unions, with one superintendent providing administrative services for a group of local boards. In both Georgia and North Carolina, most school districts coincide with county boundaries. In Georgia, however, district superintendents are elected; in North Carolina, they are selected by the school board.

Such state variations in administrative structure and political arrangements have implications for the way rural schools are run, including their implementation of federal education policies and programs. A school principal in one Georgia district, for example, reflected on the operation of special federal programs in his county, given the superintendent's concern with reelection: "We at the school level would

like to be more involved in writing federal projects, but they [central office staff] don't always consult us. The superintendent's office is often more interested in the jobs a federal program can provide than in what it can do for the kids."⁹ A member of the state department staff in Vermont regarded "the very poor quality of administration in rural areas" as perhaps the single greatest barrier to improving rural schools. She questioned the system of having lay school boards hire principals, noting: "The type of people hired by school boards to be principals often simply don't have the organizational, political and administrative skills to do the job, to meet the needs of the school." Federal efforts to be more responsive to rural needs would be served by systematic study of aspects of the state context that shape federal/local relations.

But while some rural administrative problems may reflect special state situations, serious administrative limitations appear to be inherent in rural districts independent of state political arrangements. One frequent complaint heard during our fieldwork concerned the burden of paperwork imposed by growing numbers of federal and state programs and the frustrations of trying to meet these requirements with very few administrative and clerical personnel. As one superintendent of a sparsely populated North Carolina county remarked: "There are the same administrative requirements of paperwork--it takes the same amount of time to fill out these forms--regardless of the number of students. We need the same administrative staff as a larger district, but we can't afford it."

The administrative staffing situation in one rural Appalachian county that we visited is not atypical. The central office consists of a superintendent, a general supervisor, and a Title I director. The general supervisor, who oversees instruction in grades K-12, is also responsible for writing applications for all federal projects but Title I, and filling all other administrative, informational and evaluative requirements of these programs. She commented: "Federal programs may provide for teachers, but they don't give money to cover the administrative or clerical help the programs require. Mine is an almost impossible job!"

When the person responsible for filling out forms is also the person responsible for supervising teachers, as is common in small rural districts, the administrative paperwork burden competes directly with classroom needs. Even without paperwork overload, the role of a general supervisor for grades K-12 is a challenging one. As one superintendent reflected: "It is hard to be shifting gears constantly, to work with elementary teachers on the reading curriculum in the morning and then do high school science in the afternoon."

The weak administrative infrastructure in rural districts may be contributing to what we might call a cycle of deprivation in some rural schools. Certain rural districts may be at a disadvantage in (1) identifying and documenting special needs among students that would make them eligible for special types of funding, (2) identifying potential outside funding sources, (3) applying successfully for such funds, and (4) implementing specially funded programs. One example of the first problem was cited by North Carolina's Title IVB coordinator. Gifted and talented students are one of the state's categories of high-cost children under Title IVB, which means that a district is entitled to a supplemental allocation if it has more than the state-wide average percentage of such children. Twenty of the state's 144 districts, however, most of them small rural units, have never identified their gifted and talented students and offer no program for them. These districts were therefore automatically ineligible for a portion of these monies. Thus, at least some rural districts appear to suffer from an institutional equivalent of the old "the rich get richer" adage: An educational organization must have money and staff before it can acquire and use other monies and programs effectively.

POSSIBLE SOLUTIONS AND STRATEGIES

Having identified some special needs and problems of rural school districts, we turn now to a brief presentation of possible strategies for attacking these problems so as to enhance the capacity of rural systems to provide quality schooling. Some of the ideas listed below reflect policies and practices already in operation in some states; others are still hypothetical. Not all the areas covered lie directly

within the domain of federal policies and programs, though some do. In those instances that do not, there nonetheless appears to be a potential federal role in sponsoring relevant research and encouraging states to take appropriate action.

Revision of Funding Mechanisms

Rural districts would presumably benefit from adherence to the following guidelines concerning funding mechanisms for federal education programs and related programs in which school districts participate.

1. Avoidance of eligibility criteria based on numbers of students in a particular category in favor of criteria based on minimum percentages of students or other measures that do not introduce a bias because of small size.
2. Recognition of small district size as a factor that raises per capita costs of schooling and a consequent departure from strict per ADA allocations (as many states have already accomplished by including small school or sparsity factors in their Title IVB formulas).
3. Greater sensitivity to district ability to pay in establishing matching requirements. Perhaps some sort of power equalizing mechanism--one that held district effort rather than percentage contribution constant--could be developed in programs requiring local districts to match federal funds.
4. Removal of minimum population requirements for participation in some programs. (One of the districts we visited, for example, was interested in applying for federal recreation funds reserved for nonmetropolitan counties. Upon contacting their state's federal relations person in Washington, however, they learned there was a minimum population requirement of 25,000 people, making their county ineligible.)

While such changes in federal programs could help alleviate the resource deficiencies in rural districts, the fact remains that the federal government contributes a relatively small part of most district

budgets. State school finance laws play a much greater role in determining the financial status of rural districts. The federal government is commencing a major program of research on school finance. As part of this program, the potential impact of state school finance reform on the welfare of rural schools should be studied, using finer-grained definitions of rural than nonmetropolitan.

Shared Services and Regional Agencies

One way to overcome some of the diseconomies of small scale and staffing limitations of small rural districts is for several districts to share the services of certain personnel or the purchase of special equipment. For example, an itinerant music teacher can offer instruction in several districts, none of which could support a full-time music specialist on its own. Rural districts may form informal cooperatives or consortiums to serve one specific function, such as providing special education teachers, or to enable sharing of a variety of services. In many states, cooperatives of small districts have joined together to propose and implement Title IVC projects, which is one way to increase participation by such districts in this federal program.

Another mechanism for supplementing the staff resources of small rural districts is the intermediate or regional education agency. Such agencies can fulfill a variety of administrative and support functions for rural schools, from accounting to curriculum consultation, which in urban districts would be filled by the district administration. Such agencies can thereby help compensate for some of the administrative limitations of rural districts addressed above.

Three of the four states we visited for the study have some system of intermediate or regional educational agencies serving local districts.¹⁰ California has county school districts. Georgia has 16 Cooperative Educational Services Agencies (CESAs), supported half by the state and half by participating local systems (participation is voluntary). A CESA is governed by a board-of-control composed of its local districts' superintendents. North Carolina has created eight Regional Education Centers, actually branches of the state department of education, to bridge the gap between state government and LEAs.

The actual services provided by regional staff vary from state to state and among individual agencies within a state. Georgia's CESAs allow participating rural districts to share a variety of personnel--from psychometrists to equipment technicians--they could not afford to support independently. A few CESAs employ special education teachers who provide direct services to children in their component districts' schools. North Carolina's Regional Education Center staff, by contrast, as employees of the state department of education, provide only consultative advice but no direct services to students. California's county school districts offer a range of services, including staff development, media centers, and management support for federal programs.¹¹

Regional agency staff tend to be active in facilitating local district participation in federal education programs--providing information about funding sources and projects available for adoption; assisting in proposal writing, planning, staff development, implementation, and evaluation. Each of North Carolina's eight Regional Centers has a Title IVC facilitator. In terms of service to rural districts, these facilitators get high marks from both local districts and state officials. Says a member of the state Title IVC staff: "The personal relationship of IVC facilitators with small rural systems is what's really important and has gotten us a greater response [from these districts]. They have expanded our service to the small systems, which need more hand-holding in the whole competitive process." A rural superintendent described the work of a Title IVC facilitator this way:¹² "Pre-Louise, I had to go to Raleigh, or it would take three weeks to get someone to come out here to help with planning. Louise will come over two or three times during planning. We can send her a list of our needs and she does the research to identify potential funding sources or find out places where good projects can be seen."

The relative merits of various models of regional agencies could be debated at length. Some observers have expressed concern that, if formal regional agencies assume more and more functions, especially if these include provision of direct services to children, the organizational capacity and independence of rural LEAs could be undermined. They fear that regionalization could become a sort of de facto district consolidation,

with resulting decreased accountability of the education system to rural communities. Such considerations need to be weighed in the course of implementing any regional concept.

Ultimately, the decision to establish regional agencies and choices about governance and functions rest with individual states and their local districts. However, given the apparent value of such agencies to rural districts in availing themselves of federal programs, complying with federal mandates, e.g., special education, and improving the quality of educational services, the federal government has a legitimate interest in sponsoring relevant research and sharing of experiences among states and in encouraging those states with no such system to explore its possibilities.

Building Organizational Capacity in Rural Districts

Given the limited resources in many rural districts, federal dollars obviously make a contribution when they go toward financing direct services to children. We would argue, however, that given the organizational limitations of some rural districts described above, federal programs might make an even greater contribution if they served to build the "organizational capacity" of rural school systems. By "organizational capacity" we mean a system's ability to identify and solve problems that impede its meeting the needs of its students. Capacity-building activities include staff development for teachers and administrators, particularly efforts aimed at promoting a continuing process of planning and implementing improvements in the system. Investment of federal dollars in such activities in rural districts might have a greater payoff than comparable efforts in urban areas, because small amounts of money might make a relatively larger difference to districts that typically have limited ability to support such developmental activities on their own.

Title IVC, with its mandate to promote "educational improvement," can address organizational capacity-building concerns more directly than many other federal programs. In Title IV programs such as Georgia's adoption grants, North Carolina's study and leadership training grants, and Vermont's mini-grants, the offering of smaller-sized awards and simplification of the proposal writing process seem to enhance rural

participation in Title IVC. Such uses of Title IVC funds as North Carolina's "Strengthening Leadership Resources and School Management Practice Grants" deserve consideration for rural areas in other states. Districts we visited had, with these funds, undertaken a variety of interesting capacity-building activities. One had hired consultants to work with five school principals in the county to prepare them to assume various county-wide administrative responsibilities. This plan was intended to serve the dual function of supplementing the limited resources of the central office and enhancing communication between the district and its schools. Another rural district had won two leadership grants in the past two years. Its first project focused on communication, involving a retreat at which board members, administrators, and teachers jointly considered plans for district programs. Its second leadership grant was designed to enhance the district's ability to compete for outside funding. Ten members of the district staff (administrators, psychologists, a community school coordinator) received training in grantsmanship from outside consultants and will continue to serve as a proposal-writing cadre for the district.¹³

In states where rural districts are even smaller and have fewer administrative staff than North Carolina's county-wide districts, such leadership training activities could be organized on an area basis, utilizing the resources of an intermediate educational agency, or through a consortium of several districts. Similarly, regional and consortium arrangements can be used to organize staff development activities for teachers, since many rural districts can support only the most minimal staff development efforts on their own.

Another special aspect of organizational capacity in rural districts deserves mention. Typically, school board members in small rural districts are more involved in the day-to-day operations of the schools than are their counterparts in large urban districts. However, they often lack the background and skills that would enable them to make more informed and effective decisions on such matters as staffing, curriculum, and federal programs. A key element of organizational capacity development for rural districts, therefore, would be programs to help school board members become knowledgeable, independent participants in the school governance process.

Incentives for Rural Education Personnel

The complex of problems that make it difficult for some rural districts to attract and retain qualified teachers and administrators cannot be solved easily. Ultimately, the way to make such school districts more attractive places to work is to make their communities more economically and socially viable places to live. Short of this, however, it might be possible to design a program to provide special incentives for educational service in depressed rural areas. One rural principal suggested, for example, that credentialed teachers might agree to work several years in high-need rural districts in exchange for subsidization of study toward a master's degree. Another component of such an incentive program might focus at the undergraduate level, providing support for students to train specifically for service in rural schools. Provisions could also be made for attracting school administrators and special education teachers to remote rural areas.

In recent years, the federal government has sponsored programs to attract doctors to medically underserved rural areas. It should have a similar interest in helping meet rural areas' need for well-trained education personnel.

CONCLUSION

Rural school districts, particularly in isolated or sparsely populated areas, can experience financial constraints, difficulties in attracting staff, and administrative limitations that hamper their ability to participate effectively in federal programs and to develop and maintain quality educational programs. Our fieldwork identified three categories of special rural difficulties, though we were unable to measure them in quantitative terms or to determine how widespread they are in rural America. The three categories--financial constraints, difficulties in attracting staff, and administrative limitations--include a wide variety of specific problems, only examples of which were cited in our earlier discussion. Moreover, there may be other specifically rural system problems not subsumed by these categories.

Nonetheless, even this cursory qualitative examination revealed that such systemic problems have pervasive effects on the ability of at least

some rural districts to manage and implement federal education programs. Whether it is a district's inability to attract specialized teachers to fulfill federal mandates to serve special target groups, its failure to participate in discretionary programs because of administrative staff limitations, or its difficulties in meeting fund matching requirements, such conditions interfere with the effectiveness of federal programs at the local level and therefore demand the attention of federal policy-makers.

Many of these implementation problems could be eased by direct, limited federal steps or by federal influence on state policy and practices. These steps often would involve relatively minor adjustments in federal regulations or guidelines of the type described earlier--e.g., removal of minimum population requirements for eligibility for federal funds. Though this report does not attempt to analyze the costs of such changes, their potential benefit to rural areas is significant enough to warrant further analysis. In particular, research studies might be funded to catalog problems in implementing all federal programs in rural areas and to analyze the costs of alternative means of correcting these problems.¹⁴ This research should include examination of existing legislation and regulations and field investigations that tap the perceptions of state and local implementors.

Correcting implementation problems in existing federal programs, however, is only a part, and not necessarily the most important part, of the problem. It is clear that the needs of some rural areas are great, particularly those we labeled "stressed" areas. But the nature of the federal role for treating these needs is less clear. On the one hand, some rural districts, though we did not attempt to estimate how many, find it difficult to maintain adequate schooling without additional outside assistance. On the other hand, outside assistance runs the risk of promoting imported changes that the local system cannot absorb; such intervention can undermine unique rural strengths without solving existing problems. Surely, there is no simple solution to this dilemma, even if major new federal monies were available for rural problems.

The development of policies that differentiate among rural districts, even in gross terms, might help deal with this dilemma. In particular,

federal (or state) policymakers should assume diversity, not uniformity, among rural districts and should begin by using broad categorizations to capture this diversity. For example, one broad differentiation could be based on the concept of stressed areas. Because the needs of stressed areas are so great, the risks of unintended problems resulting from direct federal special assistance may be worth taking. In less needy areas, the risks of massive federal programs may outweigh the potential gain; therefore, a more cautious, indirect federal presence seems appropriate.

To identify stressed districts, research would be needed to develop a simple index of district stress (one that would not create additional paperwork for overworked districts). Federal initiatives toward such districts would have to go beyond helping them use existing federal programs more effectively; they would need to treat underlying causes of rural education disadvantage directly. For example, one candidate for exploration would be an integrated policy encompassing a range of social services and economic development efforts as well as education.¹⁵

Furthermore, federal policy should assume that some programmatic strategies work in some places but not in others (Berman, 1980). Thus, even within the category of stressed areas, for example, mechanisms for involving the community in school-related decisions in a rural mining town would probably need to be different from those on an Indian reservation. Not only should policymaking be sensitive to this reality, but research should be supported to help understand the conditions under which different change strategies are appropriate and how local ideas and energies can be mobilized for school improvement in different types of rural settings. The many federal and state programs over the past two decades embody a wide variety of approaches. For example, the body of this report mentioned cooperatives, regional agencies, projects to develop district organizational capacity, etc. Research should be supported to identify the successes and failures within these programs. In addition, because of the small size of rural districts and the large number of them, rural areas represent good places to try out, on a small scale, new programs (such as incentives to attract staff) that are specially tailored to meet local needs. The research emphasis in these

trials ought to be on identifying conditions under which various policy alternatives might prove effective in different rural settings.

A national commitment to provide equality of educational opportunity to all youngsters--where equality is defined not in terms of equal inputs but in terms of meeting special needs of individuals and localities--requires fuller understanding of those conditions of rural schooling that we have begun to sketch here. The potential solutions and strategies we have described are also only suggestive. Designing federal education policies that will more effectively serve rural students requires additional systematic research of the needs side of the equation and further exploration of potential strategies, both those we have identified here and others.

NOTES

¹Gail Bass and Paul Berman, "Do Rural Districts Get A 'Fair Share'?" Analysis of Federal Aid to Rural Schools: A Progress Report," April 1979.

²The final report of this study, containing both the quantitative and qualitative analyses, may be obtained from The Rand Corporation, Santa Monica, California: Gail Bass and Paul Berman, Federal Aid to Rural Schools: Current Patterns and Unmet Needs, R-2583-NIE, December 1979.

³The major work on needs analysis has been in developing compensatory formulas based on the economic status of students. These analyses apply to rural as well as nonrural students, not directly to system needs, which is our focus.

⁴While the sample of districts we visited was limited, other rural educational research (Sher, 1977; Sher and Rosenfeld, 1977; Edgar, 1979) and conversations with experts in the field suggest that the conditions identified below are not uncommon among sparsely populated and isolated rural districts generally and especially among those serving disadvantaged populations.

⁵We wish to thank Jerry Fletcher for suggesting the term "stressed" to describe these districts. It was beyond the scope of this pilot study to measure in quantitative terms how stressed districts are. Such a hypothetical index might take into account such factors as the local tax base, community willingness to support educational expenditures, provisions of the state's school finance system, racial and socioeconomic makeup of the local community, and proximity to cultural and educational institutions.

⁶There is great variation among state school finance systems and many states have undertaken substantial reform in this area in the past decade, generally increasing the proportion of aid to schools from state sources. A recent review of developments in this field suggests that rural districts with low property wealth have generally benefited from these reform efforts (Tompkins, 1977).

⁷Because state allocation formulas were generally developed during periods of population growth, anomalous effects--to which small rural districts may be particularly sensitive--may result during periods of enrollment decline (see Berman and McLaughlin, 1978). In the instance described above, according to our informant, the state's allocation formula was designed to "project growth" and so adds extra staff in anticipation of new students, but conversely also "projects decline," and takes away teachers before the district actually loses the students.

⁸The prospect of greater efficiency in providing such services has been a traditional argument in favor of district consolidation. However, even consolidated rural districts, which can afford permanent service staff, incur higher maintenance and repair costs than geographically compact districts because of the time and expense required for travel between schools.

⁹We recognize that in urban districts as well federal education programs are often viewed, especially in poor communities, as a source of new jobs.

¹⁰We did not consider Vermont's supervisory unions to be regional agencies because there is no district administration (superintendent) below this level. However, we did find that the supervisory unions play a role in the management of federal programs for LEAs similar to that of regional agencies in other states.

As of 1977, 11 states had legislated mandatory regional centers, four had legislation encouraging regional centers, another four had legislation to strengthen multi-district county units, and four had legislation to foster cooperatives (Sher and Rosenfeld, 1977, Stephens, 1975).

¹¹For example, in rural parts of the state, the county district is often the funded agency under Title IVB. It handles most of the paper-work, accounting, and purchasing, dividing the grant among its component districts on the basis of their eligibility under the state formula. It is also common for county districts to run Title IVC projects.

¹²The name has been changed to protect the excellent.

¹³When a specially funded project is first contemplated by this district, a needs assessment is conducted to gather input from people at all levels of the system. The grantsmanship cadre then holds a joint session to decide the form of the proposal. One person with expertise in the substantive area of the proposal is assigned to write a rough draft, which is then critiqued by the grantsmanship cadre. Someone else then makes recommended changes and polishes the final version. The district's superintendent seemed pleased with the results so far--the one proposal written using this system had been funded--and regards this as a model of grantsmanship that can work for other small districts that cannot afford a grant writer.

¹⁴Studies of implementation problems usually focus on a single federal program rather than cover all programs potentially impinging on local districts. We suggest the latter type of study because federal programs can interact with one another in ways that may produce unintended effects (Hill, 1979).

¹⁵Sher (1977, Chapter 8) presents a proposal for school-based community development corporations that represents one possible model for such an integrated policy.

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