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ABSTRACT

Sixth, seventh, and eighth grade students (N=301) from a rural county in Tennessee (Iris County is a pseudonym) completed a Rural School Success Inventory (RSSI) and the Learning Styles Inventory (LSI). The study explored differences between low Socioeconomic Status (SES) students and middle/high SES students. The RSSI provided information about numerous student and family characteristics including educational levels of parents, employment characteristics of parents, family activities, family economics, physical characteristics of homes, substance abuse, previous school experiences, school success, educational aspirations, friendships, personal aspirations, and religious practices. Cumulative frequencies and percentages were grouped by SES as determined by free and reduced lunch status. A chi-square comparison was made on each item of the RSSI. There were no differences between the learning styles of the poor SES and middle/high SES students. Some conclusions of the study were: (1) poor students have parents with less education, blue collar jobs, less financial security, and lower levels of concern about school performance; (2) their older siblings are often school dropouts; (3) the family functions less as a unit in leisure activities and is less active in religious activities; and (4) poor students make lower grades and are more likely to be retained in grade. Before intervention strategies are addressed, further research is needed to determine which of those differences are directly related to achievement and school success and which have few or no educational implications. (KS)

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MIDDLE GRADE STUDENTS OF IRIS COUNTY:
A DESCRIPTIVE STUDY FROM SOUTHERN APPALACHIA

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MIDDLE GRADE STUDENTS OF IRIS COUNTY:
A DESCRIPTIVE STUDY FROM SOUTHERN APPALACHIA

What is known about the middle grades students of rural Southern Appalachia? Conventional wisdom would tell one that they are at-risk educationally because of low socioeconomic levels and high dropout rates in the region. Any study of the characteristics of "tweenagers" or "transescents" would further lead one to conclude that these middle grades students are experiencing a transition period in their physical, social, and emotional maturity during which they will make many decisions which will effect their educational and career future. But what are these youth really like? What is going on in their personal lives--at home, in the community, at school--which is related to their success in school? If socioeconomic status is a primary determinant of school success, then why do some poor rural students succeed in school? Specifically, what factors in the family, home, community, and peer group are related to school success?

I. Socioeconomic Status and Educational Achievement*

Numerous studies have found that high socioeconomic students score higher on standardized achievement tests than do low socioeconomic students (Teddlie, 1984, 1987; Gibbons, 1986; Lark, 1984; Schmitt, 1988). Few studies have attempted to look within socioeconomic groups to determine those attributes which account for school achievement. Allen and Tadlock (1986) found that students from two-parent lower income homes performed better than students from one-parent low income homes.

For children attending rural schools the probability of being from a high risk household are quite high. It was during the War on Poverty years that the U.S. Department of Agriculture first identified persistent poverty counties--counties that were repeatedly ranked in the lowest per capita income quartile since 1950 (Bender et al., 1985). These 242 persistent poverty counties were predominantly rural, and most were located in the South (a fact

*Major portions of section were drawn from Raftery, Susan R., "Rural Schools: The Community Context," a paper prepared for the 1990 Conditions of Rural Education Report, U.S. Department of Education, forthcoming.

that persists even today). In these counties there is a disproportional number of people with disadvantages affecting their ability to participate in the labor force with resultant low levels of income. Rural poverty, even in these early days of the War on Poverty and still today, remains isolated, dispersed, and to many Americans, invisible.

In 1985, the rural poverty rate was 18.3 percent compared with 12.7 percent urban rate (Brown and Deavers, 1988). Even when in-kind transfers are included with other income, 13.2 percent of rural people failed to have enough income to meet minimal basic needs--the official definition of poverty (Brown and Deavers, 1988). Unlike the urban poor, the rural poor are far more attached to the labor market. Over two-thirds of the rural poor families had at least one worker in 1985, and over one-fourth at least two workers.

The composition of poverty has also changed during the past ten years. Brown and Deavers (1988) point out:

In rural areas, poverty among older persons fell from 23 percent to 18 percent, and the rate for youths rose from 17 to 24 percent. The diminished economic position of children is related to changes in households and family structure, and especially the increase in families maintained by women with no spouse present...58 percent of rural children living in female-headed families are poor compared with 18 percent of children living in other family types. The child rate has increased for all residence and family types since 1973.

This rise in child poverty has had a direct influence on the schools in rural America. The "cultural baggage" which is produced as the result of living in poverty conditions can be manifested in a number of ways by rural youth. A recent study conducted by the National Rural Development Institute has found rural children are more at risk than urban or suburban children. Larger percentages of rural children are considered by school officials to be substance abusers, to suffer from depression, to be sexually active, to be involved in crime, and to be victims of child abuse (Helge, 1990). The social cost of poverty will almost certainly be inordinate.

Educational performance is influenced more by socioeconomic and other characteristics of students than by what occurs within the school (Hobbs, 1990). Accumulated research, Hobbs further argues, is consistent in identifying student socioeconomic status (especially when aggregated for a

school, community or region) as the most powerful predictor of student performance. Research conducted throughout the country since the 1970s has found that the percentage of the nation's children living below the poverty line has continued to increase while the standardized test scores have continued to decline. Such research strongly supports that this is not a coincidence (Hobbs, 1990). Edmonds (1982) defines the effectiveness of schools based on their performance in bringing poor children to minimal levels of mastery in basic skills. For rural areas this is particularly critical because of the presence of a disproportionately large segment of the nation's poor and economically marginal (Lichter and Constanzo, 1987). If one is to understand the context of rural schools, one must go beyond aggregate data of income levels of student families and cumulative achievement data by schools or districts. One must rather focus on the characteristics of individual students (which have been shaped by the culture in which they live) and the relationships between those characteristics and individual student achievement on standardized tests and other measures of school success.

II. Setting of the Study

Iris County is a rural, Southern Appalachian county in Tennessee. It is a real county but "Iris" is a pseudonym used to protect the confidentiality of the students and educators who are participating in this study. The county was selected because it is rural, poor, has limited population mobility, educates more than 90% of the middle grades students in the county in one school, has a high dropout rate, and has educational leaders willing to look for new solutions to their problems. In this report, Iris City is used to identify the county seat of Iris County which is the only incorporated town in the county. Hub City is used to identify the larger population center in adjoining Hub County where many of the Iris residents work and shop. The middle grades were selected as the focus of the study because the students have the reading skills necessary to complete survey instruments, are knowledgeable of their family circumstances, and on the whole are not yet old enough to drop out of school.

Data Collection. The research team, the middle school principal, six members of the middle school faculty, and a group of teachers in another school system serving similar students participated in the development of the Rural School Success Inventory (RSSI). The RSSI consisted of 288 multiple choice items which could be answered on computer scan sheets. No suggested items were eliminated unless the middle school teachers felt they would be offensive or mis-leading. The RSSI was administered in the spring of 1990 by one teacher in each grade over a period of several weeks to limit intrusion in instructional time. Students were instructed to leave blank any item which they felt was too personal. Each student scan sheet was coded by the teachers with a five digit student number. The first digit indicated lunch status, the second the grade level, and the last three a unique number.

The majority of the students who completed the RSSI had completed the Dunn and Dunn Learning Style Inventory (LSI) in the spring of 1989. The LSI was administered in the spring of 1990 to those students who had not taken it in 1989. The individual LSI analysis sheets were coded with the same five digit student numbers as the RSSI scan sheets. For the purpose of this report, twelve of the learning style dimensions were coded onto scan sheets for analysis.

The student characteristics presented in this report are based on RSSI and LSI student responses by 88 sixth grade students, 106 seventh grade students, and 107 eighth grade students. Of the students responding, 37.9% had qualified for free lunch, 14.0% had qualified for reduced price lunch, and 48.2% had qualified for neither. Those students who had qualified either for free or reduced priced lunch were designated as low SES while the remainder were designated as middle/high SES.

In addition to the data reported in this study, individual student records have been accessed and student attendance, teachers, teacher assigned grades, promotion/retention record, and achievement test results are currently being coded for analysis.

Data Analysis. Cumulative frequencies and percentages were computed to develop a profile of the modal characteristics of the middle grades students in Iris County. The data were then grouped by socioeconomic status as determined by lunch status. A chi-square comparison with a 0.05 level of significance was made on each item of the RSSI.

III. Family Characteristics

A variety of family characteristics was sought through the RSSI. Those of particular interest included educational and employment characteristics of the parents, family/school interactions, pre-school experiences, family routines, family activities, and tensions within the family.

Parent characteristics. Table 1 presents the educational levels of the parents, total and by SES category. The educational levels of low SES fathers and mothers were significantly lower with larger percentages having less than a high school education. Most parents (84.2%) were not enrolled in any type of class.

Table 1

Educational Levels of Parents

Educational Level	Father All	Father LowSES	Father MH SES	Mother All	Mother LowSES	Mother MH SES
Less than high school	14.6%	26.62%	2.13%	14.0%	20.81%	6.29%
Some high school	25.6%	33.09%	18.44%	25.9%	34.90%	16.78%
High school graduate	42.3%	32.37%	52.48%	40.3%	31.54%	49.65%
Some college	9.3%	5.04%	13.48%	8.9%	7.38%	10.49%
College graduate	8.2%	2.88%	13.48%	10.9%	5.37%	16.78%

The majority of the fathers (69.9%) and mothers (51.5%) worked full-time outside the home. A variety of employment characteristics are presented on Table 2. Approximately half of the fathers and mothers were farm/factory workers while the other half were non-factory hourly or salaried workers. The fathers worked in Iris County (41.4%) or in adjoining Hub County (19.4%) while the majority (66.0%) of the mothers worked in Iris County. Both parents were more likely to work days (approximately 80%). Job changes were infrequent with 65.3% of the fathers and 60.9% of the mothers having not

changed jobs in the last three years. Low SES fathers were more frequently unemployed and more likely to be employed part-time while 84.03% of the middle/high SES fathers were employed full-time. Comparatively, middle/high SES fathers were more frequently employed in Hub County while low SES fathers were employed in Iris County.

Table 2
Employment Characteristics of Parents

Characteristics	Father Total	Father LowSES	Father MH SES	Mother Total	Mother LowSES	Mother MH SES
Unemployed	17.3%	24.31%	9.72%	31.1%	43.24%	18.75%
Part-time	12.8%	19.44%	6.25%	17.1%	20.27%	13.89%
Full-time	69.9%	56.25%	84.03%	51.5%	36.49%	66.67%
Farm/home/factory	38.4%	41.37%	35.33%	52.1%	61.29%	43.38%
Non-factory hourly	34.8%	37.93%	32.33%	29.9%	29.03%	30.88%
Salaried professional	26.8%	20.59%	32.33%	18.0%	9.68%	25.74%
Iris County	41.4%	43.55%	39.86%	66.0%	*	*
Hub County	19.4%	12.90%	25.36%	16.2%	*	*

*Missing data indicate lack of significance at 0.05 level

The largest percentage of the students was the youngest in the family (39.9%) while 25.7% were oldest and 16.6% were only children. The students' mothers were 20-25 years old (43.2%) when the students were born. Only 4.2% were born to mothers age 16 or younger and 3.9% born to mothers 36 or older. Middle/high SES students were more likely to be only children or the youngest child in the family. All twins were in low SES homes. The mothers of middle/high SES students were older when the students were born and were more likely to have been born in Iris County. The fathers and mothers were either born in Iris County (48.2% and 46.07%) or were from out of state (29.6% and 27.86%).

A third of the students (35.1%) did not know if their parents voted. According to the students 40.9% of the parents voted in all elections while 8.4% never voted.

The students were generally positive about their parents with 64.6% describing them as "just right" while 19.2% felt they were "too strict". Almost half (44.5%) were never spanked at home while 42.1% were spanked a few times a year. More than a third (36.5%) had friends visit them at their home at least once a week while a 22.3% had friends visit almost every day.

Family/school interactions. When the students earned good grades, their parents praised them (85.1%), rewarded them with money or gifts (65.9%), or increased their privileges (63.9%). When their grades were bad, parents gave extra help with homework (61.4%) and limited privileges (58.1%); 42.6% scolded or punished; and 25.9% talked to the teacher. Middle/high SES parents more often scolded students or limited their privileges as the result of bad grades. When the students were "really bad" their parents grounded them (40.8%), forbade use of television, telephone or Nintendo (22.3%); or spanked them (15.8%).

Half of the students (52.9%) had never skipped school while 34.0% had done so with their parents' knowledge. They had missed school during the 1989-90 school year for sickness (81.6%), to go hunting or fishing (16.2%), to travel with their family (32.1%), or to hang out with friends (9.2%). The parents who had been to school had attended Open House or parent-teacher conferences (23.6%), the Christmas Concert or other program (26.3%), or night classes (10.5%). Some students had relatives employed by the county Board of Education: 33.0% teaching, 15.8% employed as cook or custodian, 12.1% driving a school bus, and 6.4% employed in the central office.

When the students had trouble with homework their parent(s) (64.9%) helped them. One-third (39.4%) did homework with their siblings. The site of homework was the student's room (27.5%), at the kitchen table (25.4%), or in front of television (22.7%). Half (54.1%) of the students sometimes read to their parents as a part of homework while 30.4% never did this. Reading books other than textbooks was not done by 39.7% of the students. Middle/high SES students read more books. A fourth (25.7%) read part of one book each week while 20.9% read one book per week in addition to textbooks.

Of those students who had older siblings, 59% had siblings still in school, 21.88% had siblings who had dropped out of school, 42.4% had siblings who had graduated from high school, 17.6% had siblings who had gone to college, and 3.0% had one or more siblings who had graduated from college. Low SES students were more likely to have older siblings who were no longer in school or who had dropped out of school. Siblings of middle/high SES students were more often reported to have attended college.

Pre-school experiences. Before starting to school, the students had stayed at home with their parent(s) (45.5%), at grandparent's or other relative's house (29.0%), at sitter's house (10.7%), or in day care or nursery school (10.7%). More than half (60.7%) of the parents sometimes read to the students when they were younger while 29.2% read to them almost every day; 9.2% of the students said their parents never read to them.

Low SES students had been more likely to stay at home with a parent before beginning school while more middle/high SES students had stayed at a sitter's house. A greater percentage of low SES students had attended Head Start.

Family routines. Most days half of the students ate their evening meal at the table with their family while the other half ate in front of the television. The entire family eating supper together was common (56.6%). One-fourth (25.4%) of the students skipped breakfast, 20.0% ate breakfast at school, 44.7% ate breakfast at home, and 9.8% had a fast-food biscuit breakfast. Breakfast beverages included milk (35.7%), juice (26.5%), or a caffeine beverage (19.7%). The students left home for school between 6:30 and 7:00 (29.31%), between 7:00 and 7:30 (22.76%), or before 6:30 (21.03%). Most (92%) were home by 4:00 in the afternoon. Middle/high SES students were more likely to either skip breakfast or eat a hot home-cooked breakfast while the low SES students ate breakfast at school.

On school days, students watched 2-4 hours of television (61.46%), spent less than an hour on the telephone (28.45%) or did not use the telephone (22.15%), and then went to bed after 9:00 pm (85.00%).

The majority of the students took a bath or shower daily (71.0%), brushed their teeth at least once a day (80.6%) and put on clean underwear every day (86.4%). Half or more had a physical examination by a doctor within the last year (53.0%) and had been to the dentist within the last year (67.8%). Most (67.6%) did not wear braces, but 21.2% were scheduled to get them. The middle/high SES students were less likely to have had a physical examination within the past year but more likely to either be wearing braces or be scheduled for them. Half had only been in a hospital when they were born (46.4%) while 29.5% had been hospitalized with broken bones or some other accident and 13.6% had been hospitalized with a serious illness such as an appendectomy.

Family activities. In the year preceeding the survey, the students had gone with their families to visit relatives outside of their home county (77.7%) or gone on vacation together (51.0%). Few (16.9%) had gone with a parent on a business trip. Almost half of the students (43.5%) had traveled within the southern United States with 17.4% having been to Washington D. C. When asked about travel outside the southeast, 39.2% left the item blank. Of those who responded, 55.4% had been in the northern United States, 16.3% in the western United States, 17.9% to Canada or Mexico, and 4.9% to Europe.

The students had engaged in a variety of activities with their families. In the year preceeding the survey, families had gone swimming or water skiing (68.4%), taken a pleasure trip (61.3%), gone fishing (58.9%), or participated in sporting events (45.3%). In the preceeding six months, 64.5% of the families had gone to Nashville. During the last summer 53.1% had picniced. In the three preceeding months, 41.6% had gone walking or hiking, 25.3% had gone to a concert, 17.2% had attended a dance, and 9.5% had had a family outing to a museum. In the preceeding month, families had watched television (94.6%), eaten out (79.7%), played board games (47.7%), played cards (47.3%), gone to a movie (27.4%), ridden bikes (26.7%), or attended a race (6.4%). Family social gatherings (33.4%) were more frequent than church socials (14.8%) or community social events (14.5%). Half (53.1%) of the families attended the local

harvest festival. Table 3 presents those family activities on which the responses of low SES students differed significantly from those of middle/high SES students.

Table 3
Family Activities

Activity	Total Families	Low SES Families	Middle/high Families
Family vacation trip	51.0%	42.67%	59.31%
Visited relatives outside IrisCo.	77.7%	72.00%	83.45%
Traveled to Washington D.C.	17.4%	11.03%	23.74%
Pleasure trip in last year	61.3%	50.99%	71.72%
Gone to Nashville in last six mo.	64.5%	56.00%	73.79%
Attended a dance	17.2%	22.0%	11.72%

Entertainment/leisure activities. More than half (59.5%) of the students had a television in their room. During the week before the survey, students had watched a news program (84.1%), prime time comedy or suspense (78.0%), cartoons (73.3%), music video (71.6%), sports (62.7%), rented video tapes (61.8%), or family-owned video tapes (59.5%). Their favorite music was rock (60.8%), heavy metal (25.1%), or country (13.1%).

Most students had access to printed materials and media in their home. The print materials available, in descending frequency, were a Bible (95.3%), hardback books (92.2%), paperback books (91.5%), dictionary (90.2%), encyclopedia (75.7%), magazines (76.7%), a local newspaper (69.3%), comic books (53.7%), a national newspaper such as Wall Street Journal or USA Today (20.9%), or a Nashville newspaper (18%). In the month preceeding the survey, 56.3% of the students had borrowed books from the school library while 15.9% had borrowed books from the public library in Hub City. Media in the homes included AM/FM radio (98.3%), television (97.3%), video cassette player/recorder (90.8%), telephone (89.5%), citizens band radio (40.0%), cable television (39.9%), short wave radio (39.0%), computer (28.4%), video camera (23.6%), or 22.4% (satellite dish). Table 4 presents the print, non-print,

and communications resources in the homes on which the responses of low SES students were significantly different than those of middle/high SES students.

Table 4

Print, Media and Communications Resources

Resource	Total Responses	Low SES Responses	MH SES Responses
Magazines	76.7%	65.33%	88.28%
Dictionary	90.2%	86.00%	94.44%
Encyclopedia	75.7%	64.67%	87.59%
Telephone	89.5%	81.33%	97.93%
Video Cassette Recorder	90.8%	86.58%	95.17%

Organized outside activities were a relatively small part of the students' lives. The most frequent activity was music lessons reported by 17.3% of the students. Other activities included gymnastics and/or dance lessons (12.5%), 4-H projects (10.8%), and Scouting (8.5%). Two-thirds (66.4%) did not attend any camps the previous summer while 10.2% attend a sports camp, 10.5% attended 4-H camp, 6.1% attended Scout camp, and 6.8% attended church camp.

The most frequent individual leisure activities included watching television (98%), listening to music (94.6%), shooting baskets or playing catch (88.9%), talking with friends on the telephone (87.1%), playing video games (76.4%), bike riding (76.0%), working on a collection (63.5%), reading for pleasure (63.2%), fishing (62.7%), experimenting with appearance (60.1%), or playing board games (57.4%). Artistic expression included 60.5% who painted, drew or colored at home, 32.4% who played musical instruments, and 24.7% who did needlework.

Although most of the students were too young to legally drive, 74.6% of the students had driven a car or truck in the month preceding the survey. They had also driven 3 or 4 wheelers (38.7%), motorcycles (33.2%), and tractors (22.6%). They never (38.1%) or occasionally (26.8%) rode with a friend who drove.

Table 5 presents the percentages of total students and students of low SES and middle/high SES reporting those entertainment/leisure activities on which the differences between the two groups were statistically significant. On each of the activities except playing with train set, the middle/high SES students engaged in the activity with greater frequency than did the low SES students.

Table 5
Entertainment/Leisure Activities

Activity	All Families	Low SES Families	Middle/high Families
Played video games at home	76.4%	68.00%	85.52%
Played with train set	3.0%	5.33%	0.69%
Rode bike, cycle, or ATV	76.0%	69.33%	82.76%
Experimented with appearance	60.1%	54.05%	66.67%
Talked on telephone with friends	87.1%	79.87%	94.48%

Student chores at home included housework (84.4%), cooking (69.6%), care of non-farm animals (63.1%), or outside non-farm chores such as cutting wood or doing lawn work (57.1%). Part-time jobs away from home included outside non-farm work (32.8%), babysitting and/or housework (31.1%), farm work (13.9%), or part-time jobs in public business (10.1%). Middle/high SES students more frequently helped clean house or cared for non-farm animals.

Most families had one or more dogs (81.1%) used primarily as pets (65.1%), watch dogs (18.2%) or for hunting (13.6%). Most (83.8%) of the families had hunting guns, 63.7% had a pistol, and 57.6% had an air rifle.

Family economics. The students lived in a house (64.5%) or house trailer (17.6%) owned by their family. Renters lived in houses (11.5%) or trailers (4.1%). Little (2.4%) apartment residence was reported. The homes were heated with gas or electric heat (45.4%) or with a wood stove or furnace (40.0%) and cooled with window (44.6%) or central (32.8%) air conditioners. One-fifth (20.3%) used electric fans only. The homes had one (53.2%) or two (27.3%) bathrooms. The number of persons residing in the home was 3-4 (65.74%) or 5-6 (26.30%). Only 4.7% reported having no indoor bathroom. Approximately

half (46.4%) lived in the country but not on a farm while 22.7% were farm residents. Residence in Iris City was reported by 30.6%. The homes were located 3-10 miles from school (38.75%), 10-15 miles from school (27.34%), or 1-3 miles from school (19.38%). Only 5.88% of the students lived more than 15 miles from school. The families had moved never (40.9%) to five or more times (11.1%) in descending percentages.

Table 6 compares the physical characteristics of homes of the students. Only those items on which a statistically significant difference was found are presented.

Table 6
Physical Characteristics of Homes

Characteristics	Total Responses	Low SES Responses	MH SES Responses
Apartment	2.4%	3.97%	0.69%
Trailer, Rented or Owned	21.7%	26.60%	13.19%
House, Rented	11.5%	18.54%	4.17%
House, Owned	64.5%	47.68%	81.94%
Bathrooms, None	4.7%	7.95%	1.38%
Bathrooms, One	53.2%	60.93%	44.83%
Bathrooms, Two or More	34.4%	23.84%	45.51%
Heat, Wood stove or furnace	40.0%	49.33%	29.86%
Heat, Fireplace with insert	2.4%	0.67	4.17%
Heat, Gas or electric	45.4%	37.33%	54.17%
Cooling, None	2.4%	4.00%	0.67%
Cooling, Window Air Conditioner	44.6%	*	*
Cooling, Central Air Conditioner	32.8%	27.33%	38.62%
Cooling, Fans	20.3%	23.33%	16.55%

*Missing data indicate lack of significance between groups

The parents paid for groceries by cash (59.1%), check (29.7%), or food stamps and cash (9.8%). Government commodity foods were received by 10.1%.

Half of the students (49.8%) had a bank account in their own name. The students received \$5-10 of allowance (38.19%) or no allowance (34.38%). The majority purchased their clothes in the discount department stores (57.0%) or

mall (29.7%) in Hub City. Only 5.5% purchased most of their clothes in Iris County. For school, 64.8% wore jeans and t-shirts while 28.6% prided themselves on the latest fashions. The students spent most money on their appearance (39.2%) and entertainment (32.0%). Sports (12.7%), transportation (9.6%) and food (6.5%) were other reported expenses. Middle/high SES students more often had a bank account in their name, bought their clothes at Hub City Mall, and wore the latest fashions.

The families of the students were rural but not farm families. One-fifth (21.4%) raised tobacco for income while 17.0% raised livestock for income and 14.6% raised other farm crops for income. Local food sources included home frozen or canned food (74.0%), wild meat (68.6%), fish (59.7%), fruit and/or nut trees (55.1%), and vegetable gardens (48.3%).

Substance Use. Substance use was in the minority with 41.8% of the fathers and 33.3% of the mothers smoking, 14.7% of the fathers chewing tobacco, 34.2% of the fathers and 12.1% of the mothers drinking beer, and 20.1% of the fathers and 13.6% of the mothers drinking liquor or wine. Mothers of low SES students were more likely to smoke tobacco or dip snuff.

Family tensions. In the month preceding the survey, the students' parents had argued about money (27.9%), about the student (25.6%), or about alcohol or drugs (7.9%). Since starting to school 38.2% of the students had experienced a parent being unemployed, 37.2% had experienced a severe illness of a home member, 24.3% had experienced a divorce in their home, and 19.2 percent had experienced a death in their home. Criminal allegations had resulted in 16.6% having a home member arrested, 10.7% having a home member in jail, and 2.8% having a home member in prison. A few students (3.1%) had an immediate family member in jail or prison at the time of the survey. In the low SES homes there was greater incidence of unemployment, arrests, and serving time in jail.

IV. Student/School Characteristics

Although the students all attended the same middle school, there were differences in the primary schools attended, pre-school experiences,

enrollment in special classes, levels of success, and involvement in extra-curricular activities.

Previous school experiences. Before starting to school half (52.6%) of the students had some experience in Head Start and an additional 4.1 percent had some nursery school experience. Most students (60.6%) had attended Iris Middle School and one elementary school. In most cases (78.8%) the elementary school was Iris Primary. Only 3.4% of the students had attended any of the small K-8 schools in Iris County while 4.8% had attended an out-of-state school. During the year of the survey 32.6% of the students were in Chapter I reading, 24.7% were in Chapter I mathematics, 16.2% were in a special education resource class, 1.0% were in speech/hearing class, and 1.4% were in a program for gifted students. Fewer than 10% had been on home-bound.

Table 7 presents the percentages of low SES and middle/high SES in the special programs serving students of low achievement, low or high ability, or with handicapping conditions. There is a significant difference for each program except Speech and Hearing and Gifted.

Table 7
Students Served by Special Programs

Program	Total Responses	Low SES Responses	MH SES Responses
Head Start	52.6%	64.43%	40.14%
Repeat of Grade, Once	22.9%	31.33%	14.08%
Repeat of Grade, Twice or More	5.4%	8.00%	2.82%
Chapter I, Reading	32.6%	39.60%	25.35%
Chapter I, Mathematics	24.7%	32.21%	16.90%
Special Education Resource	16.2%	22.82%	9.15%
Speech and Hearing Class	1.0%	*	*
Gifted Program	1.4%	*	*

*No significant difference between groups

School success/failure. The students reported that their average grades were A (18.8%), B (36.3%), C (33.9%), D (7.5%), or F (3.4%). Most (71.6%) had never repeated a grade but 5.4% had repeated two or more grades. In the month

preceding the survey, the students had gotten in trouble at school for talking in class (46.2%), not doing their school work (31.5%), using foul language (6.8%), fighting (6.5%), or smoking (5.1%). Half (53.4%) of the students had not been paddled at school during the year of the survey while 20.2% had been paddled four or more times. Most (92.8%) had never been suspended while 1.0% had been suspended four or more times. Middle/high SES students reported earning higher average grades in school than did low SES students. Lower SES students had repeated more grades.

Extra-curricular activities. Although a cluster analysis will be necessary to determine the total percentage of the school population involved in extra-curricular activities, the involvement of individual students in extra-curricular activities was determined through the RSSI. In descending order, the student involvement in activities was 26.0% football and/or basketball, 23.3% Beta Club, 15.1% Folklore Club, 8.9% in the band, 8.6% office/library workers, 6.2% cheerleading, 5.1% Video Club, 4.8% Computer Club, 4.5% Track and Field Club, and 3.4% Art Club. (The school limits the number of clubs in which an individual student may participate.) The only club for which there was a significant difference in participation rate was the Beta Club, in which a greater percentage of the middle/high SES students were members.

Educational aspirations. When asked how far they planned to go in school, the students responded that they planned to graduate from college (50.5%), graduate from high school (31.6%), or attend some other post-secondary program (15.8%). Only 2.1% indicated a plan to drop out of school before graduation.

V. Peer Relationships

The middle school years are a time of increasing peer pressure as the role of the parent/family in developing and reinforcing values gives way to increasing dominance of the peer group.

Friendships. Most students (76.3%) claimed a classmate as their best friend, but 8.6% of the students did not have a best friend. On weekends they

socialized with school friends (37.2%), or with siblings and cousins (33.3%). Several (17.0%) did not socialize with other youth on the weekends.

Dating. Half (58.2%) of the students did not date while 21.6% sometimes dated in groups. Weekly dating was reported by 10.2% of the students; 38.4% were going with someone special. Of those dating a special person, the relationships had existed a few weeks (36.2%), a few months (28.43%), or a few days (24.9%). Relationships of a year or more were infrequent. The students believed a steady couple should kiss (40.6%), go all the way with birth control (30.2%), or engage in heavy petting (22.8%).

VI. Individual Characteristics

Some RSSI items were highly personal. These asked about use of alcohol, tobacco and drugs, personal problems, personal aspirations, and religious practices.

Substance use. In the month preceding the survey 23.6% of the students had smoked cigarettes, 19.5% had drunk beer, 16.8% had drunk wine coolers, 16.1% had drunk liquor, 11.6% had drunk wine, 10.6% had chewed tobacco, 5.5% had smoked marijuana, and 2.7% had used other drugs. A higher percentage of low SES students drank beer.

Personal problems. When the students had problems they discussed them with their friends (63.4%), with a family member other than their parent (45.9%), with their parents (44.3%), or with a teacher (11.3%). Students were more often lonely at home (16.6%) than at school (9.2%). Suicide had been considered by 21.9% of the students.

Personal aspirations. The students indicated they planned to go to college (48.1%), go somewhere else to get a job (20.7%), go to military or vocational school (19.3%), or get a job in Iris or Hub County (11.9%). About half (54.7%) planned to wait several years to marry and have children while 17.6% wished to remain single. The 23.6% who wanted to marry soon were evenly divided between having children soon and waiting several years to have children. Twice as many middle/high SES student planned to attend college; half as many planned to get a job immediately after high school. More

middle/high SES students planned to wait several years to marry and have children while more low SES students planned to remain single.

Religious practices. There was a bimodal distribution on church attendance with 27.5% never attending and 27.8% attending two or three times a week. In the two weeks preceding the survey 45.2% had been to Sunday morning church services, 38.5% had attended Sunday school, 27.9% had attended mid-week Bible study, and 16.9% had participated in a church related youth group activity. Middle/high SES students attended Sunday school, Sunday morning church services, and mid-week Bible study more often than low SES students.

VII. Learning Styles

While the learning styles derived from the Dunn and Dunn Learning Styles Inventory have little value in isolation from other student characteristics, the data are presented for completeness. Table 8 presents the percentages of students scoring at each level on twelve selected learning styles dimensions. There were no significant differences between low SES students and middle/high SES students on any of the learning style dimensions included in the study.

Table 8
Learning Styles Dimensions

Characteristic	Low	Low Average	Average	High Average	High
Motivation	12.3%	5.4%	53.8%	13.4%	15.2%
Persistence	11.2%	6.5%	42.6%	28.2%	11.6%
Responsibility	10.5%	14.1%	45.8%	15.5%	14.1%
Structure	7.6%	6.1%	39.7%	24.5%	22.0%
Learning Alone/ Peer Oriented	9.0%	13.4%	53.4%	10.8%	13.4%
Authority Figures	8.3%	16.6%	41.9%	20.9%	12.3%
Auditory	20.9%	6.5%	39.4%	21.3%	11.9%
Visual	20.2%	11.2%	51.3%	9.4%	7.9%
Tactile	12.6%	10.1%	53.4%	12.3%	11.6%
Kinesthetic	14.1%	10.1%	49.1%	16.2%	10.5%
Parent Motivated	6.9%	7.9%	41.5%	43.7%	0.0%
Teacher Motivated	8.7%	6.5%	54.2%	16.2%	14.4%

The results indicate that the students are average in motivation, persistence, responsibility, tactile aptitude, kinesthetic aptitude, and teacher motivation. They are above average in structure, need for authority figures present, and parent motivation. The lowest areas are auditory aptitude and visual aptitude.

VIII. Conclusions

Based on the data, it was concluded that the rural middle grades students of Iris County are neither farm residents or culturally isolated. While approximately half of the students may be considered poor, their lifestyle is not markedly different from that of their more affluent classmates. However, there are several areas in which their homes, families, activities, and school experiences differ. Poor students have parents with less education, blue collar jobs, less financial security, and lower levels of concern about school performance. Their older siblings are often school dropouts. They have traveled less and have less access to printed materials and telephone in the home. The family functions less as a unit in leisure activities and is less active in religious activities. The homes are more modest and there is often more tension in the home. These students are already more often labeled as low achievers as evidenced by their level of enrollment in special education resource and Chapter I remedial programs. They make lower grades and are more likely to be retained in grade. The poor students appear to have less realistic life goals.

Further research is needed to determine which of those differences are directly related to differences in school success and achievement and which of those differences have few or no educational implications. Once differences related to achievement outcomes are determined, then intervention strategies can be addressed. Intervention may be within the purview of the school in some instances, but other areas will require policy development at the state or federal level and will involve agencies which are not primarily educational.

References

- Bender, L. (ed), Green, B., Hady, T., Kuenn, J., Nelson, M., Perkinson, L., Ross, P. (1985). The Diverse Social and Economic Structure of Nonmetropolitan America. Rural Development Research Report No. 49, Washington, D.C.: Department of Agriculture, Economic Research Service.
- Brown, D., and Deavers, K. (1987). Rural Change and the Rural Economic Policy Agenda for the 1980's. In Rural Economic Development In the 1980's: Preparing for the Future (Chapter 1). Washington, D.C.: Department of Agriculture, Economic Research Service, Agriculture and Rural Economy Division.
- Edmonds, R. (1982). Programs of school improvement: an overview. Educational Leadership, 40, 4-11.
- Gibbons, M. (1986). School Improvement Program, Fourth Year Final Evaluation Report. Columbus, OH: Columbus Public Schools. (ERIC Document Reproduction Service No. ED 2838484)
- Helge, D. (1990). National Study Regarding Rural, Suburban, and Urban At-Risk Students. Bellingham, Washington: National Rural Development Institute.
- Hobbs, D. (1990). School based community development: Making connections for improved learning. In proceedings S. Raftery and D. Mulkey (ed), The Role of Rural Schools in Community Development. Mississippi State, MS: Southern Rural Development Center. (Forthcoming)
- Lark, H. & Others (1984). An Investigation of the Variation in Student Scores for Effective and Ineffective Schools. Harrisbury, PA: Pennsylvania State Dept. of Education. (ERIC Document Reproduction Service No. ED243963)
- Litcher, D., and Constanzo, J. (1987). Nonmetropolitan underdevelopment and labor force composition. Rural Sociology 52 (3).
- Schiller, B. R. (1989). The Economics of Poverty and Discrimination (5th ed.) Englewood Cliffs, NJ: Prentice Hall.
- Schmitt, D. R. (1988). Evaluation of Six School Effectiveness Programs. Paper presented at the Annual Meeting of the Mid-South Educational Research Association, Louisville, KY. (ERIC Document Reproduction Service No. ED303503)
- Teddle, C. & others (1984). Louisiana School Effectiveness Study: Phase Two, 1982-84. Executive Summary and Conclusions. Triangle Park, NC: Southeastern Regional Council for Educational Improvement. (ERIC Document Reproduction Service No. ED 250361)