This report explores the situation of at-risk students in small and rural schools in Arkansas, Louisiana, New Mexico, Oklahoma, and Texas, and compares this information to the at-risk student situation nationwide. In order to explore both the complexity and the degree of risk of dropping out in rural school settings, research questions were posed concerning the nature and incidence of at-risk students in rural schools; related characteristics and behaviors of rural families, students, communities, and schools; insights gleaned from social theory; and perceptions of rural educators and parents of the at-risk problem. A research review examines: (1) background characteristics associated with risk, including socioeconomic status, minority group status, limited English proficiency, low parental educational attainment, mobility, psychosocial factors, and gender; (2) student behaviors such as participation in school, passive and active disengagement, substance abuse, low achievement, work, and sexuality; (3) school practices related to student retention, course failure and poor grades, suspension and expulsion, and ability grouping; (4) contextual variables, including rural school characteristics, school size, school norms, rural community characteristics, and community norms; and (5) perceptions of educators, parents, and students. The literature indicates that the rural at-risk problem differs from the metropolitan situation in at least four ways: (1) lower dropout rates than in central cities, but also lower postsecondary continuation rates; (2) higher risk of adult unemployment due to lack of useful vocational training and employment options; (3) higher risk due to direct effects of isolation; and (4) lower student aspirations. Policy and program recommendations for rural at-risk students include individualizing education to meet student needs, developing a comprehensive plan, building collaborative partnerships, encouraging connections with students, building community-school linkages, program improvement, and investing in technology. Contains 146 references and definitions of geographic terms.
Rural Students At Risk

in Arkansas, Louisiana, New Mexico, Oklahoma, and Texas
Rural Students At Risk
in
Arkansas, Louisiana, New Mexico, Oklahoma, and Texas

Richard Tompkins
and
Patricia Deloney

Southwest Educational Development Laboratory
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Austin, Texas 78701
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RURAL STUDENTS AT RISK IN ARKANSAS, LOUISIANA, NEW MEXICO, OKLAHOMA, AND TEXAS

Introduction

Rural schoolchildren are more likely to face failure because of crime, substance abuse, parental neglect or other factors than city or suburban kids, a first-of-its-kind survey says....The report...suggests that the social and economic strains facing rural schoolchildren are every bit as bad, perhaps worse, as those facing city youth. (Mitgang, 1990)

To many people who have an idealized view of rural life as being wholesome and carefree, this newspaper report of a national study by Helge (1990) is, perhaps, surprising. Are rural children and youth really more troubled or at higher risk than those in larger communities?

Few issues currently draw the attention of public school educators and policy makers more than those relating to at-risk students. It is estimated that “about 30 percent of the present school population is...at risk of failure” (Bempechat & Ginsburg, 1989).

The term “at risk” was adopted from the field of public health and first used by educators in the early 1980s to describe students who were not succeeding in the public schools for a variety of reasons. Many school improvement policies and programs aimed at bettering educational services to all students, especially those at risk, also began in the 1980s and remain a major focus at all levels—federal, state, and local.

Although students can be at risk of failure in any size or type of school district, (i.e., urban, suburban, small town, rural), a great deal of the research and program development has occurred in urban
Rural St-Jdents At Risk

schools (Houston, 1991; Theobald, 1991). Further, rural areas have seen an erosion of political power and influence to address the concerns and problems facing many of these smaller, more isolated communities (Alexander, 1990). Consequently, little has been done to find out about any uniquenesses of at-risk students that might exist in smaller, more isolated schools.

Much of the Southwestern Region of Arkansas, Louisiana, New Mexico, Oklahoma, and Texas is non-metropolitan. Indeed, 81 percent of all Arkansas schools, 72 percent of Oklahoma schools, 61 percent of New Mexico schools, 55 percent of Louisiana schools, and 48 percent of all Texas schools are located in either rural areas or small towns (Vaughan, Boethel, Hoover, Lawson, & Torres, 1989). In terms of “real numbers” and percentages, rural students comprise a significant portion of school-age children in this Southwestern Region. Information from the 1990 census (General Accounting Office, 1994) reveals the following:

<table>
<thead>
<tr>
<th>State</th>
<th>Number</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>269,106</td>
<td>60%</td>
</tr>
<tr>
<td>Louisiana</td>
<td>279,059</td>
<td>32%</td>
</tr>
<tr>
<td>New Mexico</td>
<td>176,533</td>
<td>56%</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>246,948</td>
<td>41%</td>
</tr>
<tr>
<td>Texas</td>
<td>634,728</td>
<td>19%</td>
</tr>
<tr>
<td>United States</td>
<td>10,758,902</td>
<td>23%</td>
</tr>
</tbody>
</table>

This data, along with other demographic information about this five-state Southwestern Region suggests that rural at-risk students potentially constitute a significant portion of the region's total at-risk population.
The purpose of this paper is to explore the at-risk student situation in small and rural schools, especially in the Southwestern Region, against a backdrop of the overall at-risk situation nationwide to determine what factors are associated with being at risk in small, rural school districts. Although at-risk students cannot be counted as easily as other subgroups of students can be counted (e.g., gender, free/reduced lunch program participants, students eligible for special education services), an overall assessment of “at-risk-ness” in rural and small schools suggests that the problem is both serious and complex. Five questions are posed to explore both the complexity and the degree of “risk” in a rural school setting.

1. What do studies of dropout rates suggest about the nature and incidence of at-risk students in rural schools?
2. What does information about rural families, communities, and schools suggest?
3. What do studies about student characteristics and behaviors suggest?
4. What insights may be gleaned from social theory?
5. How do rural educators and parents perceive the at-risk problem?

Since studies of rural, at-risk students are limited in number, this synthesis will first assimilate general information about the concept of risk. Factors that are commonly associated with at-risk students will be discussed. Research that does specifically address rural schools and students will also be presented to investigate whether differences among rural, urban, and suburban at-risk students exist. Finally, educational policy implications will be addressed.

Prior to addressing these issues, a comment about definitions of certain terms is in order. No one standard definition of “rural,” “urban,” or similar geographical term has been adopted in the
professional literature surrounding educational research. Often these terms are used without any clear explanation or precise definition stated. A more detailed discussion of these terms may be found in the Appendix. However, the reader should understand that because this paper seeks to synthesize current research and literature, these terms will be used in a broad sense unless specified otherwise.

**Evolution of the Concept “At-Risk”**

Education borrowed the term “at risk” from the field of epidemiology (Richardson, Casanova, Placier, & Guilfoyle, 1989), a branch of medical science that deals with the incidence, distribution, and control of disease in a population, (Webster, 1975). The medical field adopted the term from the insurance industry which has used it in relation to mathematical determinations of liabilities and insurance premium costs (Baizerman, 1991). In both medicine and the insurance industry, risk is identified by defining and measuring probabilistic outcomes, and it is defined in relation to a specific event (e.g., at risk of contracting a specific disease or of being involved in an automobile accident). Medical use of the term carries with it an added implication that treatment or prevention of some kind is called for (Richardson et al., 1989).

These conceptual origins hold both promises and pitfalls for the field of education. It is promising in that the use of “at risk” generates a sense of urgency, which is appropriate considering the data on high school dropouts and employability of students with/without high school diplomas, especially in rural areas. Sherman (1992) reports that “rural youths are at least as likely as metro children to drop out of high school and, if they manage to
Rural Students At Risk

finish high school, are less likely to finish college” (p. 107) and that “unemployment in rural areas ... is now higher than in metro areas” (p. 24).

According to Pallas (1992), “untreated education problems can be as serious as untreated medical problems” (p. 22). However, applying medical terminology to an educational context can be misleading. The untreated medical problems mentioned by Pallas reside within the patient; the untreated education problems, however, involve a complex interaction of personal, social and educational variables. The danger is that school personnel and others will focus primarily or solely on the personal variables and characteristics, viewing the at-risk student as deficient because he/she does not “fit” the system rather than viewing the situation from a broader, more systemic perspective (i.e., the system as deficient because it does not meet the educational needs of all of its students).

Another pitfall is the use of the term “at risk” without specifying in what respect the student is at risk. This has caused some criticism (e.g., Wehlage, Rutter, Smith, Lesko, and Fernandez, 1989). The term has been used in numerous, vague, and disparate ways (e.g., at risk of low self-esteem, becoming alcoholic, etc.). However, in the educational setting “at risk” is most commonly related to dropping out of school. Although definitions of “dropout” vary, once a definition is determined, measuring dropout rates is possible. Consequently, risk of dropping out may also be estimated.

Although the dropout issue and the at-risk issue are practically inseparable, most practitioners use the “at risk” label in a broader context than just dropping out. The Goals 2000: Educate America Act of 1994 identifies an at-risk student as one “who, because of limited English proficiency, poverty, race, geographic location, or economic disadvantage, faces a greater risk of low educational achievement or
reduced academic expectations” (U. S. House of Representatives Report 103-446, pp. 99-100). As of this writing, the Goals 2000 legislation has yet to be codified. However, since only one of the eight goals outlined by this legislation is concerned with dropouts, the scope of which students are at risk is clearly more extensive than those at risk of dropping out. Other literature and state adopted definitions signal a general consensus that the concept also encompasses students who are at risk of not being prepared to be successful participants in adult life, especially as related to employment. “The term at risk is...particularly applied to young people whose prospects for becoming productive members of society look dim” (Hepburn & White, 1990, p. 5). According to Boyd (1992),

> Family background, personal characteristics of the child, the school context and the social behavior of children interact to create conditions that place children at risk of failing to achieve their academic potential, dropping out of school, and/or having limits placed on their ability to function as productive adults in society.

(p. 3)

One criticism which can be made is that, although dropping out of school is generally considered a discrete event that can be measured, future success in adult life or limited functioning as productive adults are difficult concepts to define in ways that facilitate assessment of “at-risk” status.

Regardless of the difficulties inherent in broadening the definition of risk, in the Southwestern Region none of the five states has sought to limit the objectives of their at-risk programs simply to completing requirements for a high school diploma. Four states have adopted definitions that include explicit reference to being successful participants in adult life.
“At risk” is defined in Arkansas as “those enrolled in school or eligible for enrollment whose progress toward graduation, school achievement, preparation for employment, and futures as productive workers and citizens are jeopardized by a variety of health, social, educational, familial, and economic factors” (Arkansas Department of Education, 1990, p. 3).

Louisiana, through Senate Bill 691 (adopted in 1990), defines students at risk as “those who are experiencing difficulty with learning, school achievement, progress through graduation from high school, and/or preparation for employment due to social, emotional, physical, and mental factors.”

New Mexico has defined the term as “those whose school achievement, progress toward graduation, and/or preparation for employment are in serious jeopardy” (New Mexico Department of Education, 1990, p. 2).

Oklahoma currently uses the term “high challenge” to refer to at-risk students. Senate Bill 583, adopted by the Oklahoma Legislature in 1992, states, “High challenge children and youth are those at risk of failure to complete a satisfactory education.” The Oklahoma Department of Education (1992), in a statewide “High Challenge Grant Application,” clarified that “high challenge children and youth are defined as individuals whose present or predictable status (economic, social-cultural, academic, and/or health) indicates that they might fail to successfully complete their secondary education and acquire basic life skills, including skills necessary for higher education and/or employment...” (p. 6).

Rather than following the approach of the other four states, the State Board of Education in Texas differentiates “at risk” by more operational criteria [Alternatives to Social Promotion as amended by the State Board of Education in July, 1990, 19 Texas Administrative
Code §75.195]. Broadly these criteria include retention, unsatisfactory performance on various standardized tests, limited English proficiency, victim of child abuse, delinquent conduct, course failure, and/or homelessness (Texas Education Agency, 1991).

Numerous conditions and circumstances can combine to characterize a student as at risk. Through research, most frequently case studies, many of these conditional and circumstantial factors that identify a student as at risk have been described (e.g., Sherman, 1992; Richardson et al., 1989; Brendtro, Brokenleg, & Eockern, 1990; Ogden & Germinario, 1988). Currently, being "at risk" is generally viewed as resulting from certain predisposing factors in a student's personal circumstances and behavior in complex interaction with the school and its culture and certain practices within the context and/or influence of the surrounding community (Finn, 1993; Boyd, 1992; Jones, Olson, Rincones, & Taite, 1991; Pallas, 1990; Frymier & Robertson, 1990; Richardson et al., 1989; Wehlage et al., 1989; Barnes, 1989).

Although the literature gives an impression of consensus on this general concept of risk, operationalizing the definition to identify which children are truly at risk is complicated. Table 1 compares the operational definitions of at-risk students in the five states of the Southwestern region. Note that Arkansas and New Mexico have not developed criteria beyond their general definitions. Therefore, phrases from these definitions are included for purposes of comparison.
### Table 1
Identification Criteria for At-Risk Students in the Southwestern Region

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>AR</th>
<th>LA</th>
<th>NM</th>
<th>OP</th>
<th>TX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagging in academic skill development: inappropriate developmental level; no substantial progress in mastering skills that are appropriate for students of their age; failed at least one section on state minimum competency test; secondary student two years below grade level in reading or mathematics</td>
<td>*</td>
<td>( *)</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Lagging in credit attainment: one or more years behind age group in credits attained; secondary student who has failed two or more courses</td>
<td>*</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Retention: retained one or more years</td>
<td>*</td>
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<tr>
<td>Low grades: grades that consistently indicate major underachievement; student has achieved less than 2.0 grade points on a 4.0 scale or equivalent</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excessive absenteeism</td>
<td>*</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Student has been a dropout</td>
<td></td>
<td></td>
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<tr>
<td>SES: low socioeconomic level; family at or below poverty level</td>
<td>*</td>
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<td></td>
</tr>
<tr>
<td>Limited English proficiency</td>
<td></td>
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<td>*</td>
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<tr>
<td>Pregnant and/or parent</td>
<td>*</td>
<td></td>
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<td></td>
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<tr>
<td>Homeless student</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Evidence of abuse</td>
<td></td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delinquency: delinquent behavior; adjudicated as delinquent</td>
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<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of alcohol or drugs</td>
<td></td>
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<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Attempted suicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Nondisabled student in residential facility outside of district of parent or guardian</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Umbrella: educational, environmental, familial, economic, social, developmental, and psychosocial factors</td>
<td>( *)</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

(*) - Implied by state definition
Dropout Rates—An Overview

Dropouts are not a new problem. The high school dropout rate in 1900 was 90%. In the 1930s only about one-third of the youth population completed high school. By 1950 the number who graduated had increased to 59%. In the 1970s the dropout rate continued to decrease, but it was still nearly 28% nationwide. (Grossnickle, 1986, p. 8)

Although students may be at risk relative to a number of things, the term “at risk” is usually used in relation to the propensity for a student to drop out of school prior to graduation. Reported dropout rates can be difficult to understand and compare for at least two reasons: (1) dropout status changes over time—many students who initially drop out of school re-enter the system at some point and complete the requirements for either a high school diploma or a General Educational Development (GED) certificate (McLaughlin, 1990); and (2) school districts, state agencies and researchers use differing operational definitions.

Some districts count students as dropouts who have a certain number of unexplained absences on their record. Others count students as dropouts who join the military. There is some question as to whether a Graduate Equivalency Diploma (GED) is really equivalent of a high school completion, raising the question of whether those who quit high school to acquire GED should be counted as dropouts. Some schools who only account for their students between September and June therefore exclude from their definition of dropout those students who drop out in June, July and August, failing to return in September. (National Education Association, 1991) [GED stands for General Educational Development (certificate) rather than Graduate Equivalence Diploma]
Indeed, sometimes the term is used in professional literature or research writings with no operational definition provided at all.

The annual dropout report prepared by the National Center for Educational Statistics (NCES) presents dropout rates in three different ways: (1) event rates—the percentage of students who left high school without receiving a diploma within a given year; (2) status rates—the percentage of the population of a given age range who have not finished high school and are not enrolled at a given point in time; and (3) cohort rates—what happens to a single group of students over time (Howley & Huang, 1991).

Using 1980 sophomore cohorts from the High School and Beyond database (a study where approximately 30,000 high school sophomores in 1000 schools were surveyed in 1980 with follow-up surveys of the same students in 1982, 1984, and 1986), McCaul et al. (1992) and Orr (1987) both found that urban rates are about 50 percent higher than rural rates (about 20 percent for rural and suburban and about 30 percent for urban). However, Sherman (1992) taking data from the U. S. Census Bureau for the years 1987-1989 reports the following (p. 113):

<table>
<thead>
<tr>
<th>Dropout Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
</tr>
<tr>
<td>Metro</td>
</tr>
<tr>
<td>City</td>
</tr>
<tr>
<td>Suburb</td>
</tr>
</tbody>
</table>

He further states that rural dropouts are less likely to return to school or to pursue a General Educational Development (GED) certificate than their urban or suburban counterparts.

Widely varying dropout rates are reported in other studies. For example, Helge (1990) reports rural rates as high as 47 percent, while
a Texas Education Agency study (1991) shows that some rural districts have no dropouts. According to Sherman (1987), "In some...rural school districts, dropout rates are between three and four times the national average rate" (p. iv). While recognizing the limitations on making definitive statements about dropout rates, these studies suggest that the range of dropout rates in rural districts is quite wide, suggesting that an overall average rate is of limited value for policy making purposes.

**Variables Associated with Risk**

Numerous variables have been suspected of or "blamed" for contributing to students dropping out of school or being ill-prepared for life and responsibilities after graduation. Many of these factors have been studied and categorized in various ways. For the purposes of this synthesis, four categories are proposed: family and student background characteristics, student behaviors, school practices, and contextual variables. Where issues and/or research specifically addressing rural at-risk students exist, they will also be discussed.

Taken together, the following discussion of these factors addresses three of the questions, proposed in the introduction, that are of interest in this synthesis.

- What does demographic information of rural families, communities, and schools suggest about the nature and incidence of at-risk students in rural schools?
- What do studies about student characteristics and behaviors suggest?
- What does social theory suggest?

However, before addressing them, it is important to emphasize that lists of at-risk predictors are never all-inclusive. Some students who
exhibit none of the identified factors will still drop out of school, while others who are characterized by several predictors succeed quite well in school with little or no targeted intervention.

The reader is further reminded that it is often easy to misinterpret predictors of risk as causes. When teaching methodologies, contents, etc. do not foster student success, it is sometimes convenient for school practitioners to "blame" the home or child for the lack of satisfactory progress. This "blame-the-victim" mindset, in turn, fosters low expectations and a tendency for both teachers and students to "give up." The reader is therefore reminded that the following factors are variables associated with, but not necessarily linked causally, to students who are at higher risk.

**Background Characteristics**

Research identifies a number of variables related to a student's family or personal background that appears to contribute to increasing the risk of failure in school. The following are among the most often cited factors.

**Single Head of Household**

In 1955, 60% of all U.S. households consisted of a working father, a housewife mother, and two or more school-age children. In 1985, only 7% fit this pattern. In addition, with over one-half of all today's new marriages slated to end in divorce, we have 15.3 million children living with one parent, the mother in over 90% of the cases. (Davis & McCaul, 1991, p. 22)

From the High School and Beyond research and elsewhere, it is apparent that students from single-parent households tend to drop out of school at a much higher rate than those students who come
from the more traditional two-parent family structure (Ferguson, 1992; Bull, Salyer, Montgomery, & Hyle, 1992; McLaughlin, 1990; Wehlage et al., 1989).

According to the Kids Count Data Book (1993), 25 percent of all children now live in single-parent families. This represents a 9 percent increase from just five years earlier. "In 1990, over one-half of African-American children lived in single-parent families; just under one-third of Hispanic children lived in single-parent families" (p. 14).

As stated previously, more than 90 percent of these one-parent families are headed by females. The majority of female-headed households are either the result of divorce or out-of-wedlock births. There is, therefore, a significant correlation between these households and poverty (Davis & McCaul, 1991; Willis, 1987). In fact, children who live in female-headed families have a greater than 50 percent chance of being poor (Ascher & Burnett, 1993). In a 1986 study, it was found that 62 percent of one-parent families (predominantly female) had annual incomes of less than $10,000 (Keough, 1986).

Paying for a child's needs on a single salary is also hard, particularly for women. The average income of single-mother families is 60 percent of single-father families' income. Only 31 percent of mother-headed households receive any child support or alimony. (Kids Count Data Book, 1993, p. 14)

Although the numbers of rural, one-parent households do not begin to approach those in urban areas, the nonmetropolitan family structure is changing rapidly, and this also has implications for the rural at-risk student problem. The incidence of rural female-headed households has increased from 9 percent in 1960 to 20 percent in 1990
Rural Students At Risk

(Lichter & Eggebeen, 1992). Further, according to the General Accounting Office (1994), the rate of poor rural children in female-headed families increased faster than similarly situated urban children during the decade of the 1980's. That office provides the following information from the 1990 census:

Schoolage Children in Single, Female-Headed Households

<table>
<thead>
<tr>
<th></th>
<th>1980</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>6,788,605</td>
<td>7,274,565</td>
</tr>
<tr>
<td>Rural</td>
<td>1,635,823</td>
<td>1,876,503</td>
</tr>
</tbody>
</table>

The percent of children living in single-parent households varies significantly among the five states of the Southwestern Region. Yet, all have seen an increase in this family structure from 1985 to 1990. No data were found relative to single parent families specifically in the rural areas of these five states. However, the following overall information is provided by the *Kids Count Data Book* (1993).

<table>
<thead>
<tr>
<th>State</th>
<th>Percentage 1985</th>
<th>Percentage 1990</th>
<th>1990 Rank (50 States + Washington, DC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>23.3%</td>
<td>27.2%</td>
<td>41st</td>
</tr>
<tr>
<td>Louisiana</td>
<td>24.7</td>
<td>31.9</td>
<td>49th</td>
</tr>
<tr>
<td>New Mexico</td>
<td>21.7</td>
<td>22.6</td>
<td>26th</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>20.4</td>
<td>22.5</td>
<td>24th</td>
</tr>
<tr>
<td>Texas</td>
<td>20.7</td>
<td>22.5</td>
<td>24th</td>
</tr>
<tr>
<td>United States</td>
<td>22.7%</td>
<td>24.7%</td>
<td></td>
</tr>
</tbody>
</table>

**Low Socioeconomic Status (SES)**

"It is estimated that of the poor in America, 40% are children" (Davis & McCaul, 1991, p. 21). Approximately 7.6 million school-age children, more than 17 percent of the total student population, live in poverty (General Accounting Office, 1993). Much of the professional
literature indicts poverty as a primary factor placing students at high risk of not graduating from high school (e.g., McCaul, Donaldson, Coladarci, & Davis, 1992; Sherman, 1992; Presseisen, 1991; Pallas, 1990). “Students from low-income families are three times as likely to drop out of school as those from more affluent homes” (Kids Count Data Book, 1993, p. 11). Further, female students who come from families in the lowest SES quartile drop out of school at five times the rate of females from the highest quartile. Male students in the lowest quartile drop out at two and a half times the rate of those in the highest quartile (Earle & Roach, 1987). Consequently, the Goals 2000: Educate America Act of 1994 identifies poverty and economic disadvantage as significant at-risk factors.

Ellwood (1988) suggests that nearly half of all poverty exists in nonmetropolitan areas. Estimates suggest the national poverty rate in 1990 to have been at 13.5 percent, with the rural poverty rate at 16.3 percent and the inner city rate at 19 percent (Lichter & Eggebeen, 1992; O'Hare & Curry-White, 1992; Marion, 1992). The General Accounting Office (1993) reports a rural poverty rate of 15.6 percent and an urban poverty rate of 17.6 percent (p. 38).

Clearly, the poverty rate is highest in central cities. However, the largest number of poor people live in rural areas, small towns, and small metropolitan areas. Almost one in three urban children and one in four rural children live in families whose incomes are below the poverty level" (Davis & McCaul, 1991, p. 40).

The poverty problem has also grown for those in rural areas and small communities. According to Alexander (1990), “By the late 1980’s, the rural poverty rate...was growing twice as fast as urban poverty” (p. 123). Further, “White children, African American children, children in married-couple
families and children in mother-only families are **all** more likely to be in poverty if they live in a rural area" (Hodgkinson, 1994).

Data relative to the numbers and rates of poor urban and rural school-age children has been made available by the General Accounting Office (1994) from the 1990 census data:

<table>
<thead>
<tr>
<th>Location</th>
<th>Number</th>
<th>Rate</th>
<th>Number</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>2,922,623</td>
<td>14.3%</td>
<td>3,188,758</td>
<td>16.0%</td>
</tr>
<tr>
<td>Rural</td>
<td>806,757</td>
<td>18.6%</td>
<td>1,015,987</td>
<td>20.4%</td>
</tr>
</tbody>
</table>

These data suggest that approximately 75% of all school-age poverty is located in metropolitan settings, while the remaining 25% are rural. The General Accounting Office (1993) has further analyzed this information by ethnicity. They report the following:

<table>
<thead>
<tr>
<th>Geographic Area</th>
<th>Percent</th>
<th>(Further broken down by ethnicity)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><em>(White + Minority = 100%)</em></td>
</tr>
<tr>
<td>Urban</td>
<td>75.8%</td>
<td><em>(32.56% 67.44%)</em></td>
</tr>
<tr>
<td>Rural</td>
<td>24.2</td>
<td><em>(67.07 32.93)</em></td>
</tr>
</tbody>
</table>

The poverty rates of school-age children, whether urban or rural, in the five states of the Southwestern Region are among the most severe in the United States. Further, these rates have increased in each of these states, dramatically in some cases, during the decade of the 1980's.
Rural Students At Risk

School-Age Poverty Rates

<table>
<thead>
<tr>
<th>State</th>
<th>1980 Rate</th>
<th>1990 Rate</th>
<th>1990 Rank (50 States)</th>
<th>Total (1990) # of Poor Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>22.8%</td>
<td>23.8%</td>
<td>46th</td>
<td>107,170</td>
</tr>
<tr>
<td>Louisiana</td>
<td>23.2</td>
<td>30.4</td>
<td>49th</td>
<td>267,555</td>
</tr>
<tr>
<td>New Mexico</td>
<td>21.8</td>
<td>26.4</td>
<td>48th</td>
<td>82,984</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>15.2</td>
<td>19.9</td>
<td>40th</td>
<td>120,018</td>
</tr>
<tr>
<td>Texas</td>
<td>18.5</td>
<td>23.4</td>
<td>45th</td>
<td>794,774</td>
</tr>
<tr>
<td>United States</td>
<td>15.3</td>
<td>17.1</td>
<td></td>
<td>7,571,259</td>
</tr>
</tbody>
</table>

(General Accounting Office, 1993)

1990 Rural (i.e., non-metropolitan) School-Age Poverty Rates

<table>
<thead>
<tr>
<th>State</th>
<th>Rate</th>
<th>*Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>26.5%</td>
<td>41st</td>
</tr>
<tr>
<td>Louisiana</td>
<td>36.2</td>
<td>49th</td>
</tr>
<tr>
<td>New Mexico</td>
<td>30.5</td>
<td>47th</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>24.4</td>
<td>39th</td>
</tr>
<tr>
<td>Texas</td>
<td>28.2</td>
<td>45th</td>
</tr>
</tbody>
</table>

* The rank is based on 49 states because New Jersey contains no non-metropolitan counties.
(General Accounting Office, 1993)

From the above information it is apparent that the numbers of poor people are both substantial and growing. However, there are also people who are chronically poor. The term “underclass” has been used to describe persons who not only are poor, but have been firmly entrenched in poverty conditions for a long time (multi-generational) and in areas where poverty is concentrated. Students in these circumstances are surely at quite high risk. Although researchers primarily view the concept of an underclass as an urban phenomenon, O'Hare and Curry-White (1992) analyzed 1990 census data and found a significant underclass in rural areas (2.4 percent in rural areas compared to 3.4 percent in central cities and 1.1 percent...
in suburban communities). They also found differences between the urban and rural underclass that have implications for the identification of at-risk children in rural areas. For example, 55 percent of the rural underclass are White compared with 17 percent in central cities, and while 49 percent of the urban underclass are African-American, 32 percent of the underclass in rural areas are African-American. They found insignificant differences between percentages of the urban and rural Hispanic underclass.

Sherman (1992) states that “two-fifths of all young rural children with single mothers live on family incomes of less than half the poverty level” (p. 42). He reports that the 1980 census found 28 counties nationwide with child poverty rates exceeding 50 percent. All 28 counties are characterized as rural. Many of them are located in the Southwestern Region—in the Mississippi Delta area of Louisiana and Arkansas and in Texas along the Mexican border.

In contrast to all that has been stated above regarding low socioeconomic status (SES) as an at-risk factor, conflicting research and other cautions have been proposed. Some research suggests that at-risk students may be under-identified if schools are overly dependent on poverty as a criteria. For instance, Bryk and Thum (1989) found a higher dropout rate in high SES high schools than would be expected based on assumptions about the relationship between low SES and at-risk status.

In a study of 2.4 million students in 900 Texas school districts, Ferguson (1991) found that poverty did not have a statistically significant effect on achievement (as measured by the state’s minimum competency tests) when the variable “female head of household” was controlled. “In fact, the percentage of children living in poverty is highly statistically significant only when both female headship and students’ race variables are omitted; its measured
significance becomes very marginal when either of these is added” (p. 479). This finding held true for kindergarten through the ninth grade. Additional research is warranted before any conclusions can be drawn about such findings, but they suggest that there is no simple causal relationship between family income and achievement. Until such research is forthcoming, it is, perhaps, wise to continue to consider children from poorer families at higher risk than those of more affluent ones.

**Minority Group Status**

Rumberger (1987) notes that Afro-American, Hispanic, and AI/AN [American Indian/Alaska Native] populations, disproportionately represented among dropouts, are increasing at a faster rate than the White majority. This is a critical problem when one considers that in many areas, these populations represent the majority of school-age children and will be the majority in the very near future. (National Education Association, 1991, p. 8)

In general, the dropout rate is higher for minority students (Baumeister, Kupstas, & Klindworth, 1990). Minority group status is, therefore, frequently listed as a risk factor in the literature (e.g., Presseisen, 1991; Davis & McCaul, 1991; Pallas, 1990). Membership in some minority groups, however, does not appear to increase risk (e.g., Asian-American). Further, although minority dropout rates may create an impression that the at-risk problem is essentially a minority problem, the total number of White dropouts is substantially greater than the total of all other dropouts combined (Wehlage et al., 1989). Most importantly, the use of minority group status to identify at-risk students may mask information that could be critical for developing effective responses. Ferguson (1991) suggests that race
variables are "stand-ins for factors that are correlated with race but not otherwise represented ... (e.g., peer culture, ethnic idiosyncrasies in grammar)" (p. 479). For example, in his study (described earlier), he found that African-American students did not make significantly lower standardized test scores until the ninth grade. This phenomenon, according to Maeroff (1988) may be influenced significantly by peer pressure, from a strong African-American teen culture, to resist achievement. African-Americans do, however, consistently drop out of school at higher rates than their White counterparts. Certainly, additional research is warranted.

The data on Hispanic at-risk students provides further proof that overdependence on identification by ethnic group is problematic. On the surface, research studies appear to show that, as a group, Hispanic students are at a higher risk of dropping out and/or of lower achievement. An analysis of the High School and Beyond database showed that for the 1980 cohort of high school sophomores, dropouts were more likely to be Hispanic (29.8 percent) than African-American (22.9 percent) or White (20.0 percent) (McCaul et al., 1992). Ferguson (1991) reports similar findings from his analysis of Texas data. According to 1990 census data, 50 percent of all Hispanic adults report not graduating from high school (Census paints portrait, 1993).

McLaughlin (1990) suggests that policy makers should differentiate between native-born Hispanics and recent immigrants. Using census data, he showed that over one-third of the Hispanic population are immigrants (and thus probably are more limited English proficient than their non-immigrant counterparts) and that native-born Hispanics have educational attainment rates slightly less but comparable to native-born Whites. Although McLaughlin's data left many unanswered questions, his position emphasizes the need
for appropriate and specific information about why students are at risk before effective programs and policies can be initiated.

Native Americans (both American Indians and Alaska Natives) consistently have the highest dropout rates nationally of all ethnic or racial groups (Reyhner, 1991; Borgrink, H., 1987). The National Education Association (1991) compiled a comprehensive report on Native American dropouts. This report highlights the difficulties involved in determining an accurate national dropout rate for American Indians and Alaska Natives, including:

- no standardized definition of who Native Americans are (though the Bureau of Indian Affairs uses the guidelines of 1/4 "degree of blood" and an official membership in an accredited tribe). Most state education agencies accept self-reports as adequate documentation;
- no standardized operational definitions of who "dropouts" are; and
- no standardization about how dropouts are counted and reported.

Even so, the report documents several facts about the Native American population.

According to Hodgkinson, Outtz, and Obarakpor (1990), in *The Demographics of American Indians: One Percent of the People; Fifty Percent of the Diversity*, there are approximately 1.7 million persons who trace their lineage to over 500 tribes and native groups (more recent estimates proclaim that there are over two million). Sixty percent of the American Indian and/or Alaskan Native (AI/AN) population are members of ten tribes. One fourth of all AI/AN live on reservations. Over 300,000 Indians live in metropolitan areas ... The majority of [American Indian] students (85%) attend public schools, ten percent attend schools funded by the
Bureau of Indian Affairs (BIA), and five percent attend mission or private schools. (p. 1)

Reyhner (1991) estimates the Native American dropout rate to be about 30 percent. However, the National Education Association report (1991) suggests that dropout rate estimates vary significantly. “Recent estimates of the problem include dropout rates from about 35.5 percent (NCES, 1988) to over 50 percent (Wells, 1991) and in undocumented cases between 80 and 90 percent” (p. 2).

Data describing the numbers of rural school-age children in the United States, broken down by ethnicity, are provided by the General Accounting Office (1994):

National Data on Rural School-Age Children by Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>1980</th>
<th>1990</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>9,504,317</td>
<td>8,691,783</td>
<td>-8.6%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>479,469</td>
<td>557,080</td>
<td>16.2</td>
</tr>
<tr>
<td>African-American</td>
<td>1,267,696</td>
<td>1,162,640</td>
<td>-8.3</td>
</tr>
<tr>
<td>Asian</td>
<td>62,184</td>
<td>89,399</td>
<td>43.8</td>
</tr>
<tr>
<td>Native American</td>
<td>215,518</td>
<td>250,819</td>
<td>16.4</td>
</tr>
<tr>
<td>Others</td>
<td>7,269</td>
<td>7,181</td>
<td>-1.2</td>
</tr>
<tr>
<td>Total</td>
<td>11,536,453</td>
<td>10,758,902</td>
<td>-6.7</td>
</tr>
</tbody>
</table>

In the five states of the Southwestern Region, information about minority children is provided by the *Kids Count Data Book* (1993).

Minority-Status Children Under 18 as Percent of Total

<table>
<thead>
<tr>
<th>State</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>24.3%</td>
</tr>
<tr>
<td>Louisiana</td>
<td>41.5%</td>
</tr>
<tr>
<td>New Mexico</td>
<td>59.9%</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>25.6%</td>
</tr>
<tr>
<td>Texas</td>
<td>48.9%</td>
</tr>
</tbody>
</table>
Specific data about ethnicity in the five states of the Southwestern Region were provided for the 1991-1992 school year by the respective state education agencies.

### Student Ethnicity

<table>
<thead>
<tr>
<th>State</th>
<th>African American</th>
<th>Hispanic</th>
<th>Native American</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>75.6%</td>
<td>22.7%</td>
<td>1.1%*</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Louisiana</td>
<td>52.9</td>
<td>44.5</td>
<td>1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>New Mexico</td>
<td>41.2</td>
<td>2.3</td>
<td>45.3</td>
<td>10.4</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>73.5</td>
<td>9.9</td>
<td>3</td>
<td>12.4</td>
</tr>
<tr>
<td>Texas</td>
<td>49</td>
<td>14</td>
<td>34</td>
<td>NA**</td>
</tr>
</tbody>
</table>

*"Hispanic" is not a distinct category in this Arkansas database. Hispanics may also be counted in other categories.
**Not Available—included in the “Other” category.

Poverty rates are generally higher for minorities, adding an additional at-risk factor for many. An analysis of the 1990 census data (General Accounting Office, 1993) reveals the following:

### Poverty Rates by Ethnicity

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Urban</th>
<th>Rural</th>
<th>U.S. Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>30.75%</td>
<td>34.84%</td>
<td>31.15%</td>
</tr>
<tr>
<td>African-American</td>
<td>37.22</td>
<td>40.76</td>
<td>37.70</td>
</tr>
<tr>
<td>White</td>
<td>9.07</td>
<td>12.20</td>
<td>10.14</td>
</tr>
<tr>
<td>Asian</td>
<td>16.8</td>
<td>11.57</td>
<td>16.40</td>
</tr>
<tr>
<td>Native Amer./Other</td>
<td>29.84</td>
<td>59.59</td>
<td>34.36</td>
</tr>
</tbody>
</table>

A similar, though more dramatic, trend is seen in the rural areas of the five states comprising the Southwestern Region. A further analysis of the 1990 census data reveals the following information.
Percent of Poor, Rural, Minority, School-Age Children

<table>
<thead>
<tr>
<th>State</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>43.8</td>
</tr>
<tr>
<td>Louisiana</td>
<td>64.0</td>
</tr>
<tr>
<td>New Mexico</td>
<td>81.9</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>39.6</td>
</tr>
<tr>
<td>Texas</td>
<td>68.8</td>
</tr>
</tbody>
</table>

(General Accounting Office, 1994)

The reader will note that, although the information previously cited about the percent of minority children in these five states is not the same database (all minority children under 18 versus school-age minority children living in rural areas), a comparison of these two sets of data reflects a significant influence of poverty among rural, minority-status students.

The ethnic percentages of poor school-age children, whether rural or urban, for the Southwestern Region are also derived from the same census database and provided by the General Accounting Office (1993).

School-Age Poverty by Ethnicity

<table>
<thead>
<tr>
<th>State</th>
<th>White</th>
<th>African</th>
<th>Hispanic</th>
<th>Asian</th>
<th>Native Amer/Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>51.3%</td>
<td>46.2%</td>
<td>&lt;1%</td>
<td>&lt;1.0%</td>
<td>&lt;1.0%</td>
<td>107,170</td>
</tr>
<tr>
<td>Louisiana</td>
<td>28.6</td>
<td>67.8</td>
<td>1.5</td>
<td>1.2</td>
<td>&lt;1.0</td>
<td>267,555</td>
</tr>
<tr>
<td>New Mexico</td>
<td>17.9</td>
<td>2.3</td>
<td>58.3</td>
<td>&lt;1.0</td>
<td>21.0</td>
<td>82,984</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>56.7</td>
<td>18.7</td>
<td>6.6</td>
<td>&lt;1.0</td>
<td>17.3</td>
<td>120,018</td>
</tr>
<tr>
<td>Texas</td>
<td>20.9</td>
<td>21.5</td>
<td>56</td>
<td>1.2</td>
<td>&lt;1.0</td>
<td>794,774</td>
</tr>
<tr>
<td>United States</td>
<td>41.3</td>
<td>32.2</td>
<td>21.2</td>
<td>3.0</td>
<td>2.3</td>
<td>7,571,259</td>
</tr>
</tbody>
</table>

**Limited English Proficiency**

The Goals 2000: Educate America Act of 1994 identifies students who are limited English proficient as at significant risk. According
to the General Accounting Office (1993), 5.21 percent of all school-age children are limited English proficient (LEP).

As would be expected, children who are not proficient in English face significant challenges in school. Whether they are in bilingual programs or in English-as-a-Second-Language (ESL) programs, some delay in achievement, at least in the early stages, can be expected. Pallas (1990) finds that children of limited English proficiency are also more likely to drop out of school than students who are proficient. He cites a 1987 study by Salganik and Celebuski revealing that students from homes where no English was spoken were twice as likely to drop out as students where English was the primary or only language spoken in the home.

The LEP student population is one that has realized significant growth. The number of LEP students between the ages of 5 and 14 in 1976 was estimated at 2.5 million and projected to grow to an estimated 2.9 million by 1990. Projections suggest that numbers will climb to 3.4 million by the year 2000 (Gingras & Careaga, 1989).

The number of LEP students in the five states of the Southwestern Region are provided by the General Accounting Office (1993).

<table>
<thead>
<tr>
<th>State</th>
<th>1980</th>
<th>1990</th>
<th>Percent of All Students (1990)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>2,309</td>
<td>4,142</td>
<td>0.9%</td>
</tr>
<tr>
<td>Louisiana</td>
<td>16,663</td>
<td>16,508</td>
<td>1.9</td>
</tr>
<tr>
<td>New Mexico</td>
<td>47,796</td>
<td>33,074</td>
<td>10.5</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>7,791</td>
<td>9,172</td>
<td>2.5</td>
</tr>
<tr>
<td>Texas</td>
<td>407,715</td>
<td>383,572</td>
<td>11.3</td>
</tr>
</tbody>
</table>
Low Educational Attainment of Parents

Generally, the potential for being at risk is higher for students whose parents either dropped out or had fewer years of post-secondary schooling. The research suggests that the educational attainment of parents, especially mothers, has a positive and independent effect on student achievement (Smith et al., 1992; Pallas, 1990). Further, the correlation between the level of a mother’s educational attainment and family socioeconomic status is such that some research has used both students’ enrollment in the free/reduced school lunch programs of their schools and mothers’ educational attainment level to define low socioeconomic status for their research (e.g., Griffin, 1992).

Ferguson (1991) found that nearly one-fourth of the variation on Texas’ minimum competency test in 1986 was correlated positively with parent educational attainment. An analysis of the High School and Beyond database showed that for those sophomores in 1980 with mothers who had not completed high school, nearly 25 percent dropped out by 1982. Further, the entire High School and Beyond database (including 1984 and 1986 information) revealed that students whose mothers did not graduate from high school were almost twice as likely to drop out as those whose parents did graduate and more than three times as likely to drop out as those whose parents graduated from college (Barro and Kolstad, 1987). Although the average years of formal education has increased substantially since 1960 for rural adults, educational attainment in nonmetropolitan areas still lags behind that in metropolitan areas (Lichter & Eggebeen, 1992).

Earning power and educational attainment are highly correlated. The salaries of those with higher educational attainment are generally greater than those whose educational attainment levels are
lower. Consequently, poverty rates are skewed toward those with lesser educational attainment. The following information highlights the number of poor school-age children by the educational attainment of their more educated parent (General Accounting Office, 1994):

### School-Age Poverty by Level of Parental Education Attainment

<table>
<thead>
<tr>
<th>Education status of the more educated parent</th>
<th>Poor Urban</th>
<th>Poor Rural</th>
<th>All Nonpoor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade school or less</td>
<td>754,556</td>
<td>228,393</td>
<td>996,876</td>
</tr>
<tr>
<td>Some high school</td>
<td>1,502,413</td>
<td>571,015</td>
<td>2,401,794</td>
</tr>
<tr>
<td>High school graduate</td>
<td>1,490,585</td>
<td>753,407</td>
<td>9,411,221</td>
</tr>
<tr>
<td>Some college/AA degree</td>
<td>1,084,045</td>
<td>438,413</td>
<td>12,281,223</td>
</tr>
<tr>
<td>BA or more</td>
<td>265,662</td>
<td>90,515</td>
<td>10,968,082</td>
</tr>
<tr>
<td>Total</td>
<td>5,097,261</td>
<td>2,081,743</td>
<td>36,059,196</td>
</tr>
</tbody>
</table>

### Mobility

"Mobility can foster another kind of instability only rarely discussed in the at-risk literature. Even with a supportive family, students can experience serious disorientation after moving away from a community of peers who provided social identity" (Wehlage et al., 1989). No studies were found to point clearly to mobility, in and of itself, as a significant factor placing students at risk. Rather, mobility is suggested as an additional factor accompanying other at-risk characteristics (Clark, 1991). It appears that some children cope adequately with all the changes that accompany moving while others have more difficulty adjusting.

Bezruczko and Reynolds (1992), from the most recent data of their longitudinal study of Chicago at-risk students, suggest that mobility plays a strong role in grade retention. However, inconsistent data lead them to speculate that mobility may have a stronger negative impact on younger students, but fade as a significant factor in school achievement by the fourth grade (the current grade placement of the
students they began tracking in kindergarten). This inconsistency will be studied further as the longitudinal study progresses.

One subgroup affected by mobility are migrant students. The number of migrant students is difficult to determine. According to Sherman (1992), there are more than 780,000 migrant children of school-age, 80 percent of whom are Hispanic. Further, “migrant children are presumed to live mostly in rural areas and to be overwhelmingly poor” (p. 16).

The dropout rate of migrant students is also difficult to calculate, however it is estimated to be about 50% (Salerno & Fink, 1989). “Rural migrant students experience higher rates of the following: child abuse...depression/suicide/low self-esteem, poverty, illiterate parents...teen pregnancy” (Helge, 1991, p. 2). Frequently, migrant students come from families typified by many at-risk characteristics, including poverty, limited English proficiency, minority status, and low parental education attainment. Other factors that may have impact upon migrant families include inadequate prenatal care, poor nutrition, and minimal (or nonexistent) health and social services (Helge, 1991). Still other factors include overage grade placement, gaps in school attendance and inconsistent school record keeping (Salerno, 1991).

The seasonal moves that define the lives of migrant families make it difficult for their children to maintain consistency in academic content or in curricular scope and sequence within content areas. Federal efforts to alleviate some of the unique problems confronting migrant students, including a standardized record keeping system—the Migrant Student Record Transfer System (MSRTS), appear to have helped in limited ways (Helge, 1991). The MSRTS is a service that is contracted by the federal government. The database is currently housed at the Arkansas Department of Education in Little.
Rock and maintains information on migrant students in 49 states, Washington, DC, and Puerto Rico. Currently, about 30 percent of these school districts utilize the MSRTS (Cahape, 1993).

A second subcategory of mobility is homelessness. The number of homeless families is difficult to assess. However, the numbers appear to be increasing (Klauske, 1989; Shaver & Dornbusch, 1993). Families that have children make up 34 percent of the nation's homeless. One-fourth of those in homeless shelters are people from rural areas (Harrington-Luecker, 1989). Of course, only a fraction of the homeless are housed, even temporarily, in shelters.

Homeless children face unique issues that mitigate against consistent attendance in school. Beyond the obvious concerns about meeting basic needs (physical needs, safety needs, etc.), "problems such as unstable living conditions, unemployment, family problems, and health problems make homeless children particularly at-risk of school failure" (Shaver & Dornbusch, 1993, p. 2). Fatigue, caring for younger siblings, lack of any place to do homework, and other factors impinge upon homeless children to be successful in school (Shaver & Dornbusch, 1993).

One major problem confronting homeless children from attending school on a regular basis is transportation. It is difficult to get to school and back without the availability of personal or free public transportation. Another problem has been the inability to gain access to school. In the past, schools have required proof of residency within school boundary lines before a child was allowed to attend. Leases, electric bill statements, or similar documentation have been usually accepted as proof of such residency. Homeless families are unable to furnish this kind of documentation. Therefore, their children have been barred from enrolling and attending (Harrington-Lueker, D., 1989). However, this action to refuse enrollment has been
reduced significantly through the enactment of the 1989 amendment to the Stewart B. McKinney Homeless Assistance Act of 1986 (originally PL 100-77 and amended by PL 101-645), which requires schools to accommodate homeless students.

The McKinney Act also mandates that each state department of education designate a coordinator for the education of homeless children and youth. Among the responsibilities of these coordinators is the task of determining a headcount of homeless children and youth. Because of the inherent difficulties in counting these people and because no clear guidelines exist to standardize how these counts are conducted, the results are, at best, estimates. Some states survey all school districts in their state and accept whatever numbers are returned. Others perform a one-night head count of all known homeless shelters in their state and extrapolate an estimated yearly count. Some states include only those school districts in which Stewart B. McKinney funded programs for homeless students are in existence. Still other states use various combinations of these or other strategies to arrive at their respective homeless headcounts.

State agency personnel charged with determining these numbers readily admit that the resulting counts are at best general estimates and are most probably below the actual numbers. With these caveats in mind, the following is a list of the most recent counts compiled by the five state education agencies and submitted to the U.S. Department of Education in December, 1993.
Rural Students At Risk

<table>
<thead>
<tr>
<th>State</th>
<th>Annual Headcount (1993)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>5,400</td>
</tr>
<tr>
<td>Louisiana</td>
<td>13,000*</td>
</tr>
<tr>
<td>New Mexico</td>
<td>2,836**</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>4,017</td>
</tr>
<tr>
<td>Texas</td>
<td>123,738</td>
</tr>
</tbody>
</table>

This count is a rounded off figure.

** May be revised upward based upon updated data from New Mexico/Mexico border school districts.

Psychosocial Factors

Personal and family circumstances provide insight into the reasons some students experience difficulty in learning, and research shows that personal and family problems significantly affect school achievement. In a meta-analysis of correlational research into risk factors, Frymier & Robertson (1990) found that family instability, family tragedy, and personal pain were significantly associated with the risk of failing in school. Others report similar personal characteristics and experiences to be related to dropping out (e.g., Clark, 1991; Wehlage et al., 1989; Ediger, 1987; Catterall, 1986). Among these factors were limited experience in the mainstream culture, family crises (e.g., divorce, death, parent’s loss of employment), and feelings of alienation or exclusion.

Rural education literature and research also point to some of these variables as significant factors having impact on students in rural areas and in small schools. A survey of rural educators (Bull et al., 1992) suggests that such factors as low self-esteem, depression, suicidal tendencies, unstable family environment or families in crisis, victims of child abuse, and alienation from school are among their most significant concerns about their students. On the other hand, in regard to student alienation and exclusion, Ornstein (1989)
suggests that smaller schools afford students with increased opportunities
to participate in extracurricular activities, especially [sic] the high-status ones such as student government, student newspaper, school band, and athletics. The socio-psychological benefits of recognition and affiliation, and the result in terms of students' self-concept and motivation for achievement, are well documented...” (p. 156)

Gender
Some researchers suggest that males are at higher risk of dropping out than females (e.g., Wehlage et al., 1989; Presseisen, 1988, Hahn & Danzberger, 1987). Others have found no dropout rate differences between males and females (McCaul et al., 1992; Hahn, 1987; McDill, Natriello, and Pallas, 1986; Weidman, 1984). Bryk and Thum (1989) found that females are dropping out “at a somewhat higher rate than expected given their social class and at-riskness behaviors” (p. 18). According to Sherman (1987),

Males currently drop out of school at a higher rate than females. However, this appears to be a reversal of the pattern of earlier years. Up through the late 1970's, the dropout rate for females exceeded the rate for males. A rise in the dropout rate for males up through the early 1980's, coupled with a steady decline in the dropout rate for females, has produced lower dropout rates for females. (p. iv)

If it is true that the dropout rate for females is decreasing, one might speculate that a major reason for this shift is a general increase in school-based programs to encourage pregnant females and teen mothers to stay in school. Many schools have made efforts to accommodate teen mothers and mothers-to-be by providing on-
campus childcare as well as courses and/or training in parenting skills, child development, sex education, etc.

Although the dropout rate differences between males and females appears to be unclear, some of the reasons given by former students for dropping out do differ significantly. These will be discussed in a later section.

Student Behaviors

All of the at-risk variables discussed previously could be characterized as status risk factors. They are elements of students' family or personal backgrounds that can have impact on their school success. Finn (1993) identifies these factors as "demographic and historical characteristics, often used to classify large groups of individuals, that are difficult or impossible to alter" (p. 1).

A second category of risk factors are behavioral risk factors. "Behavioral risk factors are a set of behaviors that, if not manifested by a youngster, reduce the likelihood that successful school outcomes will be realized" (Finn, 1993, p. 1). This set of factors may be described as "participation" or "engagement" in school (Finn, 1993; Roderick, 1993; Office of Research, 1993; Wehlage et al., 1989). In addition to behaviors that reduce risk, there are also behaviors that increase risk. Although these behaviors are not included in Finn's discussion of behavioral risk factors, many such behaviors (i.e., truancy, delinquency, substance abuse, etc.) have been studied and reported in the literature on at-risk students. A discussion of the more prominent of these factors follows.
“Participation” in school

Participation in school or “educational engagement...is indicated by various observable forms of student effort that demonstrate attention to, and involvement in, schoolwork” (Wehlage et al, 1989, p. 177). Finn (1993) proposes four levels of participation that tend to increase success in school.

Level one is necessary from the earliest school years. Participation at this level requires students to be present and attentive, to be prepared, and to be responsive as directions or questions are directed toward them.

Level two builds upon the rudimentary elements of level one. Students exhibiting level two participation are more than passive responders; they take initiative to ask questions, to interact with the teacher and other students on relevant topics, and to go “above and beyond” the basic seatwork or homework assigned. It may also evidence itself by students participating in content-related clubs, extracurricular activities, etc.

Level three is a specific set of initiative-taking behaviors that involves seeking out help when academic difficulties are encountered. These behaviors stem from the student's awareness and nature of the difficulty, a willingness and desire to master the difficulty, and classroom environment that is supportive of seeking help.

According to Finn, level four is not possible in all schools, but may be particularly helpful for at-risk students. This level of engagement advocates for student participation in important aspects of school governance, particularly as this has direct impact on students themselves (academic goals, discipline policies, etc.).

As students become more involved in their schools and engaged in classroom activities, they reduce the risk of dropping out. Conversely,
the more alienated and disengaged they are in school, the greater the risk of dropping out (Catterall, 1986). Disengagement may exhibit itself in daydreaming, expressions of boredom, failure to complete assignments, etc.

Wehlage et al. (1989) emphasize that engagement or participation behaviors do not occur in a vacuum. The school and classroom context plays a large part in developing, nurturing, and encouraging student engagement. Class content and activities must be perceived as challenging and relevant without being too difficult rather than boring and unrelated to student lives and experiences.

**Passive Disengagement:**

**Inattentiveness, Truancy, and Absenteeism**

Finn (1993) identifies paying attention as foundational to successful participation in school. Some at-risk students are inattentive, have short attention spans, and/or are highly distractible (Lehr & Harris, 1988). They are students who daydream, or are otherwise passively disengaged in classroom academic activities. They also have very minimal or no involvement in sports or other extracurricular activities (Bempechat & Ginsburg, 1989).

Other students are passively disengaged through nonattendance. Truancy, chronic tardiness, and absenteeism can lead to the ultimate disengagement, that of dropping out altogether. Students who drop out often have had attendance problems beginning in elementary school (Texas Education Agency, 1989, p. 44). Indeed, absenteeism was found to be the strongest predictor of dropping out in an analysis of the High School and Beyond database (Bryk & Thum, 1989). Roderick (1993) found in her study that only two variables were able to separate high school dropouts from lower achieving students who graduated. One of these variables was a significant drop in
attendance during the middle school years (10+ days annually increase over elementary attendance). Lower achieving students who graduated had an average attendance drop of only 5 days during this same time.

**Active Disengagement:**

*Misbehavior, Delinquency, and Criminal Behavior*

At least 45 percent of all students who drop out have either been suspended or designated as behavior problems by their teachers ... Misbehavior in school can identify a potential dropout. Students who have been suspended, are chronically truant, or have been in conflict with the law, have a higher-than-average chance of dropping out. (Texas Education Agency, 1989, pp. 44, 51)

Eighty-two percent (82%) of America’s prisoners are high school dropouts. (Davis & McCaul, 1991, p. 89)

While some students are quietly and passively disengaged in classroom activities, others are more actively disengaged through various kinds of misbehaviors. Such misbehaviors are associated with students at higher risk and range on a continuum from classroom discipline problems to delinquency and criminal behaviors.

Juvenile delinquency and other problems that youth have with the law enforcement and/or judicial systems appear to be a greater problem in urban areas than in suburban or rural communities (Snyder & Nimick, 1983). Information about juvenile crime (including urban, suburban, and rural) ranging in age from 10 to 17 years are provided by the *Kids Count Data Book* (1993). The reader will note the significant increases over the five year period from 1986
to 1991 for all of the states in the Southwestern Region as well as nationwide.

<table>
<thead>
<tr>
<th>State</th>
<th>Rate (per 100,000)</th>
<th>1991 Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1986</td>
<td>1991</td>
</tr>
<tr>
<td>Arkansas</td>
<td>88</td>
<td>276</td>
</tr>
<tr>
<td>Louisiana</td>
<td>288</td>
<td>493</td>
</tr>
<tr>
<td>New Mexico</td>
<td>299</td>
<td>328</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>201</td>
<td>337</td>
</tr>
<tr>
<td>Texas</td>
<td>195</td>
<td>347</td>
</tr>
<tr>
<td>United States</td>
<td>314</td>
<td>466</td>
</tr>
</tbody>
</table>

The same source provides information about the numbers of violent deaths per state for teenagers between the ages of 15 and 19 years. Although these data incorporate deaths from both accidents and homicide or suicide, the numbers reflect a markedly increasing trend from the mid 1980's to the early 1990's for two of the states in the Southwestern Region. Further, all five states ranked significantly above the national average.

<table>
<thead>
<tr>
<th>State</th>
<th>Rate (per 100,000)</th>
<th>1990 Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1985</td>
<td>1990</td>
</tr>
<tr>
<td>Arkansas</td>
<td>81.3</td>
<td>80.8</td>
</tr>
<tr>
<td>Louisiana</td>
<td>74.9</td>
<td>115.0</td>
</tr>
<tr>
<td>New Mexico</td>
<td>101.7</td>
<td>121.1</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>79.0</td>
<td>83.2</td>
</tr>
<tr>
<td>Texas</td>
<td>80.3</td>
<td>80.2</td>
</tr>
<tr>
<td>United States</td>
<td>62.8</td>
<td>70.9</td>
</tr>
</tbody>
</table>

(Kids Count Data Book, 1993)

Substance Abuse

Students who misuse or abuse drugs, alcohol and/or other controlled substances are at increased risk of academic failure and of
dropping out (Shannon & James, 1992; Trusty & Dooley-Dickey, 1991; Wehlage et al., 1989). Such use appears to be a common outcome of students who are prone to misbehavior. Indeed, early antisocial behavior often leads to substance abuse (Bempechat & Ginsburg, 1989). Teachers and administrators rank substance abuse among their greatest concerns as a major risk factor affecting whether or not a student will graduate from high school (Bull et al., 1992; Klingstedt, 1990).

Drug and alcohol use among teens has been inconsistent over the years, waxing at times and waning at others. The popularity of diverse substances has also varied over time. Regardless of the current substance of choice, substance misuse/abuse appears to be a major concern for those who work with teens. A Wisconsin study of alcohol and drug use among teens suggest that 33 percent of high school sophomores and 43 percent of seniors are problem drinkers and/or drug users (Wisconsin Department of Public Instruction, 1991).

That same Wisconsin study suggests that, although both alcohol and other drugs are available almost universally to those who seek them, teens in rural and small communities (less than 10,000) appear to prefer alcohol, while those in larger communities have higher rates of drug use over alcohol (Wisconsin Department of Public Instruction, 1991). It should, however, be stressed that both alcohol and other drug use are prevalent in both rural and urban settings.

Other research appears to confirm high rates of alcohol consumption/abuse among rural teens (Delgado & Rodriguez-Andrew, 1990; Egginton et al., 1990; Bill, 1989). In a study of rural Tennessee students identified by their school counselors as being at high risk of dropping out, Reddick & Peach (1990) found that 86
percent of the nearly 300 students surveyed consume alcohol at an average rate of four times per week; 73 percent self-report regular use of other drugs.

An additional concern related to substance abuse involves the children born to alcohol or drug users. There is a growing prominence of "crack babies" and children exhibiting characteristics of Fetal Alcohol Syndrome entering the schools across the United States. Because of the influence of these substances on their prenatal development, these children have significant learning deficiencies. Their potential of becoming fully functioning, independent, productive adults in later life are also greatly curtailed as a result of the substance abuse of their mothers while pregnant.

**Low Achievement**

The characteristic most used to identify at-risk students is low achievement. This is typically measured in terms of poor performance in class, as indicated by below average/failing grades and/or poor performance on standardized test scores. "About half of those maintaining D averages or lower typically drop out" (Catterall, 1986, p. 9). Poor academic performance often delays graduation. According to the Center for the Study of Social Policy, only 68.6 percent of all students graduated from high school on time in 1990 (within 4 years of entering high school in the ninth grade). This is down from 71.6 percent in 1985. Further, the 1990 data on students who graduated on time in the five states in the Southwestern region are as follows:
Percent of Students Graduating “On Time”

<table>
<thead>
<tr>
<th>State</th>
<th>1985 Rate</th>
<th>1990 Rate</th>
<th>1990 Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>77.7%</td>
<td>76.4%</td>
<td>19th</td>
</tr>
<tr>
<td>Louisiana</td>
<td>56.7%</td>
<td>58.7%</td>
<td>47th</td>
</tr>
<tr>
<td>New Mexico</td>
<td>73.8%</td>
<td>57.3%</td>
<td>49th</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>72.6%</td>
<td>77.2%</td>
<td>14th</td>
</tr>
<tr>
<td>Texas</td>
<td>65.1%</td>
<td>65.4%</td>
<td>40th</td>
</tr>
</tbody>
</table>

(Kids Count Data Book, 1993)

Although the issue of low/slow-achievement of students is an important factor in determining the at-risk status of students, it is only one factor. A narrow perception of at-risk students as low achieving/low ability may result in under-identifying students who need additional support to complete school successfully (Frymier & Robertson, 1990). Hess and Lauber’s 1985 study of the Chicago schools revealed that nearly one third of all students who dropped out in 1984 were reading at or above grade level (cited in Wehlage et al., 1989). After a study of Texas high school dropouts, the Texas Education Agency (1991) reported that (1) the most frequently used at-risk identification criteria were related to school performance, and (2) a significant proportion of dropouts had not been previously identified as at risk.

Students whose grades and test scores drop precipitously, especially at transition times, have also been found to be at increased risk. A study of high school dropouts in Massachusetts found that all of the dropouts had shown significant drops in grades and test scores during the year following transfer from elementary school to middle school and from middle school to high school (Roderick, 1991).

Comparing student achievement (in terms of standardized test scores) between rural and nonrural areas has also been problematic because of the difficulties in controlling for influences other than
geographic location. Nevertheless, improved student databases and more sophisticated statistical techniques are making such comparisons more feasible. There is evidence to suggest that, in general, rural students are not at higher risk of low achievement than nonrural students (Ferguson, 1991; Welch, 1991).

As noted earlier, educators and policymakers generally include in their at-risk student population those who are at risk of not being successful participants in post-secondary education and/or the job market. In this respect, it appears that overall, in post-secondary pursuits, rural students may be at higher risk of not achieving their potential than their suburban and urban counterparts. Significantly fewer rural than nonrural students attend and finish college (Marion et al. 1992, Sherman, 1992; Hillman, 1991). One reason may be limited access. Hodgkinson (1994) reports that metropolitan counties are three times as likely to contain a local college or university as their rural county counterparts. Further, rural students who do not attend post-secondary school may be at higher risk of not finding satisfactory employment than similar students in nonrural areas. Elliot (1988) reported that rural administrators and teachers identified the non-college-bound student as at greater risk in rural schools because of limited vocational training offerings and employment opportunities.

**Work**

A great deal of political emphasis has been recently placed upon school-to-work transition. Two of the original six National Goals for Education, promoted by the U.S. Department of Education, are concerned with preparing students for productive employment to compete successfully in a modern, global economy. Job Training Partnership Act (JTPA) funds are channeled to schools across the
nation to help develop job-related skills and knowledge. Vocational education and school-business partnerships also emphasize preparing students for the world of work. One of the characteristics of many dropout prevention programs is vocational preparation through on-the-job training (Roderick, 1993; Wehlage et al., 1989; Titone, 1982). However, one of the predominant reasons given for dropping out of school is because of employment (Roderick, 1993).

Sometimes dropping out of school to go to work is an economic necessity (especially for Hispanics); for others it is simply a preference of work over school (Roderick, 1993). Working while attending high school, in and of itself, does not appear to influence students to drop out. Approximately 30 percent of all 16-17 year old teens are employed (National Center for Education Statistics, 1993). However, the amount of time spent at work does have impact on dropout decisions. Barro and Kolstad (1987) found from the High School and Beyond data that students who work more than 10 hours per week are at higher risk of poorer academic performance and of leaving school prior to graduation than those who worked fewer hours per week. Catterall (1986) suggests that increased likelihood of dropping out occurs when students work more than 15-20 hours per week.

**Fertility-Related Behavior**

Davis and McCaul (1991) use the term “fertility-related behavior” (p. 89) to refer to the arena of issues related to potential results of teenage sexual activity (i.e., pregnancy, sexually transmitted diseases, abortions, etc.). Since approximately 40% of the young women who drop out do so because of pregnancy and/or marriage (Earle & Roach, 1989; Sherman, 1987), at least some of these issues are associated with increased risk of dropping out.
No research was found that attempted to study any potential correlation of teenage sexual activity and school performance or success. Rather, research appears to be more focused upon the effects of the various consequences of teenage sexual activity relative to dropping out. For instance, Davis and McCaul (1991) report the following facts about one consequence of teenage sexual activity—pregnancy.

- About 1 million teenagers become pregnant annually in the United States (approximately 11 percent of all young women ages 15 to 19 years).
- At least forty-two percent of teenage pregnancies end in abortion.
- Seventy percent of births to teenage women are out of wedlock.
- Almost half (44 percent) of all teenage mothers drop out of school.

Hodgkinson (1994) adds that rural women are less likely to receive medical attention during the early months of their pregnancies than women in urban and suburban areas.

The *Kids Count Data Book* (1993) reports the following information regarding the percent of births that are to single teenagers in the five state area of the Southwestern region:

<table>
<thead>
<tr>
<th>State</th>
<th>1985 %</th>
<th>1990 %</th>
<th>1990 total # of births</th>
<th>1990 Rank (50 States + Washington, DC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>9.6%</td>
<td>11.8%</td>
<td>4,304</td>
<td>47th</td>
</tr>
<tr>
<td>Louisiana</td>
<td>10.8%</td>
<td>12.9%</td>
<td>9,277</td>
<td>49th</td>
</tr>
<tr>
<td>New Mexico</td>
<td>8.9%</td>
<td>11.4%</td>
<td>3,128</td>
<td>44th</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>6.8%</td>
<td>9.1%</td>
<td>4,341</td>
<td>32nd</td>
</tr>
<tr>
<td>Texas</td>
<td>6.3%</td>
<td>6.3%</td>
<td>19,811</td>
<td>6th</td>
</tr>
<tr>
<td>US Total</td>
<td>7.5%</td>
<td>8.7%</td>
<td>360,645</td>
<td></td>
</tr>
</tbody>
</table>
Major decisions about marriage, abortion, and adoption, strained relationships, and stretched resources all have impact on the personal crisis of teen pregnancy. Another health issue relative to teenage sexual activity concerns sexually transmitted diseases. Davis and Mc Caul (1991) report that an estimated 2.5 million teens are annually exposed to and infected with a sexually transmitted disease of one kind or another. Hodgkinson (1994) reports that “AIDS is fast becoming a rural problem...The situation is critical because of a lack of appropriate resources and social isolation in rural areas” (p. 16). The consequences of these various diseases range from minimal to deadly. Some are easily treated; others remain incurable. Although no direct association of sexually transmitted diseases to increased risk of poor school performance has been studied, the psychological impacts that often accompany the burden of contracting and dealing with such diseases may impair students’ ability to focus adequate attention and energy on their schoolwork. Consequently, grades may suffer, thereby increasing the risk of dropping out. Clearly, additional research is warranted in this area.

School Practices

“Students do not fail simply because they are black or poor or pregnant or from a single-parent home. They fail, in part, because schools are not responsive to the conditions and problems accompanying these personal and SES conditions” (Wehlage et al., 1989, p. 50-51).

Teachers can have a significant impact on how well their students achieve. How they treat their various students may make the difference between decisions to remain in school or to drop out. Many students report teacher conflicts as a significant factor in their
decision to drop out (Roderick, 1993). It is apparent from research that at-risk students are frequently treated differently from their higher achieving peers.

For example, sometimes these [at-risk] students are ...

- seated farther away from the teacher.
- given less direct instruction.
- offered fewer opportunities to learn new material.
- questioned primarily at the knowledge/comprehension levels.
- not prompted when they do not know the answer to a question.
- given less praise.
- rewarded for inappropriate behavior.
- criticized fore frequently.
- given less feedback.
- interrupted more often.
- given less eye contact and other nonverbal communication of attention and responsiveness.

(Lehr & Harris, 1988)

In addition to teacher effects, some school practices and policies (for example, tolerance of truancy) can also increase risk of failure or dropping out. Indeed, some policies, ostensibly designed to maintain high standards in school, have had unintended consequences that have exacerbated the dropout problem. Such policy issues include (1) student retention, (2) the frequent use of out-of-school suspension to control behavior, (3) high rates of course failures, and (4) ability grouping.

**Student Retention**

Retention in at least one grade is a predictor of dropping out (Clark, 1991; Pallas, 1990; Bryk & Thum, 1989). This factor has been a known dropout correlate for quite some time. Schreiber reported in 1963 that out of every ten dropouts, nine had been retained at least one year. Whiteside and Merriman in 1973 found that of all pre-ninth
grade dropouts in their study, all had been retained at least one grade. Indeed, 84 percent had been retained two grades.

Although the practice of retaining students who do not make satisfactory progress appears to be a logical strategy for maintaining academic excellence, a review of the literature led Slavin (1991) to conclude that there is solid research to show that retention does not improve achievement. Roderick (1993), reporting on studies measuring the effects of retained students against matched students who were not retained, concludes that

promoted students perform better than nonpromoted students in the next year on measures of academic achievement, personal adjustment, self-concept, and attitudes toward school....[Further, a] widely quoted finding from the Youth in Transition Study is that one grade retention increases the risk of dropping out by 40 to 50 percent, and more than one by 90 percent. (pp. 104-105)

Additionally, some evidence points toward discrimination in retention practices with disproportionate numbers of males, African-Americans, and Hispanics being retained (Slavin, 1991; Witte and Walsh, 1985).

**Course Failure and Poor Grades**

"Whenever students do more poorly in school, they are more likely to drop out" (Roderick, 1993, p. 90). Poor and failing grades are a strong predictor for dropping out of school (Wehlage et al., 1989).

"Failure and dropping out are intertwined. Three times as many school failures dropout than those who succeed" (Titone, 1982, 4). This dropout correlate is quite understandable and, like retention, has been a known variable for a long time. For instance Schreiber (1963) suggested a threefold course failure rate of dropouts over those
who completed high school. A strong link between those students whose grades drop significantly at major transition times (from elementary to middle school or from middle school to high school) are also at increased risk of dropping out (Roderick, 1993).

In secondary schools, the need to maintain academic excellence often leads to higher numbers of course failures. As with retention practices, requiring students to maintain certain standards in order to receive passing grades appears to be a practice grounded in logic. However, when students perform poorly in or fail courses, the school’s practices (e.g., the curriculum, teaching strategies, etc.) must also be subject to investigation and modification. The challenge is to modify programs to improve at-risk student success without “watering down” course contents.

**Suspension and Expulsion**

High numbers of out-of-school suspensions are also related to higher dropout rates (Wehlage et al., 1989). “Eventual dropouts tend to be...more entangled in school disciplinary proceedings, more frequently suspended, and in more trouble with the law” (Catterall, 1999). Goll et al. (1989), reporting on the results of a large, national, “at-risk” study conducted by Phi Delta Kappa, indicate that suspension and absences are the two leading variables having impact on students being retained. This finding is not surprising since it is virtually impossible to make satisfactory academic progress when one is not present in the classroom. Grade retention, in turn (as stated previously), influences student decisions to drop out.

The issue of potential discrimination is evident with course failures as it is with suspensions and expulsions. In a study of Boston schools, where the dropout rate was 50 percent, Wheelock
(1986) found that one in ten students was suspended each year. Further, African-American and Hispanic students were suspended at higher rates than were their White counterparts.

**Ability grouping**

Ability grouping or “tracking” came into prominence as large numbers of immigrants came to the United States earlier this century and began to enroll their children in the public schools. Its purpose has traditionally been to match student ability with appropriate curricula and teaching methodologies. However, research has shown that this practice has created as many problems as it was designed to solve. Tracking...allocates the most valuable school experiences—including challenging and meaningful curricula, top-quality instruction, and high teacher expectations—to students who already have the greatest academic, economic, and social advantages. On the other hand, those who face the greatest struggles in school—and in life in general—receive a more impoverished curriculum based on lower assessments of their learning capacity. (Wheelock, 1992, p. 6)

Placement in lower ability groups is associated with increased frequency of delinquent behaviors and a higher rate of dropping out (Slavin, 1990). Furthermore, there is evidence to show that expectations are reduced, the curriculum is less rigorous, and less creative instructional techniques are used for students placed in lower ability groups (Pallas, 1990; Slavin, 1990, Wells, 1989). “Being locked into a lower track over several school years and many subjects is [also] likely to restrict opportunity as an adult” (Carnegie Council on Adolescent Development, 1989, p. 50). Another significant criticism of ability grouping surrounds the issue of educational

Heterogeneous grouping is one of the hallmark aspects of many reform efforts, particularly in many middle school restructuring efforts (Carnegie Council on Adolescent Development, 1989). There is also a strong movement nationwide to incorporate disabled, limited English proficient, and other traditionally segregated/isolated students into “mainstream” classrooms full-time, providing appropriate resources in regular education classes rather than through “pull out” or “self-contained” classroom settings.

Multiple-age classes, peer tutoring, peer-mediated conflict resolution, mastery learning, and cooperative learning strategies are some ways that many schools, elementary and secondary, are attempting to address the inadequacies of homogeneous grouping (Doyle, 1986; Carnegie Council on Adolescent Development, 1989; Slavin, 1990; Black, 1993). Research evaluating these and other strategies appears to be generally favorable toward heterogeneous grouping (Black, 1993; Manning & Lucking, 1990). However, some resistance to, criticism of, and conflicting research results relative to heterogeneous grouping approaches involving gifted students may be found. Some advocate, with research support, for grouping gifted students heterogeneously with others in the school (e.g., Johnson & Johnson, 1992); others point to different research supporting homogeneous grouping of the gifted (e.g., Feldhusen & Moon, 1992; Kulik & Kulik, 1987).

**Contextual Variables**

Not only do school programs and practices have a direct impact upon student success, but the school and community contexts in
which these programs and practices occur also affect success rates. "Context" is comprised of numerous factors. Some contextual variables can have a positive impact upon students, while others work against student success.

**Generic Rural School Characteristics**

Rural and small schools traditionally have fewer human and financial resources available than larger school districts. Their per-pupil costs tend to be higher than larger school districts because of the need to provide a wide range of courses and services to fewer students. Many states build additional weighted factors for small school size and/or isolation into their school funding formulas in an effort to help these school systems overcome these obstacles. However, state legislatures and education agencies frequently seek to reduce expenditures and increase courses and services to students through various efforts and pressures to consolidate these rural and small schools with neighboring school districts.

The Goals 2000: Educate America Act of 1994 (U. S. House of Representatives Report 103-446) specifically singles out geographic location as an at-risk student variable. Many rural communities are remote, and many of their isolated rural, small schools have difficulty recruiting and retaining teachers. Qualified teachers are frequently unwilling to teach in these remote areas. Further, these smaller schools have difficulty competing with their urban and suburban counterparts in terms of salaries, fringe benefits, and wider social opportunities (Berkeley & Luldow, 1991).

**School Size**

Research on school size suggests that large schools are associated with lowered student achievement and higher dropout rates.
Rural Students At Risk

(Roderick, 1993; Fowler, 1992; Fowler & Walberg, 1991; Roweton & Bare, 1990; Bryk & Thum, 1989). Pittman & Haughwout (1987) found in their study of 988 high schools that "for every 400-student increase in the high school population, there would be approximately a one percent rise in the dropout rate" (p. 343).

Smaller school size also appears to be positively associated with factors such as school climate, orderly environment, and student-faculty engagement, which do have a direct effect on dropout rates (Jolly & Deloney, 1993). Indeed, "small schools of 300 to 400 students have fewer disruptions, higher achievement levels, more student participation in extracurricular activities, and stronger feelings of satisfaction with school life" (Clark, 1991). Certainly, many rural and small town school districts have an advantage over larger metropolitan centers with respect to school size.

School Norms

In addition to a school's characteristics, organization, and policies that affect the at-risk status of students, researchers have found that certain normative factors adversely affect student performance. Negative expectations, punitiveness, and depersonalization are obvious examples, but such norms are still evident in some schools today (Bryk, & Thum, 1989; Brendtro et al., 1990; Wehlage et al., 1989). "Students with different cultural backgrounds, values, and skills than those generally valued by American schools may be perceived as incapable of performing according to the school's standards" (Boyd, 1992, p. 31).

There are school norms that increase risk; there are also school norms that minimize the potential for certain students to be at risk. Dropout rates tend to be lower in schools where students feel safe, where "school spirit" is high (i.e., where the morale of both students
and staff are high), and where teachers are perceived to be committed (Bryk & Thum, 1989).

In a synthesis of research and other professional literature on contextual factors of schools that facilitate or impede school improvement for at-risk students, Boyd (1992) suggests four school norms which tend to encourage improvement efforts. These are:

- A norm of continuous critical inquiry — Based on an understanding that all organizations have strengths and weaknesses, this norm is typified by an open examination of all aspects of the school in an atmosphere that is positive, constructive, and supportive. There is little reluctance by school personnel to share ideas, even when they appear to be counter to the group as a whole. This norm tends to encourage flexibility, creativity, and experimentation.

- A norm of continuous improvement — This school norm is one typified by action. Ideally it is closely aligned to the previous norm in that it acts upon the assessment of strengths, weaknesses and the ongoing exchange of ideas. It is a norm whereby problems are addressed by providing accurate, relevant, timely information, staff development, and other resources as needed. Communication among staff is open and clear.

- A widely shared vision — Vision, as used in this sense, has two dimensions: (1) a clear “picture” of what a school could be, and (2) an understanding of how to get the school from its current state to its envisioned state. When constituents (administrators, teachers, other school personnel, parents, and students) clearly understand and agree with both, school improvement efforts are more likely to be realized.
A norm of involvement in making decisions — Research suggests that, to increase the probability of success in school improvement efforts, participation in decision-making processes by all who are affected, especially those with the responsibility of carrying out the improvement efforts, is strongly recommended.

**Generic Rural Community Characteristics**

Rural characteristics vary from community to community and region to region. Unlike their urban counterparts, rural communities typically have an economy based primarily upon a single business, commercial, or industrial source. The economic bases found in rural areas are:

- agriculture (29% of the U.S. non-metropolitan counties)
- manufacturing (28%)
- vacation/retirement/resort (11%)
- mining (8%)

The remaining non-metropolitan counties are either federal land or specialized government counties (Jolly & Deloney, 1993). With such specialized economies, rural communities are more vulnerable to economic instabilities and hardships as their local economies cycle through “highs and lows.” Further,

the prevalence in rural counties of extractive industries (mining, agriculture in general, forestry, and fishing), state employment (education, social service, government), peripheral manufacturing and both large corporate and very small, part-time farming seem to have a *negative* effect on socioeconomic conditions over time. (Howley, 1991)
Two other factors appear to be true, broadly, of rural communities. One is that the populations of many of these communities are decreasing due to the continuing migration of rural residents to larger communities and cities (Jolly & Deloney, 1993). The other is that many of these regions are quite remote, far-removed from more metropolitan cities. Many of the services, opportunities, and conveniences afforded to those who live in larger cities and towns are not as readily available to people in isolated rural areas. Health and social services, cultural resources, etc. are limited or totally lacking in these more remote regions. For this reason the Goals 2000: Educate America Act of 1994 specifically identifies geographic location as a leading indicator for identifying students who are at risk.

**Community Norms**

According to an African proverb, it takes a whole “tribe” to educate a child (Brendtro et al., 1990). In addition to generic demographic characteristics, rural communities and their institutions play a significant role in socializing students for readiness to learn and for success in adulthood (Pallas, 1990; Smith et al., 1991; Brendtro et al., 1990, Coleman & Hoffer, 1987). Students who have minimal community support are at higher risk of school failure than students who have such support. “Community,” used in this sense, involves more than just a residential community. Coleman and Hoffer (1987) describe a *functional community* where social interaction, networks, and other resources go beyond the level of the family and school. In a functional community, the adults feel responsible for all children through knowing and caring about others in the community. Coleman (1990) describes this phenomenon as intergenerational closure, where “a child's friends and associates in school are sons
and daughters of friends and associates of the child's parents” (p. 318).

Today, many children are isolated from these kinds of community influences. Where such a variety of influences and resources exists, the ability of children to be successful and even to rise above the socioeconomic class of their parents is enhanced. However, “the decline of such communities in the present [time] leaves parents, whether middle class or lower class, without a strong set of social resources, able only to draw upon whatever individual resources they have” (Coleman & Hoffer, 1987, p. 8). Again, students who have few or none of these social resources to draw upon for support are at higher risk of school failure than students who have more of these resources available.

The size of small towns and rural communities makes the development of such “functional community” resources easier. Most people in these smaller communities know each other. On this foundation of familiarity it is possible to nurture a greater, more mature commitment, concern, care, and support for each other. One example is Cicero, Indiana, the community that eagerly accepted Ryan White (one of the first known students with HIV/AIDS) after his home city (population in excess of 45,000) refused to allow him to attend public school.

Cicero prepared for Ryan by teaching its school staff, students, and community about AIDS. The results were compelling. The boy who had to be taught via a computer at home for fear of casual contact in Kokomo was not shunned but embraced on his first day of school in Cicero. (Sroka, 1990)

However, this kind of interpersonal involvement does not happen naturally. Indeed, it is often easier for factions and cliques, “insider”
versus "outsider" attitudes, and/or "other side of the tracks" mindsets to develop and persist in smaller communities.

What causes some rural areas to be "functional communities" and others not? Social theory provides some insight. According to rural sociologists, students are at higher risk of failure in some rural communities because of the lack of human and social capital (e.g. Smith et al., 1991; DeYoung, 1989). Human capital is the combined skills, knowledge, and talents of a particular group of people. It is increased primarily through schooling and job training (Smith et al., 1991). Social capital, a concept developed by Coleman (1988), is the sum total of "the norms, social networks, and interactions that facilitate educational attainment" (p. 334). Social capital includes those factors that can be identified in both families and communities which facilitate the creation and development of human capital.

Smith et al. (1991) used the High School and Beyond database to study the relationships between school dropout rates in the South and the social capital found in families and communities. They found several family and community social capital factors that significantly influenced dropout rates. These include—

High family social capital variables:
- two parents present
- one sibling
- mother did not work when her child was young
- mother expects her child to go to college.

Low family social capital factors:
- one parent present
- four or more siblings
- mother worked full-time when her child was young
- mother has no expectation for college for her child.

High community social capital indicators:
• child has never changed schools since grade 5 because of a family move
• child participates actively in church activities.

Low community social capital variables:
• child has changed schools 3 or more times since grade 5 due to family moves
• child does not participate in church activities.

Using these significant factors, they were able to construct a model that explains variations in dropout rates among the southern communities in the study. The following table was borrowed from the study to illustrate the relationships among these variables.

Table 2
Predicted Dropout Rates in the South Between Grades 10 and 12 (Spring Semesters)

<table>
<thead>
<tr>
<th>FAMILY SOCIAL CAPITAL</th>
<th>COMMUNITY SOCIAL CAPITAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>High</td>
<td>High</td>
</tr>
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Note. This chart denotes dropout rates for students whose families and communities differ in social capital, controlling for human and financial capital.

Coleman’s (1988) social capital theory and the findings of Smith et al. (1991) help explain the wide variance in dropout rates in different rural communities. Further, the theory suggests that increasing family or community social capital could facilitate educational attainment for disadvantaged students who are at risk.
Without taking away from the impact of Smith's study, one of its limitations is found in the narrow scope of identified factors, particularly in identifying social capital in terms of religious involvement and mobility (or lack thereof). Certainly there are a variety of other community resources that might contribute to increasing educational productivity. School leaders are increasingly pursuing coalitions and collaborative efforts with businesses, health departments, various social agencies and community organizations to expand the resource base available to meet a wide diversity of student needs. Partnerships or other cooperative arrangements are also being developed between schools and other educational entities—daycares, universities, community colleges, vocational/technical schools, intermediate education agencies, state departments of education, and other school districts. Indeed, further research is warranted.

Why Students Drop Out:
Perceptions of Educators, Parents, and Students

The factors discussed above are characteristics associated with students who are at higher risk of dropping out or of being ill-prepared for adult life. They are correlated with students being at greater risk. However, none of these factors should be considered "causes" of dropping out. Indeed, more students characterized by any one category discussed above complete school successfully than those who do not. To better understand the reasons for students dropping out, it is necessary to investigate other data.

Research efforts investigating why students do not graduate from high school have typically taken the form of surveys or interviews where participants are asked for explanations or perceptions. The
High School and Beyond Survey and the National Longitudinal Survey of Youth suggest the major reasons students report for dropping out. These include the following responses:

- They did not like school.
- They had poor grades.
- They either were already working, were offered a job, or decided to seek employment.
- They were getting married.
- They could not get along with teachers or other school personnel.
- They had to help support their families.
- They had other home responsibilities.
- They were pregnant.
- They were expelled or suspended.

(information adapted from Roderick, 1993, p. 27)

According to Roderick (1993), the most common reasons for dropping out, cited by both young men and women, include not liking school and poor school performance. Males appear to be more likely than females to drop out of school because of conflicts with school personnel, expulsion/suspensions, and/or financial/home responsibilities. Females more frequently cite pregnancy (for obvious reasons) and marriage than their male counterparts.

Similar studies targeting the perceptions of rural educators and parents suggest that rural students are placed at risk by certain unique characteristics of the rural environment that may not be captured by broad-based school or demographic data. Although conclusive data are not available, two themes emerged from the literature reviewed: first, virtually all students in an isolated community may be at higher risk of not achieving their potential, and second, low self-esteem and lowered aspirations may be more pervasive among rural students (Bull et al., 1992; Helge, 1990; DeYoung, 1989; Elliot, 1988).
After interviewing teachers and principals in rural districts, Elliot (1988) concluded that students in isolated communities are at increased risk of not achieving their potential because of factors such as limited access to student services and programs, a lack of cultural amenities, lack of cultural diversity, student fears of the unknown, and lowered career aspirations and expectations because of lack of role models or knowledge of options. Low self-esteem among rural students was identified as an issue requiring priority attention in three survey studies of the perceptions of rural educators and parents (Bull et al., 1992; Helge, 1990; Bull et al., 1990).

Policy and Program Implications for Rural At-Risk Students

Summary of the Research

For policy making at all levels of government, it is important to determine whether the at-risk student problem is different for rural schools than for their urban and suburban counterparts. This paper began by introducing five questions as a way to provide insight into the overall picture of rural at-risk students.

1. What do studies of dropout rates suggest about the nature and incidence of at-risk students in rural schools?
2. What does information about rural families, communities, and schools suggest?
3. What do studies about student characteristics and behaviors suggest?
4. What insights may be gleaned from social theory?
5. How do rural educators and parents perceive the at-risk problem?
These questions have been addressed as they were relevant throughout the earlier sections of this synthesis. To summarize, information about rural schools, communities, and families and about rural dropouts (i.e., the increasing poverty rate, the growing number of single female-headed households, the historic lag of educational attainment, etc.) suggests that, overall, the at-risk problem in rural schools is significant and generally ranges between the rates of prevalence of the same factors in central cities and those in suburban areas. Additionally, the rural at-risk problem differs from the metropolitan in at least four ways:

1. Although the average high school dropout rate for rural schools is lower than for central cities and higher for suburban areas, average post-secondary education continuation rates are lower for rural students than for their metropolitan counterparts.

2. Rural students who graduate from high school are at higher risk of not being successful participants in adult life because of the lack of useful vocational training programs for high school students and employment options for high school graduates.

3. Students in relatively isolated communities are placed at higher risk because of various direct effects of the isolation (e.g., fewer human services, fewer cultural amenities, lack of cultural diversity, lack of exposure to career options and opportunities, etc.).

4. Lower student aspirations appear to be more prominent in rural communities than in other settings.

These conclusions about rural at-risk students are necessarily tentative because of the relatively small number of actual studies of rural at-risk conditions. However, they provide a starting place for consideration of strategies and policies aimed at the rural at-risk
population, and they suggest that programs and policies based on the
urban situation may not necessarily be appropriate for rural
districts. Further, the diversity of conditions in rural districts
implies a need for flexibility in policy responses to rural needs.

Policy Implications for Rural At-Risk Students

According to Catterall (1986), several general themes have
emerged with respect to the ways in which schools have approached
their at-risk student problems. They have tended to focus upon one or
more of the following:

- importing/developing programs for specifically targeted at-risk
  student populations or actual dropouts;
- identifying and providing help to at-risk students as early as
  possible;
- addressing academic deficits through remediation;
- providing counseling services to address negative attitudes, to
  establish goals, and to develop positive self-concepts; and
- pursuing school-work linkages.

These have all been met with varying degrees of success (or lack
thereof). The usual approach of providing "pull out" remedial
programs has generally not shown itself to be very successful (Clark,
1991). And remedial kinds of programs, as discussed previously, tend
to lower expectations and achievement. School counseling programs
are far from universal. Further, where they do exist, school
counselors frequently perform other tasks that tend to minimize time
for counseling students. Vocational education programs are often
limited and minimally relevant to the aspirations or occupational
pursuits of students being served.
Recent federal legislative efforts, notably the Goals 2000: Educate America Act of 1994, the Improving America's Schools Act of 1993 (ESEA Reauthorization, not yet passed as of this writing), and the School-to-Work Opportunities Act of 1994, highlight most of these same plans of action as important directions for schools to pursue relative to their at-risk student populations. However, they appear to recognize the deficiencies of many current practices.

There are at least two strong emphases in these legislations that have particular impact on rural schools and communities. One is an emphasis upon working more holistically through collaboration and cooperation with others both inside and outside the school system to improve the quality of education offered to all children in the community. There is a recognition that school improvement cannot simply be mandated from the federal or even the state level. Meaningful change must come from concerted, comprehensive efforts at the "grassroots" level. These local efforts must also enlist the cooperation and involvement of local constituents who have a stake in improving the situation as it currently exists.

A second emphasis is the incorporation of various telecommunications technologies into school curricula and routines. Advancements in computer technologies and in other distance learning capabilities provide the potential to reduce the effects of geographic isolation which confronts many rural schools and communities.

One other piece of legislation is significant for rural school policy. The National and Community Service Trust Act of 1993 emphasizes the importance of people being involved in the lives of others in their community. This act encourages schools to integrate community service as part of the learning process. In addition to helping to improve the plight of various local individuals in need, these efforts
strengthen the ties of students to the community, as well as strengthen community commitment to their schools. The act also encourages others to be involved in their communities, including their local schools.

At least seven policy issues emerge out of what is known about rural at-risk students, about school responses to their at-risk students, and about recent legislative efforts that will have significant impact upon schools as they continue to address the needs of their at-risk students.

**Individualizing to Meet Student Needs**

Much has been presented in this synthesis about the nature and characteristics of at-risk students. However, as has been stated previously, a reliance on these characteristics to identify specific at-risk students is flawed. Many students who possess or display one or more of the cited at-risk characteristics will achieve adequately in school without any additional intervention. Similarly, other students, who exhibit none of these traits or behaviors, will end up dropping out of school. It is, therefore, important for each school district and school campus to assess the unique characteristics of the students whom they serve to determine who is, indeed, at increased risk of not succeeding academically. There are no generic at-risk children, and there can be no generic at-risk programs (Wehlage et al., 1989). Identifying groups of students who have a high probability of being at risk is important for planning and discussion but not necessarily for meeting the needs of individual students. Too much dependence on identification by group will lead to stereotyping some children and overlooking other children who may be in need of supportive services. Rural and small school districts are often better able (because of their smaller size) to look at students individually to assess the adequacy of
their program to meet individual educational needs. However, they may need to be more creative in meeting these needs because of limited financial, human, and other resources.

**Developing a Comprehensive Plan**

A plethora of services for traditional at-risk students abounds in schools across the nation. There are early childhood programs, counseling programs, bilingual education, special education, vocational education, compensatory education, remedial education, and drug education. There are alternative schools with programs for pregnant students, delinquent students, former dropouts, etc. The list could go on. However, almost never do these programs interact with each other or with general education program personnel about the students each serves. Nor has the planning for and implementation of these programs developed from a comprehensive point of view.

Based upon a local assessment of which students are at risk, rural school districts should develop a master plan for reducing risk, and a strong emphasis should begin with preschool services. (It is much easier and produces much greater impact to catch problems early than to remediate embedded deficiencies later.) This does not mean that an “at-risk” label ought to be attached to young children. The negative effects, both potential and actual, of the practice of labeling students has been actively addressed (Hrncir & Eisenhart, 1991; Cuban, 1989). The comprehensive plan also has to be approached systematically so that at-risk students at all grade levels are addressed. Finally, this plan should incorporate an evaluation component to assess effectiveness in achieving program goals of facilitating learning and decreasing dropout rates.
Just as it is important to place particular focus on early childhood education to make sure that all children come to school ready to learn, it is also important for schools to prepare students for post-high school life. This means academically rigorous programs for college-bound high school students (see the “Investing in Technological/Telecommunications Linkages” section below for potential ways for rural schools to provide these alternatives). It also means that additional focus should be placed upon preparing the non-college-bound for realistic employment. To do so, schools must move beyond the traditional vocational agriculture, vocational home economics, shop, and business education options that define many vocational education programs in the nation’s high schools. Tech Prep or other school-to-work opportunities (where there is an honest, realistic assessment of future regional employment options and in-depth collaborations with area businesses) provide students with foundational skills and work-related experiences to find high quality employment following graduation.

**Building Collaborative Partnerships**

The at-risk problem must be approached through the concerted efforts of schools, families, and the community. Since all three institutions contribute to a child’s education, best results will be obtained from collaboration. Indeed, where possible, it may also be advantageous for people in smaller, more isolated communities with few resources to pursue collaborative relationships with groups beyond the community borders (Korsching, Borich, & Stewart, 1992). Neighboring school districts, intermediate education agencies/service centers, regional education laboratories, nearby universities, colleges, vocational schools, etc. may provide additional educational resources. Regional mental health centers, hospitals,
and various other regional service agencies may be other resources to pursue, as are the services of community volunteers. Schools should take an assertive role in bringing together families, community institutions, agencies, and other groups and individuals to respond to the needs of at-risk children. Of the many partnerships that school leaders and teachers may pursue, meaningful associations with parents are among the most important. When parents create a positive learning environment at home, have high expectations for their child's performance, and encourage positive attitudes toward education, student achievement is significantly improved (Clark, 1991; Henderson, 1987). However, there is often a significant gap between many schools' espoused commitment to parental involvement and their actual efforts to incorporate parents in significant, meaningful ways into the ongoing education of their children.

School and community leaders should be aware that collaborative efforts are not easy. However, when the potential benefits of such collaborations are significantly greater than the prospects of achieving desired results without working with others, these kinds of interdistrict and intra-/inter-community linkages should be seriously considered. In some cases, to establish a foundation for partnerships and other collaborative arrangements, it may be necessary to develop communication and team-building skills through staff development. Teachers are skilled at working with children. However, some teachers find working with adults not to be as comfortable. In a similar way, parents, agency personnel, and others in the community may not possess adequate skills necessary to facilitate the success of efforts to develop, combine and coordinate services. Consequently, targeted training in basic communication and teamwork skills may be an important starting point.
Encouraging Connections with Students

One of the most important strategies for helping students who are at risk may be to assist them to achieve a sense of belonging in school (i.e., school membership). The importance of this sense of belonging to a supportive school community requires social bonding with other students, teachers, and/or school staff (Wehlage et al., 1989). Closely related to school membership is the concept of engagement in school. Engagement is the active involvement in at least one academic, social, or extracurricular feature of the school. Miller et al. (1988) found that engagement in even one of these aspects of the school significantly increased the likelihood of staying in school. However, there is agreement that, at some point, academic engagement must take place for school achievement to improve (Wehlage et al., 1989; Miller et al., 1988).

Improving school membership and engagement for at-risk students may require staff development to heighten teacher sensitivity. Several authors addressed student perceptions of teachers as uncaring, especially in the more academic content areas (e.g., Grannis, 1991; Frymier & Robertson, 1990; Elliot, 1988; Brendtro et al., 1990). These kinds of perceived characteristics, whether accurate or not, often contribute to decisions to drop out of school.

Because of the potential for being more "personal," small schools are more likely to achieve the kind of school climate that facilitates school membership and engagement (e.g., Fowler, 1992; Fowler & Walberg, 1991; Bryk & Thum, 1989; Pittman & Haughwout, 1987; Friedkin & Nechochea; 1987). Alternative schools and programs for at-risk students have generally attempted to create a kind of "small school" environment in their efforts to provide more responsive teachers and greater flexibility in instructional methods (Wehlage,
1989). However, small size alone does not guarantee a more personal, caring environment. Developing the kind of school culture that promotes student membership and engagement takes work and commitment from all school staff.

**Building Community-School Linkages and Commitment**

Especially for rural communities to survive and thrive, it is important for schools to be strong and effective. Many of these communities have had a steady decline in their populations as young adults move away and new families do not move in. Community survival rests largely on the decisions of each generation to make their homes where they were raised. Consequently, in addition to formalized organizational collaborations, more personal linkages between the school and community members are also important. A network of adults who work to see that all children succeed in school and in life develops a truly “functional” community, and establishing such a network is one of the best ways of reducing a school’s at-risk potential.

Actually, these community-school linkages should go both ways, with community members serving students in various ways and visa versa. Community residents could serve as “foster grandparents,” “Big Brothers/Big Sisters,” tutors, coaches, mentors, sponsors, school aides, etc. to lend support personally to students and schools. However, students can also be involved in their communities through service learning projects and activities. When integrated into academic curricula, service learning projects give meaning, dignity, and worth to learning. They also strengthen the ties that these children have to the community.

A specific example of students being more actively involved in their communities is a school-based program called REAL (Rural
Entrepreneurship through Action Learning Enterprises. Through this program "with help from teachers, students research community needs and then design and establish small businesses to fill economic niches" (Watkins, & Wilkes, 1993, p. 48). This program not only enables students to see how they can use their talents and energies to build a business that actually meets a community need, but also facilitates greater self-esteem and fosters higher aspirations as students begin to see the potential of becoming entrepreneurial employers rather than simply employees. Further, students are potentially able to envision staying in their community (or returning after college).

Building Challenging and Relevant Programs

In many cases, students who are classified "at risk" are placed in programs or groups which might be described as "lower track." They are subjected to simplified curricula at slowed down rates. Expectations of both their teachers and themselves are lower as they proceed through repetitious drill and practice exercises.

There are a growing number of educators who espouse that students who are below grade level in achievement need accelerated programs—not slowed down, simplified programs (Guthrie, 1989; Levin, 1988; Slavin, 1987). Strategies such as explicit goals for closing the achievement gap, gaining parental commitment through written contracts, and increasing quality instructional time, particularly in individualized or small group settings, are part of the accelerated school concept. Providing students opportunities to learn from each other (through cooperative learning strategies, peer tutoring, etc.) also enhances student learning while freeing teachers to work more intensively with those students of greatest need. Further, as teachers adapt learning objectives to the learning styles and preferences of
their students, greater learning occurs. Skilled use of computers and software (beyond lower-level “drill and practice”) as learning aids are other ways to facilitate significant, accelerated, academic gains in students typically classified as at-risk.

Investing in Technological/Telecommunications Linkages

The combination of small community size and isolation place many rural areas at a distinct disadvantage relative to their urban and suburban counterparts. Per pupil costs to educate rural children are significantly higher; social, health, and other services are frequently limited; and economic development is both limited and difficult to achieve. One way that some rural school districts are dealing with limited resources is to share teachers by linking electronically with neighboring districts through two-way interactive audio/video telecommunications. Some are also linking with nearby community colleges or universities to offer dual enrollment or advanced placement courses to high school students. (This has helped to ease college-bound students into college by allowing them to experience college electronically and to gain college credit simultaneously with high school graduation credit.) Others are linking via satellite to resources that provide expanded course offerings. Also, the advent of access to the Internet is providing students and teachers with wide-ranging resources and connections worldwide via computers. And these are just a few of the technological options becoming more readily available to schools.

Computers, software, satellite uplink-downlink capabilities, fiber optic cable, Instructional Television Fixed Service (microwave transmission and reception) capacity, classrooms with full motion, audio/video telecommunications abilities, etc. are expensive. And beyond the initial purchase of hardware and systems, there are
maintenance and expansion-of-capability costs. Therefore, rural schools should carefully consider many things before pursuing the acquisition and implementation of any of these various technologies into their educational systems. However, implementing certain new technologies (e.g., advanced/enhanced telephone, computer, and video telecommunications) can be one way to bring additional and enriched resources into rural classrooms. These technologies can also decrease the impact of isolation on students and others who live in rural areas or small communities (Sullivan, Jolly, Foster, & Tompkins, 1994; U.S. Congress, 1991; Barker, 1990).

**Concluding Remarks**

There is currently a great deal of focus upon the Goals 2000: Educate America Act of 1994. This act proposes eight national goals for public school education to attain by the year 2000. These goals state that by the year 2000:

- all children in America will start school ready to learn;
- the high school graduation rate will increase to at least 90 percent;
- all students will leave grades 4, 8, and 12 having demonstrated competency over challenging subject matter including English, mathematics, science, foreign language, civics and government, economics, art, history, and geography, and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our Nation's modern economy;
- the Nation's teaching force will have access to programs for the continued improvement of their professional skills and the
opportunity to acquire the knowledge and skills needed to teach to an increasingly diverse student population with a variety of educational, social, and health needs;

- United States students will be first in the world in science and mathematics achievement;
- every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship;
- every school in the United States will be free of drugs, violence, and the unauthorized presence of firearms and alcohol and will offer a disciplined environment conducive to learning;
- every school will promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children.

(U. S. House of Representatives Report 103-446, pp. 7-10)

This act also potentially identifies a great majority of children who attend school in rural communities as at-risk in that it defines an at-risk student as one "who, because of limited English proficiency, poverty, race, geographic location, or economic disadvantage, faces a greater risk of low educational achievement or reduced academic expectations" (U. S. House of Representatives Report 103-446, pp. 99-100). This phrase, "geographic location," suggests that students who live in remote, isolated areas, where many resources are limited or absent altogether, are at least as much at risk of not achieving these educational goals as those who live in inner-city urban areas.

If America is, indeed, to become a leading nation in terms of the educational achievement of its children and youth, attention must be paid not only to those who live in metropolitan areas, but also to those who live in rural areas and small towns. With a great deal of creativity and hard work, these areas can become just as effective as
those cities which have significant problems, but also manifold resources.
Appendix

Defining Geographic Terms

The National Center for Education Statistics (NCES), a division of the U.S. Department of Education's Office of Educational Research and Improvement (OERI), uses U.S. Census terms to categorize communities into seven classifications:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Central City</td>
<td>Central city of a metropolitan area [a metropolitan area generally is any county in the U.S. that has a city or urbanized area of at least 50,000 and a total county population of at least 100,000] with (a) a population of more than 400,000 or more, or (b) a population density of 6,000 or more persons per square mile</td>
</tr>
<tr>
<td>Mid-size Central City</td>
<td>Central city of a Standard Metropolitan Statistical Area (SMSA) with (a) less than 400,000 population or (b) density of less than 6,000 per square mile</td>
</tr>
<tr>
<td>Urban Fringe of a Large City</td>
<td>Place within the SMSA of a large central city that is defined as urban by the Census</td>
</tr>
<tr>
<td>Urban Fringe of a Mid-size City</td>
<td>Place within the SMSA of a mid-size central city that is defined as urban by the Census</td>
</tr>
<tr>
<td>Large Town</td>
<td>Town not within an SMSA but with a population of 25,000 or more</td>
</tr>
<tr>
<td>Small Town</td>
<td>Town not within an SMSA with a population between 2,500 and 25,000</td>
</tr>
<tr>
<td>Rural</td>
<td>Place with a population under 2,500 and not within an SMSA (Vaughan, Boethel, Hoover, Lawson &amp; Torres, 1989, pp. 20-21)</td>
</tr>
</tbody>
</table>
These categorical definitions are useful in developing a common framework for understanding and discussing communities of varying sizes and locations, but they have not been universally adopted by educational researchers. Some have similar, though differing definitions; others use the term “rural” to mean everything except urban. Indeed, such terms as “rural communities” and “small, rural school districts” are often discussed without any clear, precise definition. The complexities involved in defining and using such terms have been discussed (Hillman, 1991; Stephens, 1991; Hobbs, 1989; Sher, 1988). Because of these complexities, this synthesis uses the terms “rural,” “urban,” “suburban,” “inner city,” “small town,” etc. broadly, accepting them as they are used in the reviewed literature.
References


Boyd, V. (1993). *School context: Bridge or barrier for change.* Austin, TX: Southwest Educational Development Laboratory.


“Southwest Educational Development Laboratory exists to challenge, support, and enrich educational systems in providing quality education for all learners, enabling them to lead productive and fulfilling lives in an ever-changing, increasingly inter-connected world... SEDL’s particular emphasis is on ensuring educational equity for children and youth who live in poverty; who are Hispanic, Black or other minorities; or who have physical or mental exceptionalities.”

—SEDL Mission Statement