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ABSTRACT

Rural education is described in this paper in terms of its progress and problems. Among the problems, it is noted that money available on a competitive basis is generally out of reach of the rural school because of the lack of time and talent needed to obtain the funds. Teachers are often undertrained, holding "Life Certificates" earned with less than 4 years of college. Special services such as guidance programs and hot lunch programs are lacking because funds are not available to support them. Course offerings are limited due not only to class size but also to what the teachers who are employed can teach. Vocational education as related to fields other than agriculture does not exist, and 9 out of 10 students leave the farm without the training needed for employment in the city since course offerings serve only the college-bound student. However, some trends are described which hold promise for the rural youth. The number of 1-room schools is declining. Regional service centers or intermediate units are beco. ng new resources to rural areas, providing services such as diagnostic clinical facilities and specialized personnel. Ways to expand innovative programs in rural schools, as well as new programs designed for nonurban schools, are also discussed. (LS)

RURAL EDUCATION IN THE UNITED STATES

by

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PREFACE

Rural schools are basic elements in the American system of public education. Each one, however, is indigenous to its own local form of rurality. Rural conditions vary so widely that there is no general definition, pattern, or stereotype of a "rural" school. Some of the highest quality schools in the United States--as well as some of the most inadequate--are rural.

There is no suitable definition which will distinguish between rural pupils attending urban and suburban schools and suburban children attending large consolidated schools in the open country. Schools which are urban in character may be found even in areas that are considerably removed from urban-suburban centers. Thus, the connotation of "rural education" conveyed so readily a generation ago by the one-room school now requires a measure of isolation and remoteness for a similar meaning.

There are those to whom "rural" implies some relation to farming or agriculture, and the census data include subsections of the population as rural-farm and rural-nonfarm residents. This classification is not suitable for the many small communities and isolated families whose principal livelihood is mining, forestry, fishing, or service to tourists, sportsmen, and vacationers. The patterns of gainful employment do not characterize the rurality of education but are symptomatic of its poverty.

The rural-urban contrasts in social and cultural features of education have all but disappeared. Probably the social and economic differences between truly rural life in different geographical regions are greater than the urban-rural differences within a region. Yet, in

a given school, the greatest contrasts may be exemplified by the children of migrant families, of large acreage owners-operators, of service trades and professional people, and the like, as in the Glades section of Palm Beach County, Florida. Again, remoteness and relative isolation may be required to establish a degree of uniformity and similarity for the definition of a local rural school center.

Julian Butterworth and Howard Dawson (1), two of the most respected leaders in rural education in recent decades, achieved an explanation of the rural school that is too general to be a definition:

> 1. It is a school that serves an area of relatively sparse population.
>
> 2. It is a school that serves the whole rural community, including a hamlet or village and its surrounding open-country territory.
>
> 3. It is a school that includes both elementary and secondary grades as needed to provide an adequate educational program.
>
> 4. While, predominantly, the rural school in the United States is one located in an agricultural area, it does not exclude the school serving other occupational groups in sparsely settled regions.

Finally, education is much broader than schooling; rural education means much more than rural schools; and the population served includes more than children and youth. Churches, extension services, 4-H clubs, local governmental agencies, businesses, and many other agencies are integral parts of rural education but are not uniquely rural.

The purposes of this paper probably justify focusing on that segment of rural education which consists of public elementary and secondary schools populated by children and youth between the ages

of 5 and 18 years, and spanning any combination of grades from kindergarten through grade 12. This limitation excludes very important elements in rural education represented by vocational-technical schools, post-high-school area schools, and the many adult and continuing education programs; however, it permits a perception of rural education as being those programs and services afforded in excessively small but necessarily existent isolated school centers as the lower extreme of a continuum.

An assumption is being made that the largest public schools are to be found in urban areas, and the smallest schools are in the "most rural" sparsely populated areas. Thus, for the purpose of this report, sparsity of population is accepted as a criterion of "rurality" of schools. Another assumption is that the highest percentage of rural families having less than $3,000 in average annual income affords an estimate of greatest poverty, without trying to equate for regional differences in cost-of-living indices.

Selection of cases for detailed examination in the progress of this report is desirable. Because general observations and conclusions must be made, an impartial and objective if not scientific procedure was followed in identifying sample or illustrative counties.

Using the published 1960 Federal census data, 10 percent of the least densely populated counties (as measured by persons-per-square-mile) was identified for each state, rounded to the next larger integer. The counties thus selected for each state were then marked on a county map of the United States.

Next, up to the limits of there being enough such counties, approximately 10 percent of counties having the highest percentage

of rural families with average annual incomes of $3,000 or less was plotted on the map. The data used were those published by the Human Resources Branch, Economic Development Division, Economic Research Service, United States Department of Agriculture, in a table entitled "U. S. Counties Ranked According to Percentile of Five Factor Index of Relative Economic Status of their Rural Population, etc...." It must be noted that this procedure failed to include many counties in the 100th percentile of "poor" rural families.

A similar sampling was made on the basis of "Effective Buying Income per Family," published annually in Sales Management. These, too, were plotted on the map. The sample counties selected as being the most rural and poorest were those identified by all three sources in the manner of an isopleth. For schools in these counties, detailed up-to-date information was sought.

Conclusions and generalizations are based upon these sampled cases and upon personal observations from visits to rural schools during school surveys conducted throughout the states of Alaska, Georgia, Louisiana, Montana, Nevada, North Carolina, Oklahoma, South Carolina, Tennessee, Utah, and West Virginia.

It is believed that these sources of information include representation of the most severe conditions of climate, the most mountainous terrain, the most arid populated areas, reservations, segregated schools, the "North Woods," and other unique factors affecting poor rural students.

I

CRITERIA OF ADEQUACY AND NEEDS

America has become genuinely concerned with the adequacy of public education only within the past ten years, and most citizens still lack an understanding of "adequacy." Until the shock of Sputnik I, educational goals and criteria were stipulated in terms of minimums which, even then, poor rural schools could not meet. Since 1957, attention has been focused mainly upon quality in urban and suburban education. The Federally supported programs under the National Defense Education Act (NDEA), Vocational Education Act of 1963, Head Start, and the Elementary and Secondary Education Act (ESEA) have favored the larger school systems having competent leadership, adept proposal writers, and available project personnel; these programs have not comparably reached the rural poor (2). The desirable criteria applicable to both urban and rural schools need to be better understood.

Grade Groupings

Pupils are organized into instructional groups for the primary purpose of management control. The early schools advanced to "eight-grade common schools." The secondary school academy was displaced by the public four-year high school. Thus, a 1-12 or an 8-4 grade grouping became the standard plan for organizing rural school centers.

Prior to World War I, Denver initiated the "junior high school" plan. The resulting 6-3-3 grade plan became a standard

urban pattern. A companion move then appeared in rural schools where excessively small high schools existed. With elementary education shifting to a six-grade pattern, and with too few students to warrant separate junior high schools, the "six-year" high school appeared as a rural pattern for grades 7-12. This grouping assembled enough students to justify facilities such as the auditorium-gymnasium, shop and lab, library, and lunchroom, which have service loads directly proportional to the number of persons rather than to their age or grade level. It should be noted, however, that the potential for increasing twelfth-grade course offerings was not increased by moving grades 7 and 8 into the same structure.

In the 1960's, increasing attention was given to the "ungraded school" and to a different 4-4-4 grade grouping in place of the prevalent 8-4, 6-6, and 6-3-3 patterns. As was the case with the early junior high school, all kinds of good-sounding educational rationalisations are being advanced by proponents.

Regardless of the sound arguments and strong beliefs of the adherents to each particular scheme, there is no best plan for grade grouping; and any educational advantage that can be provided for a given grade or age level under one plan can be provided under any other--given an efficient administrator, competent teachers, necessary facilities, sufficient enrollment, and adequate support.

Teacher Personnel

Teachers are expected to be college graduates, although there is no uniform agreement as to what this graduation criterion represents. The regional accrediting agencies and a few progressive

states require a master's degree of beginning high school teachers. State salary schedules differentiate between the nondegree, bachelor's degree, and master's degree teachers and more states are beginning to interpose a "sixth-year" salary step between the master's and doctoral degrees. However, numerous teachers in classrooms today began their careers when a high school graduate could pass a "county examination" and teach in the rural schools of that county, and when the "local institute" two-year diploma could qualify for a "Life Certificate." Many of these teachers have never earned a bachelor's degree, and many of them are teaching in rural schools.

The National Education Association, in its study of one-teacher schools in 1960, found that teachers with fewer than four years of college training were in 83.2 percent of the schools and that only 3.2 percent of the teachers had more than the basic four years. Moreover, 14.3 percent of the teachers did not meet minimum state certification requirements. In contrast, 23.4 percent of teachers in other schools had more than four years of college training, and 33 percent had fewer than four years. Recent nationwide data are not available on the level of training of teachers in two- and three-teacher schools or in rural compared with urban schools.

Such data as are available support the conclusion that criteria of adequacy in teacher training for rural schools desirably would provide for the following:

1. Primary teachers with a bachelor's degree and major emphasis in professional education.

2. Upper elementary, middle school, and junior high school teachers with an undergraduate academic major and professional education minor, and a master's degree in the same pattern.
3. Senior high school teachers and specialized resource teachers with a two-year graduate degree in the field of specialization.
4. Educational leaders and administrators with a second year of graduate study as a minimum. (The American Association of School Administrators has this minimum as a prerequisite qualification for membership.)

Specialists in rural education maintain that teachers should be prepared specifically for rural schools. Every major nationwide study of teacher education has recommended some specific preparation for teaching in rural schools. Yet, at the present time, concern for rural education is at an all-time low in teacher education. Also, "equality of opportunity" now has a national urban-racial focus, and there is extensive concern over the lack of specific training to prepare teachers to cope with any of a wide variety of the educationally disadvantaged in urban schools. Somehow, a criterion of adequacy in the preparation of teachers should be related to such specific emphasis, although the solution may lie in the design rather than in the level of training. With the manpower shortage as it is, many schools are unable to employ teachers who meet the minimum of four years of training, and it is felt that adding more preparation is neither realistic nor practical.

Special Services

No standard criteria can be developed for the variety of special services needed in rural schools. Even the needs vary between elementary and high school levels as pupils mature from children into youth. The large rural school of either level can serve these needs as adequately as can the urban and suburban schools, but the small school finds it impossible to do so unless it is a unit in a larger administrative system.

Guidance. The most common guidance load is usually stated as one counselor for every 250 to 300 secondary school pupils. The NDEA has done much to stimulate schools in staffing for guidance services, but thousands of small high schools are not large enough to meet the service-load criterion. Utah, as a rare example, requires every high school to designate a vocational counselor. While the needs of young children are different, part-time guidance services should be available for the occasional cases of emotionally disturbed or socially maladjusted children and the disadvantaged such as migrant children; but counselors are not found in most rural elementary schools and school systems.

Special Teachers. Authorities estimate that about 8 percent of children differ from the norm enough to need special education programs. The gifted, the mentally handicapped, and the physically impaired can progress better with the guidance of specially trained teachers. Rural areas undoubtedly have their full share of atypical pupils, but none of the varied forms is prevalent enough to prompt the small rural school to provide the needed services.

Health Services. Many vision, hearing, and physical defects first become apparent in the elementary school years. Unless these defects are detected early, the child suffers needless retardation in school. School nursing service should be available for all pupils. Rural school children, however, are almost wholly dependent upon their meager ration of time from overworked and understaffed public health and agency welfare offices, and it is impossible for these organizations to meet the criterion of one nurse for each 2,000 pupils or to have a nurse visit in the school a part of each day. Furthermore, the goal of having a teacher trained to give screening tests of hearing and vision is not attainable. Poor families cannot obtain the required health services privately.

Library Service. An elementary school pupil should have contact and service from a trained school librarian each week. According to the American Library Association, every child should have access to a book collection of from 6,000 to 10,000 volumes. Even with book-mobile service, rural schools usually have inadequate library materials shelved or housed in less than inviting facilities.

Food Service. Although hot school lunches have become almost a universal expectation among standard school services, the NEA reported in 1960 that, in the typical one-teacher school, seventeen pupils traveled from one to three miles to school and carried their lunches. Extraordinary measures are required to meet the criterion of wholesome, nutritious hot lunches daily in the small remote school, yet it is probably in these schools that the basic need for food service is greatest.

Course Offerings

There is a nationwide expectancy that public elementary schools shall educate children in the basic tool subjects, and the secondary schools shall prepare youth for college. As a result, one finds language arts, social studies, arithmetic, and rudimentary science in any rural elementary school, and college-entrance-required courses and probably homemaking and agriculture in rural high schools. These subjects and courses represent almost the total offerings in small rural schools. Seldom provided are kindergarten, art, music, physical education, foreign languages, industrial arts, and other experiences that are essentials for adequacy.

The concept that the noncollegebound youth should be served as adequately as the collegebound is widely held as a principle, but in practice there is little evidence of it in the subjects and courses of the rural school. Even the provision of vocational agriculture is not evidence of equitable vocational opportunity in a small rural high school where most farm youth will neither desire nor be able to find gainful employment in occupations related to agriculture.

In 1893, the Committee of Ten recommended that 38 courses should be taught in the high school. In 1953, twenty-one small high schools in New York offered a median of 34 courses per school. More typical is the remote rural high school offering only 25 to 30 courses. This practice is true also in hundreds of small high schools within easy reach of larger centers and not in remote areas. Not widely known is the disclosure by Jackson (3) in 1966 that a four-year high school should offer 3.2 times as many courses as are required for graduation if the youth entering the labor force is to have as adequate an opportunity as the school provides for the youth entering college.

Thus, if 17 courses are required for graduation, about 54 courses should be offered in grades 9-12 for minimal adequacy.

Class Sizes

Accreditation standards usually express the optimum class size as about 25 pupils, with a range from 20 to a maximum of 30. However, there is always recognition that special cases may require a class load of 10 to 12 (in remedial groups) or a class of perhaps 40 to 50 (in some instrumental music groups). Specialists who are not oriented, especially to either elementary or secondary school levels, usually consider class size to be most critical in the beginning primary grades and less critical with the normal older youth who should have developed some disposition toward self-directed study and learning. Unfortunately, in this sense, the accrediting agencies have been concerned with secondary schools, where their standards have controlled class size, and have not shown a similar concern for the lower grades, where most of the overloaded classes are found.

The small class sizes in rural schools are frequently cited as a strength of the small school because they permit more individualised instruction. This is a spurious rationalisation when facts consistently show that, while classes are smaller, the teachers have less training, more are teaching classes outside the area of their limited training, the efficiency of staff utilization and flexibility are lowest, and unit costs for instruction are highest. Moreover, although difficult to substantiate by facts but still observable, the excessively small class restricts the cosmopolitan nature of the group and much of the potential of interaction between students is not realized.

The criteria for class sizes cannot be met in the isolated rural school. Statistical data show that the average class size of small high schools is 12 to 15 pupils, in contrast with the average of 24 to 27 in large schools. In the isolated rural elementary school, one child is frequently the only one in his grade group and may continue alone throughout his elementary schooling.

School Sizes and Enrollments

The present trend toward larger school sizes has been going on for more than sixty years. Between 1880 and 1930, high school enrollments in the United States almost doubled with every decade. Part of this expansion resulted in the rapid extension of high school centers to within walking distance of most pupils: service radii of about 2.5 to 3 miles. Then, the advent of horsedrawn or primitive automotive pupil transportation extended the feasible service area of a school far beyond reasonable walking distance. The evolution of pupil transportation by 1930 helped to reverse the trend of more and more small school centers toward a trend of fewer and larger schools.

Population density, roads, terrain, climate, and physiological factors combine to establish limits as the reasonable service areas of schools. Consequently, there are limits to the potential size of any given school. Rural schools in America generally have not approached these limits, primarily because it is the normal reaction of the rural citizen to endorse any proposal to regroup pupils to his school center and to oppose vigorously and bitterly any attempt to relocate his school center elsewhere.

For three decades, educational specialists have asserted that, as a minimum, an elementary school should have at least one teacher per grade taught. This means that about seven teachers are needed for a school having grades 1-6 because of the larger numbers in first and second grades and decreasing numbers in upper grades. Certainly a school where teachers and pupils may divide the school day between five or six subjects should be more effective than a one-teacher school in which the teacher must cover the total range of subjects for all the grade levels represented in a given day. The foregoing factors are defined as "minimums," however. Concern for quality and adequacy rather than for minima might easily establish that an elementary school with three or four teachers per grade can be more effective than a school with one teacher per grade. Yet, this is a criterion that the small isolated rural community cannot meet, and it requires either a sacrifice of adequacy or a measure of special enrichment or compensation.

In similar manner, high school criteria have been stated variously in terms of three teachers per grade, or a minimum enrollment of 300 (without reference to grades). Conant (4) proposed that the minimum "comprehensive" high school should have 100 pupils in the senior class. A twelfth grade of 100 students means four teachers. For an output of 100 pupils, the ninth-grade input necessarily must be about 150 students, with six teachers for this grade. Thus, on the average, Conant's senior class of 100 demands a four-year high school of about 500 rather than 300.

The research by Jackson established 500 as the minimum enrollment for a good four-year high school. With the normal decreasing enrollment from grade 9 through grade 12, Jackson's requirement of 500 would result in a grade-12 enrollment surprisingly close to Conant's hypothesized senior class of 100 pupils.

Travel

Rural schools in America generally are either the small unit within walking distance of home or the consolidated center made possible by pupil transportation. Even transportation service cannot assemble enough pupils to provide schools of desirable size in remote and sparsely populated areas. Somewhere, there is a limit upon a reasonable walking or riding radius, although it cannot be established uniformly.

Most states specify a limit of 1.5 miles for walking distance, giving no recognition to the fact that it makes a great deal of difference whether the pupil is a six-year-old first grader, a twelve-year-old sixth grader, or a high school senior; or whether the path is along a 60-mile-per-hour busy highway with narrow shoulders or along a dirt road with little or no traffic. The State of Alaska will not reimburse for transportation of pupils living within 1.5 miles of school, although the temperature may be -30 degrees and the child may be walking in darkness along an ice-glazed highway. This is of no import in a remote village such as Huslia, where children live within a quarter of a mile of school, but it is significant in the rural areas around Fairbanks, for example. Similar conditions may be found in the "south forty-eight."

The stipulation for a transported travel limit frequently is in terms of miles but properly should be set in terms of travel time. Distance is not a factor in the fatigue of a riding pupil; it is a function of the rear-wheel revolutions. The time criterion takes into account the condition of the bus, road surface, terrain and topography, weather, frequency of stops, density of traffic, and other pertinent conditions. One hour on the bus is generally accepted as reasonable.

Thousands of excessively small and inadequate schools exist where reasonable policies would permit transporting pupils to larger centers. For example, in the Bitterroot Valley of southwestern Montana, six small high schools are operated in Ravalli County for an area which could be served better by only three larger schools. An objective and accurate evaluation of rural education would require a discrimination between the "necessarily small" rural school and the "adamantly small" school, but such an evaluation is not available. Indeed, most states avoid such a study.

Physical Facilities

Any well-trained teacher expects the school plant to support and enhance the teaching-learning process. The plant should provide spaces favorable for teaching; environmental conditions of thermal comfort, visual hygiene, sonic control, and aesthetically cultural surroundings; and the resources and appliances which are standard learning tools. The most remote rural school building can be made structurally sound and weathertight, but the smaller and more remote the building, the less likely it is to afford the school-plant services

reasonably expected.

Rural schools are still found with outdoor privies, water supplied by a shallow well pitcher pump in the school yard, and no artificial lighting. The prime requirement is electrical power, which could be made available anywhere if the rural community perceived the need and wished to satisfy it. A local power generator would not only make feasible indoor water under pressure, sanitary indoor toilets, and electrical lighting, but also teaching accessories--motion picture and filmstrip projectors, television and tape recorders, and a variety of teaching machines and equipment--common in urban schools but lacking in many rural school plants.

Smallness is also a controlling factor in rural school-plant educational services. The larger isolated rural schools have developed a number of successful multipurpose areas such as the combination auditorium-gymnasium, the lunchroom-auditorium, the library-auditorium, office-clinics, central heat supply, and the like. The one- and two-teacher schools seldom afford such facilities, although they have been designed. It probably is true that the smaller the school the more likely it is to be drab, uninviting, and aesthetically desolate. Until the school is large enough to justify regular custodial and maintenance service and administrative supervision, the physical-plant services are likely to mitigate against good educational service.

The National Council on Schoolhouse Construction has established school-plant criteria which have been accepted throughout most of the states. Technically, there is no serious problem in achieving superior design requirements in rural schools. Excellent

space for teaching -- satisfying all design criteria -- could be expected almost anywhere. The notorious deficiencies in many small rural schools stem from a lack of understanding of what good school facilities are, lack of financial resources to underwrite the higher costs, and lack of enough students to justify the expense and afford adequate utilization for desired facility services such as library rooms, multipurpose rooms, playrooms, and auditoriums. The factors most closely related to poverty are the low levels of appreciation and the lack of funds. In many situations, lack of local funds and the absence of state aid for capital outlay are barriers to reorganization into larger centers.

Financial Resources

The concept of school equalization was stimulated by Cubberly after 1905, and by Strayer and Haig about 1917. Equalization financial aid for rural schools was generally accepted and formulas for allocation were established in many states by the onset of the Depression. However, these formulas were weighted heavily for pupil transportation, which many remote schools do not provide. Rare, indeed, were the instances in which special school-building aid, incentive supplements for teachers' salaries, or higher requirements for teacher qualifications were seriously considered--although some token grants were made for eliminating one-room schools.

One of the ironies of the present, truly critical financial plight of the urban centers and of their valid plea for Federal aid is the fact that it was they who, smugly proud and complacent, favored school systems most vigorously opposed to state equalization

aid for rural schools in the 1920's and who consistently opposed Federal aid to education in the 1930's and 1940's--when the far-out goal was only $300,000,000 per year. It is more tragic than ironical that the large influx of children and youth so poorly educated in those distressing rural schools in depressed areas--who were denied equalization and Federal support--now occupy the slum housing in the ghetto and the rundown schools in the central city.

Rural schools have been characterized by a low but extremely disparate tax base for school support. While the occasional small school may have been the beneficiary of a private power dam, or factory, or mine, or extensive railroad trackage, generally rural schools have been dependent upon the property tax related to a single major economic base such as farming, ranching, or timber. Their greatest differences have been due to the contrasts between the particular income-producing tax bases: copper versus coal mining, wheat versus cotton farming, machines and chemicals versus textile industries. In other words, the financial resources of local rural schools have reflected directly the income levels of the patrons gainfully employed in the particular local patterns. Typically, these have not been varied enough to support an adequate educational program. This generalization about the local rural school can be applied to entire state systems of rural education, as seen on an isopleth map. State-aid formulas are geared to <u>minimum</u> criteria, and <u>quality</u> services must come as supplements from local resources which the rural poor simply do not have.

It is pertinent to observe here that many states allocate teacher units and financial aid on a scale which is weighted for the

unusually small school. Most of the states do not stipulate the "necessarily small" school and thereby subsidize or reward inefficient school organization by perpetuating schools which should not exist. Arkansas is a prime example. It probably is because of their preoccupation with their own woes that urban, suburban, and reorganized rural school systems tolerate being taxed for equalization without insisting upon efficiency in the use of the funds or adequacy in the programs provided. This condition makes the interpretation of unit-cost data extremely difficult.

Clark (5) indicated that approximately one-third of the factors affecting quality in education are related to expenditure levels. Research has shown that excessive costs are found in schools having fewer than ten teachers and that unit costs in schools having fewer than 100 pupils are about twice as high as those in schools with more than 200 pupils (6). McLure (7) found that per-capita costs decrease rapidly as enrollments increase up to about 200 pupils, decrease but less rapidly up to nearly 700 pupils, and level out in schools ranging from 700 to 3,000 students.

Morris (8) related per-pupil expenditures for instructional staff salaries and selected educational factors, and found a high positive correlation between school size and efficient expenditures for staff salaries. The correlation appeared significantly in (a) teacher qualifications, (b) teacher assignments in their major fields, (c) average number of courses offered, and (d) average number of different subject areas.

These facts, coupled with the consistently low expenditure levels in rural schools, even with state aid, make cost level almost unusable

as a criterion of adequacy in rural education. The small poor rural school and the excellent large urban school are both high in per-pupil expenditures, and with grossly unequal results.

II

PERSISTENT CRITICAL PROBLEMS IN RURAL EDUCATION

The serious problems in rural education are the same ones which persisted fifty years earlier. Much progress has been made in all segments of American public education, but the disparities between urban-suburban and rural schools probably are greater than ever. With the increased urbanization and complexity in this country, the deficiencies in small, poor, remote, rural schools may impose handicaps on children and youth that are more critical than heretofore and that make satisfactory life adjustments more improbable.

In rural as opposed to urban America, school terms are shorter, teachers with less training are employed at lower salaries for shorter lengths of time, the percentage of teachers residing in the communities where they teach is smaller, equipment and instructional resources are meager, facilities are more inadequate, job-related school offerings are scarce, and a smaller proportion of school graduates go to college. Additionally, leadership and specialized staff resources are at their lowest level in rural schools.

Curriculum Emphases

Opportunities in rural schools are further limited because America has patterned its rural schools so much after urban practices that rural life has been ignored. This is one of the serious weaknesses of rural schools--the lack of a program to serve the needs of

rural people while they are rural and, simultaneously, to prepare them for probable urban life.

College Preparation

All elementary schools, rural and urban, make a commitment to teach the basic subjects. The small, remote, rural school typically undertakes little else. Under the domination of college-entrance requirements, accreditation standards, urban school patterns, and the academic orientation of the teachers, small rural high schools struggle to maintain respectable college-preparation programs. The fact that a majority of the graduates do not go to college appears to receive tacit acknowledgment without any evident curriculum change from the example set by urban schools. Thus, with 17 units required for graduation, the small rural school seems happy if from twenty-five to thirty subjects or courses are offered. Such a limited offering serves the collegebound student at the expense of the noncollegebound.

School size is an important factor in shaping the pattern of curricular emphasis. Recent research has shown that course offerings are seldom expanded beyond school-graduation and college-entrance requirements until enrollments pass the 500 level and approach 1,000 students; and, of particular significance, program expansion usually consists of merely adding "more of the same" subject areas without broadening curricular offerings for additional pupils (9).

Focus on Rural Living

From about 1935 to 1955, nationwide interest in rural education was focused on the concept of the "community school." The principal idea was that the school should be an integral part of rural community life, the curriculum should incorporate community problems as essential elements in the instructional program, and all community agencies and resources should be coordinated in the teaching-learning activities of the rural school. Much of the literature of this period provides descriptions of the operational aspects of the concept, and of attempts to prompt institutions for teacher education to make appropriate adjustments in training teachers for rural schools.

Olviden (10) stated that

> Much of the citizen interest and participation in schools typical of the 1950-1963 period sprang from the community school movement. But the specific community school emphasis which held so much promise for small school improvement in the 30's and 40's seems to have evaporated. . . . Affluence or television or the lack of sufficiently inspired educators or the return to prominence of "academic excellence" and the subject-matter curriculum. . .some or all of these influences and others led to a failure to capitalize on fine examples set in isolated small communities in America. . . . The professional staffs and the citizens interested in small school improvement could resurrect great promise by finding ideas and suggestions in community school literature.

In 1940, an editorial comment by Pulliam (11) asserted:

> We must stop thinking of the ideal rural school as an enterprise which approaches as nearly as possible in organization and program the prevailing model of the city school. . . . The rural school must be, in the broadest sense of the term, a community centered school.

In the same journal fourteen years later, Cushman (12) said:

> In some communities, rural schools must compensate for local community deficiencies, the handicaps of poor recreational facilities, such as limited adult education, few vocational opportunities, worn-out soil, cut-over forests, and even property. Their aim should be the improvement of the over-all quality of rural living. Many rural schools are doing these things, and when they do they are called "community schools," a phrase that has taken on a significant meaning in American education in the last two decades. The concept of "the community school" is a unique contribution of rural education to the basic philosophy of American education.

Efforts to focus curricular emphasis of the rural school on rural living, as represented by the community school movement, came from philanthropic support of foundations interested especially in rural education: General Education Board of the Rockefeller Foundation, Kellogg Foundation, Rosenwald Fund, and Sloan Foundation. It was coincidental with the transition of America from a rural to an urban society--and the shock of Sputnik I--that these foundation programs were succeeded by the larger Ford Foundation, the Carnegie Corporation, as well as the Federal NDEA, contract research, and ESEA programs with different objectives and with an entirely different clientele. When one classifies and tabulates the nature of the programs chosen and supported by the latter agencies, it is not surprising that Gividen observed the "evaporation" of community school emphasis.

The community school concept is still particularly appropriate to rural education and is entirely different from the "neighborhood school" design which is a target of the civil rights movement. The latter is essentially an urban development. It probably is pertinent,

however, to observe that the civil rights focus on central city and suburban problems has combined with the favorite interests of certain private foundations and Federally supported programs to minimize--if not "evaporate"--serious general concern for rural education and the community school.

Employment Opportunities

The time is not too far off when rural schools will be able to anticipate reasonably that most of their graduates will remain in the community as gainfully employed adult citizens. Although demographers and sociologists can show earlier rural-to-urban movements, probably the Depression and the subsequent world war marked the really permanent dislocation of rural youth and young adults. While some farm leaders assert that the flight from the farm has nearly run its course and that a cadre of workers must be held on the farm at all costs if production is to be maintained, it appears that mobility has replaced stability as a way of life of the American people. If so, for what kinds of job opportunities will the rural school prepare its students? Obviously, no one knows.

Nine out of ten rural youth do not go into agricultural-related occupations, yet vocational agriculture is by far the most commonly offered vocational subject for boys in rural high schools and, since World War II, has expanded its enrollments more than any other vocational subject. With the interested cooperation of 1,008 employers who hired the largest numbers of high school graduates in eleven southern states, a classification was made of the kinds of jobs available, skill requirements, and the training which the employers

needed the high schools to provide (13). Simultaneously, an analysis was made of curricular offerings and training programs in 394 state-accredited high schools in the service areas of the employment. There was an appalling lack of correspondence between the training needed and the school courses provided. With all of the attention that has been given to industrialization in the South, and with the nationwide concern for jobless youth, this gross disparity between school program and employment opportunities must be laid on the doorstep of poor and ineffective school leadership.

Programs and Services

Truly, the educational opportunities for children and youth exist mainly in the programs of directed learning activities and experiences, and in the supporting services provided for both pupils and teachers. These services facilitate and enhance the instructional offerings. It is in these operations that the critical tests of adequacy should be applied, and it is here that rural schools in America are most deficient. Foremost in the educational programs are the academic subjects and school courses offered, and the effectiveness with which they are taught. Next in importance are the school-sponsored cocurricular or extracurricular activities conducted as supplements, expansions, or enrichments of the instructional programs.

Research has clearly determined that the breadth and depth of educational opportunities are related to school size, and the scope of the all-important instructional programs and services increases in direct proportion to size up to about 600 in elementary schools

and 1,200 to 1,500 students in high schools. Such enrollments are out of the question for remote schools in sparsely populated areas--whether the high school criterion is set as a desirable 1,200, a minimum of the valid 500, or the inadequate traditional 300. In 1966-67, 55 percent of all school districts had fewer than 600 total in all grades, 1 through 12. Again, extra support and supplements are essential in the small schools with limited programs and services.

Minimum school standards are probably more dependent upon the classroom teacher than any other factor. Quality or adequacy criteria, however, are more dependent upon specialized professional and technical services beyond those which even good classroom teachers can render. Small rural schools do have classroom teachers of some sort; however, most rural schools do not have specialized services beyond those of the regular teachers, and many do not have specialists available from outside the school.

Excellent or superior schools have specialized staffs, within the school and school system or available on call, including the following: counselors, dental hygienist, dietician, instructional supervisors, librarian, physician, psychologist, psychometrist, school nurse, social worker, subject specialists (arts and graphics, language, health education, music), visiting teachers, as well as specialists in audiovisual aids, curriculum coordination, continuing or adult education, remedial reading, research, special education, speech therapy, and vocational-technical education. In most of the sample counties, none of these special services are provided.

The normal case load for each of these special areas varies. It is estimated that a school-district pupil population of 10,000 or more is needed to justify full utilization of all types of special services. This is the base for most of the efforts to improve rural education through intermediate units, shared services, area offices of state departments of education, and the like. It is noted that many of these specialized staff services are provided to teachers, while others are rendered directly to pupils. It is easy to see that regular classroom teachers cannot hope to possess such special competencies, yet must work with some pupils who need them.

The more remote the small rural school, the more likely the teacher is to need supportive personnel and the less likely help is to be available. As one consequence, the gap tends to widen between small rural schools and urban, suburban, and large rural schools. It is quite probable that there is also an inverse relationship between such services and the income level of the school patrons, for no state foundation program provides financial assistance for all of these special services.

Professional Personnel

The one most difficult and persistent problem facing the small rural school is that of employing and keeping well-qualified teachers. Numerous factors contribute to this problem, notwithstanding the facts that most states provide equalising state aid for local districts, certify teachers uniformly, and establish a uniform minimum salary schedule.

Rural schools are not in a competitive position in the teacher-supply market and are unable to be selective in their recruitment. The fact is that most new teachers do not want to teach in a small rural school. Options in living conditions, cultural activities, professional associations, and the like are limited. Rural communities are least likely to provide local supplements to the state salary scale. The usual teacher-training program does not orient or educate teachers for the unique professional tasks in rural education. It is in the small rural school that teaching aids, physical facilities, and enrichment materials are most frequently deficient. Well-trained teachers find that strong leadership and technical assistance are notably lacking in small rural school systems. As a result, the recruits available for employment are usually those who are permanent local residents, those passed over for other positions by selective employers, or those who are motivated by a "missionary spirit" at the moment.

The explosion of knowledge requires a higher level of basic education for teachers of every kind in all fields. During the past decade, advocacy of the active philanthropic foundations has been given to subsidizing liberal arts baccalaureate education for teachers--with an almost corresponding decrease in the professional-technical pedagogical training of these persons, and a concomitant disparagement of professional education. Unfortunately, the expansion of knowledge has been as rapid in human growth and development, the psychology of learning, and teaching technology as it has in the liberal arts; and the need for teachers with even more professional

training is greater, not less. Awareness of both of these trends has prompted a few states to begin to subsidize with scholarship grants a sixth year of study when planning for specialized teaching preparation, but these premiums have not been earmarked for the needs of rural education.

III

PROMISING PRACTICES

In a status report such as this, the comparison of existing conditions in rural education with nationwide criteria of adequacy is certain to create a dark and dismal picture. When placed in perspective, however, with an understanding of what these conditions have been in the past and an appreciation of the current changes and trends readily observable, an entirely different picture appears. The small rural schools are the weakest link in American education, but they are so much better than they once were and are improving so steadily that one may admit a spirit of optimism without any relaxation of effort to hasten charges for the better.

Even more "American as apple pie" is the large yellow transit vehicle, recognizable as the school bus as far as it can be seen anywhere in the United States. Pupil transportation has been the principal means for the reduction of one-teacher schools from the 200,000 of fifty years ago, to the 59,700 of less than twenty years ago, to the 9,895 of 1963-64. This reduction has been made possible also by a comparable reduction in school districts or administrative units. Of these corporate governing units, there were 127,531 in 1931-32; 83,718 in 1949-50; 40,520 in 1959-60; and only 23,461 in the fall of 1966 (14).

The decline in the number of small rural schools will soon slow down. While many of these are inexcusable, several thousand are necessary. In 1967 in Kentucky, for example, all except 9 of

its 422 one-teacher schools were in Appalachia; although North Carolina has its portion of Appalachia, it had only 2 one-teacher schools and only 11 two-teacher schools. Apache County, Arizona, is almost 250 miles in length, yet it had 9 one-teacher schools and only 2 two-teacher schools. The Elko School District in Nevada is about 150 miles east-west and 120 miles north-south, but its Ruby Valley School had to operate as a two-teacher school because of isolation and impassable roads. Island 36 is cut off from Tennessee by the main channel of the Mississippi River but is a part of Lauderdale County. The children who are permanent residents on the island must be served by a necessarily small school. Thousands of such cases are permanent.

A comparable justifiable slowdown in the reduction of administrative units has not been approached. The practical limits to the size of an efficient school district have never been determined. A specialist sent out from the school staff in Elko headquarters can serve effectively the teachers and pupils in Montello High School 100 miles away. Such specialists were not available in Elko County prior to elimination of the local school districts.

By popular vote in the 1966 general election, the citizens of Georgia amended the state constitution to permit the merger of school systems across county lines and to make possible multiple-county school systems. Wisconsin also has created multiple-county boards with statutory power to order school-district consolidation.

In 1946, the citizens of Mecklenburg County, North Carolina, decided by referendum to relocate the fifteen small high schools throughout the large county into three new centers. An interesting

(and influential) stipulation was that one of the new schools could not be located in any community having an existing high school. This policy forced the three new schools into open country, resulting in large, modern, and excellent rural schools. Later the countywide district voted to merge with the Charlotte system. By contrast, in 1967 the smaller Iredell County in the same state still maintained three separate school districts and a number of small high schools.

Smallness of enrollment is a common characteristic of rural elementary and high schools throughout the United States, and the evolving policy design under Title III, P. L. 89-10, appears to be shaped toward a preservation of this characteristic--with the subdivision of states into "regional service centers" which develop proposals for Title III grants to "reinforce and enrich" the educational opportunities of these small schools and school systems. As of June 1967, the Federal aid criteria had not tested or even challenged the validity of preserving this smallness.

Some states have established the county as an "intermediate unit" with the implicit commitment to keep school districts smaller than the county. Alaska, as a new state with a clean slate, determined to reject the "county" as an archaic, obsolete, and inadequate basis for subdividing a state. On the other hand, in New York, for example, 342 school districts existed without operating any schools in 1962-63; yet from 1959-60 to 1962-63, state aid was requested for thirty different kinds of services to be "shared" across independent school-district lines. Many of these services were those to be found elsewhere within individual good local schools and should be expected in desirable school districts. Thus, the several states are looking

for and devising various plans for the improvement of rural schools in keeping with their particular philosophies regarding school-district organization, and peculiar results are observable.

There is no educationally justifiable reason why Garfield County, Montana, should be divided into 20 common school districts operating 30 one-teacher schools, whereas Carbon County has 17 such districts with only 1 one-teacher school and Ravalli County has 8 school districts and no one-teacher schools.

In Michigan, although the state in 1964 had reduced its school districts by 20 percent and had maintained a visiting teacher program for twenty years (99 cities and 27 counties), in the sample "rural poverty" counties of Lake and Montmorency where 50 to 74 percent of rural families were below the $3,000 level, neither had a visiting teacher program or a diagnostician program in pupil personnel services (15).

Among the more promising practices in rural education is the rediscovery of a permanent truth in the education of children: learning is a wholly individual, personalized phenomenon. Here the President's National Advisory Commission on Rural Poverty probably will encounter direct contradictions. The "multiple track" concept, which is based upon a sound, commendable, defensible concern for the individual differences within groups of pupils, is coming into disrepute because it becomes systematized as an end in itself--as a modus operandi in school operation rather than as a potential for giving every child the best possible conditions for his own growth and development. Exactly the same permanent truth is reflected in the idea of the "ungraded" school. This trend is more an urban

school "discovery," for it has typified the small rural school for decades. It is reflected also in the current interest in "acceleration" of the gifted. Fifty years ago, the teacher concerned with the individual child moved him from "Low Third" to "High Third" grade on the basis of his progress in reading and number skills, and even in the urban schools reclassified him as "Third Grade" after a summer school session following "First Grade."

Teaching machines, individual channels in the language laboratory circuits, personal cubicles in the library, and the like are all based upon this recognition of the learner as an individual. This "permanent truth" is disregarded but not altered by overriding special interests in intelligence, handicaps, family aspirations, race and civil rights concerns, or other factors outside the process of personal development. In rural schools, the controlling factors are the levels of understanding, the professional skills, and the insights of the individual teacher in the particular rural school. Where these levels are low, no amount of gadgetry, grouping schemes, or promotion policies can serve children adequately.

Among promising practices are efforts to provide the perceptive and understanding teacher with the resources needed to guide and promote the child's individual progress. Myriad teaching aids are available on the commercial market to a degree that probably exceeds the competence of rural teachers to use them to advantage. In October of 1966, Southern School News stated that over half of the one-teacher schools "have an adequate supply of textbooks, library books, encyclopedias, maps and globes, chalkboards, and record players; less than half are equipped with movie or slide projectors, cooking

equipment, television sets, or duplicating equipment." This observation, too, may be a measure of teacher needs and desires. Thirty years ago, excellent supportive aids such as opaque projectors, ground glass slides for teacher-drawn aids, nose-piece projectors for use of microscope slides, and sound-on-film projectors were available but were not found in rural schools.

Governor Winthrop Rockefeller has become interested in the development of mobile shops for rural schools, and a feasibility study is being supported by the Educational Facilities Laboratory. Mobile science labs, language labs, and diagnostic clinical facilities could become as widely dispersed as bookmobiles. In the space of three years following the 1956 Library Services Act, and with the support of only $13,050,000, it was reported that public library services reached over one million rural children and adults for the first time, and approximately 200 new bookmobiles were serving remote areas (16). A similar transformation could be effected for the physical resources and equipment which are substandard or lacking in small isolated schools. But, without teacher interest and skill, the benefits would not accrue to children.

During the past ten years, 1957 to 1967, a number of pilot exploratory projects have undertaken to find or rediscover ways to utilize the unique features and to compensate for the weaknesses in rural schools. Supported chiefly by private philanthropy, some of the participating schools were experimental centers even though they could have been consolidated had there not been a tacit commitment to continue them. For the most part, the projects did identify a number of ways to reinforce the small-school programs.

Foremost among the projects were the Catskill Area Project in Small School Design, the Education Resources Program, the Rocky Mountain Area Project for Small High Schools (and its successor the Western States Small Schools Project), the Rural School Improvement Project, the Upper Susquehanna Valley Project, the Texas Small School Project, and the Rural Education Improvement Project of the Southern Association of Colleges and Schools (17). These demonstration programs have opened new vistas in rural education, but no innovative way has been developed to disseminate and incorporate them in general practice. Probably teacher education is the best and most promising avenue--the reeducation of those who do and will teach in the small remote school. Encouragement is found in the fifteen-year longitudinal study of reorganized school districts and programs in Wisconsin (18), which shows that the reorganized districts provide better educational opportunity for a wider range of pupil needs; students in these districts show higher achievement and more mental maturity than do students in the small rural districts.

IV

RURAL EDUCATION AND POVERTY

This status report of rural education has suggested many implications related to poverty, not only in terms of low family income but also in terms of the paucity of educational adjustments to individual needs and of the educational deprivation which will result in more low-income families in the next generation. Miss Franseth (19) put it forcefully:

> Especially serious is the long-term deprivation among identifiable, visible types of rural families. Spanish-American migrants, Negroes, sharecroppers, farm laborers and rural industrial workers, Indians on and off reservations, and mountain whites--whether from the Appalachians, Ozarks, Cascades, in fact, anywhere back in the hollows, up the creeks, and in the back waters of American society--share common problems and generally lack spokesmen on their behalf.

School reorganization is not a panacea, although it is a prime essential. When local leadership is weak, the results are poor. Isenberg (20) said:

> In more reorganized districts than desirable, the anticipated upgrading of the educational program is yet to be realized. In some, the reorganization has been too small. . . . In still others, there has not been much program expansion. . . . The gains have been many. But if in a second look we see that 44 per cent (9,456) of the operating school districts have enrollments of fewer than 300 children and that 55 per cent (12,100) enroll fewer than 600, we know there is much still to be done.

It is impossible to assign priorities and first steps needed to improve the economic status of rural children and youth through education. The opportunities, of course, are the absolute essential, but they cannot exist unless both the potential or capability and the understanding or competence are present. The small rural school

has some unavoidable deficiencies which could be supplemented by specialized school-district resources. The small school district does not have these resources, but they might be provided by some intermediate unit. An intermediate unit customarily geared to an obsolete county structure could be supplemented by branch or regional state offices. All of these potential supplements are ineffective unless good local leadership is present and the capability to use them is possessed by the teacher in the classroom. Yet, competent leadership and skilled teachers are not usually found in the small school or school district. A break anywhere into this vicious circle would be helpful.

The new support programs for the relief of poverty, for job preparation, for improvement of elementary-secondary schools, and the like seldom penetrate the isolation of the small rural school. Generally, no one cares. In her report on "Rural Education Systems, Elementary Education" for the National Committee for Children and Youth in 1963, Cockerille was prompted to observe that in the two-year period of 1955-57 the Education Index listed only six articles on one-teacher schools. During the next five years, the interest and support of private foundations and of the U. S. Office of Education and the National Institute of Mental Health were directed to special interests of the incumbent policy groups: academic disciplines (NDEA), airborne television, large group instruction, teacher aides, programmed learning and teaching machines, flexible scheduling, team teaching, behavioral sciences, psychological research, and so on. These are worthwhile, but their values are not evidenced in poor rural schools.

The formidable impediments to improvement in rural education are the consistent opposition of local rural school leaders to reorganization efforts; the lack of capital resources to provide the space and facilities required for reorganized schools; the inability of rural schools to find, recruit, and hold the level of competence in classroom teachers and the many specialized professional services which characterize quality in educational opportunity; and the fetish of the American people to follow the current wave of popular interests, which now have moved to concerns other than rural education.

The manipulator of quantitative data is tempted to state that the significance of small rural schools in American education has all but disappeared. Their numbers have steadily declined, but several thousand one-teacher schools will likely remain after the ultimate reorganization is achieved in public education. However, statistical data are misleading. Two one-teacher schools disappear when they become one two-teacher school, as does a two-teacher school when consolidated with another school of any size; and the resulting school may still be excessively small.

The statistics shed no light on the adequacy of the new patterns. They tend to obscure the fundamental ideal of adequate educational opportunity for <u>every</u> American child. They also do not reflect the fact that each rural child is an individual, identifiable personality at <u>his</u> center of the total universe, and that <u>his</u> opportunity exists only in the school <u>he</u> attends. Unless <u>his</u> school achieves adequacy, he will be educationally disadvantaged regardless of statistics and his relative standing will worsen as he becomes a welfare burden upon an urban society.

V

CONCLUSIONS

A knowledge of the educational opportunities being afforded to rural children and youth, coupled with concern because the adequacy of their schooling has so much to do with their chances of breaking out of the poverty cycle, leads to some very firm convictions which in no way disparage current efforts to make small schools better.

Population sparsity is a controlling factor which, within reasonable travel time, limits the potential size of a rural school. The smallness of schools imposes handicaps to adequacy, some of which cannot be offset by enrichment, compensatory, or supplementary programs. A great many excessively small schools exist only under political paternalism and should be eliminated. The necessarily existent small rural schools should be incorporated into administrative area organizations large enough to provide the technical-specialist central staff services expected and accepted as common practice in urban-suburan school systems. No physical or geographical conditions are known which would modify this basic conclusion or render the objectives unreasonable.

The quality of rural education cannot rise above the levels of appreciation, understanding, and competence of the educational leadership in rural areas. Some of the chronic and persistent weaknesses in rural education may be attributed to the limited ability of local personnel to know and to do any better. Certainly, there is no greater influence operating against needed school

reorganization and curriculum reform than the entrenched rural teacher, principal, superintendent, and board members. All the evidence points to the need to upgrade the professional competence of these school leaders, a goal which may require changes in their qualifications and the methods of their selection.

For adequate educational services, rural schools must be able to compete in a national market on even terms with urban-suburban schools for their manpower requirements, even after adopting an added job qualification of specialized preparation for teaching in rural schools. Furthermore, a continuous program of on-the-job or inservice training must be maintained by the larger governing administrative agency proposed above. In order to compete equally, the rural school should provide rewards and premiums to make rural teaching as attractive as the urban-suburban position. Worthy of consideration are housing, rent supplements, automobile, paid holiday and summer travel, salary bonus, and similar fringe incentives.

While the urgently needed large administrative unit staff would afford the required personnel talent, specific measures are needed in the interim to give remote and necessarily small rural schools equity in the competition for support grants of the states and numerous Federal agencies. This means that some level or agency of local, state, or national government should be charged with this duty and should be empowered to discharge it. A rural school district employing only one, two, or three teachers is in need of "foster care."

The inadequacies in rural education may, in large part, be traced to deficiencies in the preparation of those who teach in

rural schools--deficiencies in both type and amount. Private foundations and Federal programs alike have contributed to the overshadowing or subordination of interest in the professional education of rural teachers through the support of earmarked programs for various academic disciplines, liberal arts in general, and urban problems, meritorious as these programs are. This is certainly a legitimate, if discriminatory, option of private philanthropy but it is not of the Federal Government. Comparable concern for the educational well-being of poor children and youth in the small rural school would warrant an earmarked support program for selected institutions committed to professional teacher education and to the improvement of rural education.

Finally, the rural schools in poverty areas lack the capital funds and borrowing capacity to construct the facilities required to house a reorganized and redesigned educational program. This is an insurmountable barrier in those many states which do not include capital outlay or the physical plant as an element in the state-aided foundation program. Thus, even a strong local desire to reorganize small rural schools into larger centers eventually ends in futility and hopelessness.

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