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Rural America in the Global Economy: Socioeconomic Trends

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Recent rural socioeconomic trends, in part the product of the internationalization of markets, provide a severe challenge to rural school systems. On the one hand, rural families in the 1990s have less to support their children and schools than a decade earlier: poverty rates are up (particularly among children), intact two-parent families are rarer, mothers are more likely to be working, and parental education is lower. On the other hand, schools have become more critical for economic futures. It is increasingly difficult to support a family without post-secondary education. And rural communities, to avoid further declines in the economic well-being of their residents, will need to shift their specialization from low-skill, low-pay activities to new, higher-skill manufacturing and other activities. To succeed, this shift will require the active, innovative involvement of rural school systems.

Why should people concerned with education care about socioeconomic trends in small town and open country areas of the country? The local socioeconomic context impinges on schools in several ways. First, the economic and social well-being of families affects the ability of children to learn. Single-parent family, low family income, low parental education, and being home alone for 3 or more hours are among the "risk factors" associated with students' weak scores on national tests and other educational problems (Stern, 1994). Second, the economic well-being and the age distribution of local families influence local financial support for schools. Retired people, for instance, are more likely than others to feel that schools are adequately financed (Deller & Walzer, 1993). Finally, school systems are preparing youth for life beyond school, whether that is further education or work. Their success in this preparation depends on the ability of educators both to understand the opportunities that students will be facing and the skills they will require to act on that understanding. In all three ways, there are reasons to consider rural education systems imperiled. Considerable attention is paid to the urban socioeconomic context in this country—often under the assumption that the nation's socioeconomic problems are largely urban problems (Hoppe, 1993). Urban problems do involve more people, since over three fourths of the population lives in metropolitan areas, and urban problems are more visible, as urban people are concentrated rather than scattered. But the rural socioeconomic situation is no less serious.

Here, I draw primarily on the 1980 and 1990 censuses to examine both current socioeconomic conditions in rural areas and trends over the past decade. I couch rural America in the "global economy," as many current rural trends can be understood only in light of the rural role in that economy and the economic transformations occurring at the national and international levels. In the first section, I highlight some of these broader economic changes and their relevance to rural areas and people. I focus on the declining earnings opportunities of young adults, particularly those with low levels of education. Changes in earnings opportunities and family life have both made the situation of rural children more difficult. In the second section, I turn to family structure and poverty as both affect rural children. The final section examines the stresses on educational systems that stem from the changing socioeconomic context.

The rural/urban distinction used here is the Office of Management and Budget's nonmetropolitan/metropolitan designation, which is based on counties. Metropolitan counties are either central counties that have cities of at least 50,000 residents or counties that have close ties to these central counties by virtue of commuting, population density, and urban character; nonmetropolitan counties are the remainder. The delineation of counties changes yearly, although Census data series such as the Current Population Survey incorporate new designations only once every 10 years . While the metropolitan/nonmetropolitan distinction is generally useful for identifying urban and rural areas, it

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Table 1
Industrial Employment by Degree of County Rurality, 1990

Type of Industry	Metro-politan	Nonmetropolitan			
		Total	Adjacent to metro	Remote	
				With city[a]	No city
Agriculture and related	1.7[b]	6.5	5.8	4.9	9.5
Mining	0.4	1.5	1.1	1.4	2.5
Manufacturing	16.8	20.9	23.0	17.9	19.6
Business services[c]	20.0	12.3	12.4	13.2	11.1
Consumer and other services[d]	61.1	58.8	57.8	62.5	57.3

[a]County has all or part of a city of 10,000 to 49,999 residents.
[b]County percentage.
[c]Includes business and repair services, finance, insurance, and real estate; and other professional services
[d]Includes transportation; communications, utilities, wholesale and retail trade; health, personal, entertainment and recreation services; educational services; and public administration.
Source: U.S. Department of Agriculture (1993).

has become less useful over time in the West, where counties are relatively large. Counties designated as metropolitan in the West often have large numbers of people who live well outside the direct influence of urban centers and would otherwise be considered rural (also see Elder, 1992, and Hobbs, 1994). At the time of the 1990 Census of Population, about 23% of the U.S. population lived in nonmetropolitan areas (see U.S. Department of Commerce, Bureau of the Census, 1986).

Rural America in the Global Economy

After decades of off-farm migration, urban-to-rural industrial decentralization, and rural recreational development, the industrial structure of rural America as a whole is broadly similar to the urban industrial structure. In both rural and urban areas in 1990, approximately 60% of employment was in distributive and consumer services industries and about 20% was in manufacturing (Table 1). While rural and agriculture could be equated in the past, less than 7% of the 1990 rural workforce were employed in agriculture (forestry, fishing, and related activities). Even in remote rural counties lacking a substantial city, less than 10% of the employed worked in agriculture, half as many as in manufacturing. Agriculture remains dominant only in a few local rural economies—mostly in the Great Plains—largely because remoteness and the sparseness of population have inhibited the development of other industries.

While the rural industrial structure has come to broadly resemble the urban structure, some important differences remain—differences that are particularly relevant in the context of the development of the global economy. Rural manufacturing developed after World War II largely through the decentralization of production out of urban areas in search of cheap, reliable labor (Townroe, 1979). As a result, the rural industrial job mixes include far more routine types of production jobs and far fewer high skill managerial and research jobs than is found in urban areas. In 1993, 9.8% of rural manufacturing jobs were in management and research, compared to 24% in urban areas (Table 2). About three in every four rural manufacturing workers has a production job, compared to slightly over one in every two urban manufacturing workers. This division of labor, with rural workers tending to do routine production work and urban workers more often the high skill management and professional jobs, is also found in agriculture and related services and mining (McGranahan, 1988).

The explanation for this division of labor appears to lie in the small size of rural settlements and their remoteness from major centers of activity. Managers, professionals, and other "social analytic" (Reich, 1992) types of jobs require access to information about new markets and technologies, access to specialized services, and access to other

Table 2
Manufacturing Occupations by Area, 1993

Occupational Group	Metro-politan	Nonmetro-politan
Management and research	23.9[a]	9.8
Support staff	21.5	14.9
Production workers	54.6	75.3

[a]Percentage.
Source: Current Population Survey (1994).

analysts—access that has tended to be difficult in remote areas. Also, small labor markets may not have a large enough pool of workers to support the generation of specialized groups with the particular skills required by analytic or otherwise nonroutine types of work activities.

Recent Trends

Rural area specialization in low cost labor activities made them extremely vulnerable to outside competition during the 1980s. The globalization of markets, accompanied by technological change, boosted social analytic jobs in the United States and undercut low-skill jobs in manufacturing. Urban areas, specializing in high-end producer services and high-tech industries, gained in these types of jobs as they continued to shed the low-skill routine manufacturing jobs (McGranahan & Ghelfi, 1991). But jobs that in previous decades would have shifted to rural areas tended to shift overseas instead and many rural plants moved on as well. Rural manufacturing, competing with Pacific Rim and Latin American countries on the basis of low wages and quantity rather than quality product, gained no new jobs over the decade (U.S. Department of Agriculture, 1993). Manufacturing employment in the rural South, which had grown by 25% in the 1970s (and 38% in the 1960s), stagnated, with a net employment addition of only 1.5% in the 1980s. Perhaps because market uncertainties and rapid changes in technology favored central locations with access to information, rural areas were also unable to hold onto their share of the more high-skilled jobs during this period (McGranahan & Ghelfi, 1991).

These trends were associated with declining wages in both rural and urban areas, particularly for less-educated men. For the young adult age group (ages 25-34 in 1990), who entered the labor market in the 1980s and, usually, started families, the changes were substantial. Overall, rural men in this cohort earned 15% less in 1989 than the corresponding cohort in 1979 (Table 3)[1]. Earnings fell even for young rural men who were college graduates. Rural women fared better over the decade, although their gain in earnings was largely due to an increasing proportion who worked full-time full-year. Their earnings remain much lower than men's earnings, especially in rural areas. Among full-year, full-time workers, the average earnings of rural women who are college graduates is about the same as for rural men who have completed high school but not college.

The 1980s were a period of opportunity for the better educated in urban areas. Largely because of a 10% growth in earnings for urban, college-educated workers and the relatively high proportion of these workers in the urban work force, the urban decline in wages for young adult men was much less sharp—only 4.3%—than the rural decline. Although the earnings of less-educated, urban women declined over the decade, the average earnings of college-educated, urban women in this age group grew by 26% (18% for those working full-time year-round), and the overall average for women in this age group rose by 16%. As a result of these changes, the rural/urban wage gap increased, particularly among the college educated. In 1989, rural, college-educated young men and women earned only about three fourths as much as their urban counterparts. The rural/urban gaps for other education groups are smaller, especially among men.

Young Adult Education

These statistics would be less alarming if rural young adult education levels were rising rapidly. But, in a reverse of historic trends, education levels of young rural men fell markedly in the 1980s. The proportion who had completed college fell from 19% to 13%, while the proportion who were high school dropouts remained at 20% (Table 4).[2] Substantial rural/urban migration of college graduates was responsible for some of the drop, but even in urban areas college completion by young men declined. The education levels of young rural women remained fairly constant across the decade; consequently, among rural young adults in 1990, women were more highly educated than men.

[1]The geography is not constant in this table, as the census data sets use the metropolitan area definition current at that time. Earlier research on 1979 to 1987, using data with more constant geographies, showed the same trends in earnings (and education completed) as reported here (see McGranahan & Ghelfi, 1991).

[2]The Census education questions changed between 1980, when the focus was on years of schooling completed, and 1990, when the focus was on degrees obtained. While this change may have exaggerated the decline in education completed, a comparison of the two approaches in a national survey showed little overall effect. For instance, 19% of the respondents reported that they had completed four years of college while 18% reported having a bachelor's degree (Kominski & Siegel, 1993). I assumed in this article that the completion of four years of college was comparable to a bachelor's degree.

Table 3 (continued on page 143)
Average 1989 Earnings and Change in Real Earnings (1979-1989) of Young Adult Workers (Ages 25-34), by Gender and Area

	Metropolitan		Total	
	1989 Earnings	% Change 1979-89	1989 Earnings	% Change 1979-89
All workers				
Men				
No high school diploma	15,682	-16.9	14,418	-17.2
High school diploma	22,930	-8.5	19,856	-14.7
Baccalaureate degree	33,255	10.0	25,922	-2.0
Total	24,659	-4.3	19,275	-15.5
Women				
No high schhool diploma	9,558	-1.6	7,875	-3.3
High school diploma	15,086	9.5	11,095	4.0
Baccalaureate degree	23,838	25.8	17,951	14.2
Total	17,013	16.1	11,791	5.1
Full-time, full-year workers				
Men				
No high school diploma	19,575	-12.6	18,010	-13.3
High school diploma	26,029	-7.3	22,260	-12.8
Baccalaureate degree	37,569	9.2	29,272	-1.1
Total	28,642	-2.5	22,598	-11.7
Women				
No high school diploma	14,485	-1.3	12,555	-2.7
High school diploma	19,729	4.7	15,342	-1.4
Baccalaureate degree	29,224	18.0	22,617	11.1
Total	22,247	11.6	16,211	1.5

Source: Census of Population and Housing, 1980 (1983a); Census of Population and Housing, 1990 (1993b).

Table 4
Education Completed (Ages 25-34) by Gender and Area, 1980 and 1990

	Men		Women	
Area and Education	1980	1990	1980	1990
Metropolitan				
No high school diploma	13.9[a]	15.8	14.9	13.9
High school diploma	57.1	58.4	63.3	61.2
Baccalaureate degree	28.9	25.9	21.9	24.9
Nonmetropolitan				
No high school diploma	19.0	20.0	19.5	17.4
High school diploma	62.1	67.2	67.0	72.4
Baccalaureate degree	18.9	12.8	15.1	14.3

[a]Percentage.
Source: Census of Population and Housing, 1980 (1983a); Census of Population and Housing, 1990 (1993b).

Because of its traditional role as a provider of natural resources and low-cost labor, rural America was particularly hard hit by the economic transformations of the 1980s. At least in the short run, the new global economy and the information revolution have created a rural vacuum. High-tech, social analytic jobs have concentrated in cities rather than dispersing to the countryside, and low skill jobs have dispersed outside the country. Rural earnings fell between 1979 and 1989, particularly for less-educated men, and young men's education levels fell as well. These changes do not bode well for rural school systems, as families now must commit more time to work to achieve the same level of living as in the past. This affects both the likely support that families have for school financing and the resources families devote to their children. Since relationships between wage-earners and school systems are largely mediated through families, however, we also need to examine families and the ways that they themselves changed over the

Nonmetropolitan							
North		Midwest		South		West	
1989 Earnings	% Change 1979-89	1989 Earnings	% Change 1979-89	1989 Earnings	% Change 1979-89	1989 Earnings	% Change 1979-89
17,000	0.6	15,035	-21.1	13,610	-18.2	15,362	-20.7
21,505	-6.0	19,976	-18.2	19,006	-14.5	20,670	-14.9
27,072	5.3	25,515	-4.7	26,170	-0.9	25,088	-7.0
21,887	-3.7	20,079	-16.9	18,514	-13.4	20,434	-15.5
8,453	0.9	8,053	-6.2	7,937	-2.2	7,058	-4.8
12,459	15.9	10,975	6.4	10,833	-0.5	11,045	2.9
19,153	23.7	17,339	15.2	18,090	10.7	17,584	12.2
13,519	16.4	11,713	6.5	11,453	2.8	11,612	2.1
20,190	-2.4	19,091	-17.1	16,993	-12.8	19,573	-21.5
23,731	-7.1	22,211	-16.4	21,345	-11.8	23,873	-12.5
30,684	7.1	28,508	-4.0	29,161	-0.4	29,730	-5.5
24,551	-4.4	22,763	-14.9	21,443	-10.6	24,222	-13.3
13,810	1.0	13,298	-6.5	12,141	-1.6	12,548	-9.1
17,449	5.6	15,295	-2.7	14,483	-3.2	16,688	-0.2
24,579	18.4	22,295	12.5	21,792	8.6	23,533	7.0
18,793	9.3	16,185	-0.1	15,228	0.6	17,532	0.5

decade to understand how the economic transformations will be affecting school systems.

Changes in Family Demography

Two trends have helped to compensate for the decline in men's earnings. First, rural women continue to have fewer and fewer children. As recently as 1970, rural women ages 25-34 had born an average of 2.43 children (U.S. Department of Agriculture, 1993). By 1980, this statistic had fallen to 1.76 and, by 1990, to 1.63 (Table 5). As a result of this declining birth rate, the number of children living in rural areas fell by 5.6% during the 1980s, even as the number of working age adults (ages 18-64) rose by 6.1%.

The second trend offsetting the decline in men's earnings has been the increasing tendency for women with children to work. Over two thirds of women with children are in the labor force, up from somewhat over half in 1980.

Another trend has had a more pernicious effect. There has been a continuing decline in traditional family structures. In 1990, over one fourth of all rural children in families were not living with two parents (biological or adoptive). And the proportions are far higher among Blacks than among other groups. About half of all rural Black families with children were single-parent families in 1990, up from only a little over one third in 1980. While White families with children are much less likely to be one-parent families, the proportion rose in the past decade; at nearly 20% in some regions, it is not trivial. Among Hispanics, who comprise an increasingly significant proportion of the population in several rural areas in the South and West, family structure falls in between Whites and Blacks.

Poverty

The economic and demographic trends of the 1980s had somewhat opposing effects on rural poverty. On the one

Table 5
Changes in the Demography of Families and Children[a]

Indicator		Year	Metro-politan	Nonmetropolitan				
				Total	North-east	South	Mid-west	West
				Average number per woman				
Children born to women ages 25-34		1990	1.26	1.63	1.44	1.61	1.68	1.73
		1980	1.40	1.76	1.57	1.80	1.77	1.73
				Percentage				
Labor force participation of women with children at home		1990	67.5	68.2	69.1	71.7	66.7	65.4
		1980	55.5	54.6	54.3	55.2	55.2	51.6
Children not living with both parents		1990	29.7	25.7	22.4	30.5	19.8	25.7
		1980	25.1	20.4	18.2	24.8	15.1	20.0
One-parent families with children	White	1990	17.9	16.9	18.8	15.6	16.4	19.9
		1980	14.8	12.4	14.4	11.6	11.6	15.0
	Black	1990	54.0	49.0	40.8	49.5	47.9	32.4
		1980	47.4	37.3	37.7	37.2	40.0	31.8
	Hispanic	1990	29.2	23.2	32.3	19.2	24.9	25.8
		1980	24.5	16.6	21.9	15.1	18.3	17.3

[a]Children under 18 years old.
Source: U.S. Department of Agriculture (1993), supplemented by statistics from Censuses of Population and Housing, 1980 (1983a).

hand, women were having fewer children and spending more time at work, both of which tended to reduce poverty. On the other hand, earnings were falling for men, particularly the (already poorly paid) less-educated, and single-parent families became more prevalent. The net effect was an increase in rural poverty, from roughly 16% in 1979 to 17% in 1989 (Table 6). While small, this increase was in considerable contrast to the 1970s, when rural poverty fell by 5 percentage points, and the 1960s, when the rural drop was 14 percentage points (U.S. Department of Agriculture, 1993). Blacks have an extremely high poverty rate, nearly 40%, but despite the increase in Black single-parent families, their overall poverty rate did not rise during the 1980s. The explanation appears to be declining birth rates. Hispanic poverty did rise, however, the influx of poorly educated immigrants and in part due to the increase in the incidence of single-parent families.

More disturbing than the general increase in rural poverty is the increase in poverty among children. In 1989, 22% of all rural children lived in poor families, up from 19% a decade earlier. Poverty rates are extremely high (58%) for children in rural families headed by women, over 43 percentage points higher than for children in other types of families. The increase in single-parent families was clearly an important factor in the rise in children's poverty, although it must also be recognized that poverty and unemployment are part of the socioeconomic context that results in single-parent families.

Rural Diversity

Like most generalities, the concept of "rural America" ignores a considerable diversity. Rural areas in the country are alike in having small, relatively remote settlements and scattered populations, but their local histories, cultures, and economies make them distinct from each other in many ways. The regional data reported above show considerable differences in earnings, family demography, and poverty across broad regions. For instance, the proportion of children not living with two parents is slightly over 30% in the rural South, but less than 20% in the rural Midwest. Similarly, the poverty rate for children is nearly twice as high in

Table 6
Poverty Incidence

Population Group	Year	Metro-politan	Nonmetropolitan			
			Total	North-east	South	Mid-west	West
All people	1989	12.0[a]	16.8	11.3	20.5	13.5	16.2
	1979	11.4	15.7	11.7	19.8	12.0	13.7
White	1989	8.4	13.8	11.0	15.6	12.8	13.4
	1979	8.2	12.9	11.4	15.0	11.5	11.6
Black	1989	27.5	39.3	32.2	40.1	35.4	26.8
	1979	27.8	39.5	27.6	40.0	30.2	27.0
Hispanic	1989	24.5	32.2	23.6	38.8	25.1	28.5
	1979	23.0	27.4	22.5	34.1	18.5	22.8
Children only	1989	17.1	21.9	14.7	27.0	17.2	21.3
	1979	15.0	18.9	14.1	24.4	13.7	16.3
In families headed by women	1989	47.8	57.9	46.4	62.3	53.2	55.2
In all other families	1989	9.5	14.5	9.4	17.6	11.8	15.0

[a]Percentage.
Source: U.S. Department of Agriculture (1993).

the South as in the Northeast. There are equally large differences within the regions. The greatest differences are probably in population and employment change. Rural areas near urban centers and favored by a pleasant climate and topography have had quite high rates of growth in recent decades, while other areas have lost population (McGranahan, 1993). Thus, although the number of school children will probably continue to decline in most rural areas, there will be some areas where problems are created by a rapid growth in the school age population.

Despite their diversity, rural areas are subject to the same broad socioeconomic forces, and many economic and demographic trends are similar across regions. Earnings fell markedly for the less-educated young men in all regions except the Northeast, where a strong urban economy during much of the 1980s benefited rural residents. While young women's earnings rose in all regions, the gain was almost entirely due to the larger proportion working full-time, full-year. Only in the Northeast did earnings rise for young women working full-time, full-year. But in the Northeast as elsewhere, men and women who were college-educated did much better than those with less education.

Birth rates declined and women's labor force participation rose in all regions. The proportion of children living with only one or neither of their parents even rose by about the same amount in all the regions. Poverty trends have somewhat greater divergence, in part because the strong urban economy of the Northeast benefited its more rural areas during the 1980s. Nevertheless, children's poverty rose in the rural Northeast as elsewhere.[3]

Implications for School Systems

The economic and demographic trends of the 1980s have implications for school systems in three domains: (a) the resources that students bring to the school, (b) the support that schools get from the local community, and (c) the preparation needed by students for jobs or further schooling. In general, school systems in the current decade will have to do more with less. Education has gained in

[3]The urban Northeast faltered economically around the turn of the decade, creating a more difficult and uncertain rural job market there as well.

importance for jobs, and preparing students for further education is more important now than 10 years ago. But both the students and their school systems have fewer resources than before to accomplish this task.

As noted above, single-parent family, low family income, low parental education, and being home alone for three or more hours are among the risk factors associated with weak student performance. The census data presented above show that the first three problems increased substantially in rural areas between 1980 and 1990. Given the rises in both single-parent families and women's labor force participation, it seems likely that the proportion of children who go home to an empty house has also increased. Even where none of these particular risk factors applies, family members are working longer hours now to obtain the same standard of living as ten years earlier. There are generally fewer family resources (time and/or money) to devote to children. Analyses of more recent changes, from 1989 to 1993, suggest that education levels and earnings have continued to fall for rural young adults.

It seems unlikely that the pressure to reduce education and other public sector costs will ease in rural areas. School expenditures are sensitive to local income levels. According to Jansen (1991), rural counties in the bottom fifth of all rural counties in per capita income spend about 30% less per pupil than rural counties in the top fifth. This suggests a downward pressure on school expenditures in a period of falling wages. With wages lower now than in the past 15 years and future wages and job stability uncertain, continued pressure to lower school expenditures seems likely.

Recent migration patterns may further reduce local support for education in rural areas. Many of the better educated young adults, who tend to value schooling the most, have been leaving rural areas. Between 1988 and 1989, there was a net loss of nearly 5% of the rural college graduates (ages 25-34) while there was little net movement of those with high school or less schooling (McGranahan & Ghelfi, 1991). While this outmigration appears to have slowed with the economic recession in the early 1990s, there is little reason that it could not pick up again. The inmigration of retirement age people to areas high in natural amenities probably also limits local support for schools in those areas, although the evidence on school support is mixed for the elderly in general (Deller & Walzer, 1993).

The shift in the bases of school funding away from local property taxes now occurring in several states may benefit school financing in rural areas. One reason is that rural areas tend to have lower tax bases than urban areas, as well as higher costs per pupil (due to the small sizes and/or broad geographic base of rural schools). Equalization, a major reason for the development of alternative revenue sources, should help the poorer rural areas. A second reason that the shift away from property taxes may benefit rural areas is that most youth move away from the county in which they grow up (Cromartie, 1992). Those who pursue post-secondary education are especially likely to move away. Many local taxpayers, particularly business owners, may see little to be gained by increasing local taxes to promote, in effect, the outmigration of local youth.

Finally, the education system must help deal with an irony. For individuals, education now makes more of a difference in earnings than ever. The ability of young men without a high school degree, or even with a high school degree, to earn a reasonable living was seriously eroded in the 1980s, and this erosion has continued in the 1990s. Women's earnings are getting closer to men's earnings, less because women's earnings are rising than because men's wages are falling.

At the same time, rural areas with relatively high levels of education have been losing out to areas with low education in terms of attracting industrial growth. Because they compete primarily on the bases of low labor costs, rural manufacturers have tended to gravitate to those areas where high school dropout rates are high, other things being equal. While this shift in jobs may help these areas in the short run, it is unlikely to be a fruitful long-run strategy for either the manufacturers or the local communities. Industrializing countries pay considerably lower wages than even the lowest wage rural areas. The continued shrinkage of trade barriers with NAFTA and GATT is likely to make this rural specialization in low-wage industries and jobs increasingly untenable.

This suggests two strategies. First, a greater emphasis on getting local students to enter and complete college. To some extent, the changing premium for education should itself encourage more continuation of schooling beyond high school. But, while rural schools (outside the South) now appear to be as effective as urban schools in general education, they are weaker in preparing students for college—at least in terms of courses offered (Teixeira & Greenberg, forthcoming). In particular, rural schools are less likely than urban schools to have high level science and math courses available. This drawback reflects in part the relatively small size of rural schools. Developments in information technology and infrastructure could help overcome this drawback, with "long-distance learning" giving students in small schools access to courses normally available only in larger schools.

Perhaps more problematic is the extent of interest in college education on the part of rural communities, families, and youth. Rural students are generally less ambitious in educational goals than their urban counterparts (Stern, 1994). This may be particularly true in areas such as mining counties, where, historically, reasonably well-paying jobs have been periodically available to young adults without extensive formal education but managerial and professional jobs have been rarer than in most areas (Smith, 1989). The declining education levels of rural young adults, par-

ticularly young adult men, makes the situation more difficult. On the other hand, the loss of opportunities for those with up to a high school diploma is becoming increasingly visible and may inspire current youth to think more seriously about educational goals.

But the college route is not for everyone. Reich (1992) and other have argued for greater collaboration between local educational systems and employers, so that worker skills become an important asset for an area and its industries. This second strategy is necessary if rural communities are to compete in the world on the basis of something besides low wages. Such collaboration would also enhance the apparent value of the school system for both the community and its employers as the link between schools and jobs would be more evident. But this strategy would require a number of conditions which may not now or ever exist in many rural (or urban) communities. First, there must be clear employer benefits to improving the skills of high school graduates. Current changes in technology and work organization, which involve greater use of computers and work teams and more worker responsibility, suggest that skills will become more salient. To date, however, evidence of rural employer need or even desire for work force skill-upgrading is sparse and anecdotal. The preponderance of evidence is that low-cost labor continues to be the central motivating concern.

Second, any school-private sector collaboration must involve a pool of employers, since the program would otherwise be vulnerable to the changing fortunes and hiring practices of one or two firms. This structure may make the idea impractical in smaller, more remote rural communities. Finally, there must be flexibility and creativity on the part of school systems and their monitoring agencies in the design and content of curricula. This would be less of a problem if school systems were not already being asked to be flexible and creative in so many other ways, including adapting to reduced financial resources.

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