# Project STAR and Beyond: 

## Database User's Guide

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The authors welcome comments or suggestions regarding this User's Guide. Please send comments to JayneZaharias@HEROS-Inc.org

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## CHAPTER 1

## PROJECT STAR BACKGROUND AND DATA COLLECTION

## Overview of the Data Files

The STAR-and-Beyond database contains raw student- and school-level data from a longitudinal experiment conducted in Tennessee beginning in 1985. The experiment lasted for four years, with a single cohort of students progressing from kindergarten through third grade. Achievement tests and non-achievement measures were administered annually. The experiment ended in 1989. However, student achievement data continued to be collected through high school, ${ }^{1}$ and ancillary studies resulted in other non-achievement variables being added to the data set.

The primary student-level data file contains information on 11,601 students who participated in the experimental phase for at least one year. Information for each of grades K-3 includes:

- Demographic variables;
- School and class identifiers;
- School and teacher information;
- Experimental condition ("class type");
- Norm-referenced and criterion-referenced achievement test scores;
- Motivation and self-concept scores.

Additional data, added to the records of some or all students, include:

- Achievement test scores for the students when they were in grades $4-8$, obtained from the Tennessee State Department of Education;
- Teachers' ratings of student behavior in grades 4 and 8;
- Students' self-reports of school engagement and peer effects in grade 8;
- Course taking in mathematics, science, and foreign language in high school, obtained from student transcripts;
- SAT/ACT participation and scores, obtained from ACT, Inc. and from Educational Testing Service;
- Graduation/dropout information, obtained from high school transcripts and the Tennessee State Department of Education.

In some cases, data were not available for all students and are indicated as "missing," for example, scores not available from State of Tennessee records. In other cases, some students did not participate in particular ancillary studies (e.g., the studies of

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school engagement). Flags in the data file indicate participation/non-participation at each stage of data collection.

Other data files include:
(1) Student data on 1780 students in grades $1-3$ in 21 comparison schools, matched with STAR schools but not participating in the experiment;
(2) A school-level file with additional information about each of the 80 STAR schools;'
(3) A school-level file with additional information about each high school attended by STAR students.

The data are provided in SPSS "SAV" format (using Version 11.5). ${ }^{3}$ Flags in the data indicate the presence or absence of particular sets of variables (e.g., whether the student attended a STAR school in each grade from K-3; whether high school transcript data were available for the student). These flags help users select subsets of data for secondary analysis.

Chapter 2 of the User's Guide gives further information about the data files and the variables. Detailed information is given about particular variables, organized by the type of measure (e.g., achievement tests; course-taking). Researchers using the data are advised to examine this section. Chapters 3 and 4 of the User's Guide give distributions of the variables in the student and school files, respectively. A topical reference list is given at the end of the Guide.

## Contact Us

- Data files are available at www.heros-inc.org/data.htm
- For additional information, contact STARDATA@heros-inc.org
- Phone for HEROS, Inc: (615)-449-7904


## Planning and Execution of Project STAR ${ }^{4}$

In May of 1985, the Tennessee Legislature passed House Bill (HB) 544, authorizing and funding a policy study to determine the effects of class size on student achievement in the primary grades. The legislation directed that three questions be addressed:
(1) What are the effects of a reduced class size on the achievement (normed and criterion tests) and development (self-concept, attendance, etc.) of students in public elementary school grades ( $\mathrm{K}-3$ )?

[^1](2) Is there a cumulative effects of being in a small class over an extended time (4 years) as compared with a one-year effect for students in a small class for one year?
(3) Does a training program designed to help teachers take maximum advantage of small classes, or to use aides effectively, improve student performance as compared with teachers who have no special preparation for their altered conditions?

To design and conduct the study, the Tennessee State Department of Education formed a consortium of researchers from the Department, the State Board of Education, the State Superintendents' Association, and representatives from four Tennessee universities. ${ }^{5}$ Responsibility for direct contact with schools was delegated to the university representatives. The study was named Project STAR, an acronym for Student/Teacher Achievement Ratio.

The Consortium reviewed prior class size research and used this as the basis for decisions about its own study: The study would begin in the earliest grades, where small classes would be most likely to show positive effects; the small classes would have no fewer than 13 students and no more than 17 students; it would allow disaggregation of the data by school location (urbanicity), student race/ethnicity, and socioeconomic status (SES). Most importantly, the study would use an experimental design in which causal connections between the experimental variable (class size) and student outcomes could be discerned.

The State paid the costs associated with the study, including the salaries of extra teachers required to reduce class sizes, and of project teacher aides. The total cost of the four-year project, plus data analysis and reporting in the fifth year, was approximately $\$ 12$ million.

## Selection of Schools

All Tennessee school systems were invited to participate in STAR and were sent guidelines for participation. Although costs associated with STAR would be borne by the State, local school systems would provide any additional classroom space needed. There were to be no major changes in school processes, organization, or policies other than those required by the class size experiment. Schools were to plan to participate in the project for four years, beginning with kindergarten in 1985-1986. All participating teachers had to be certified for the grade level they were teaching. Schools had to agree to the random assignment of teachers and students to different class conditions (i.e., class sizes).

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The legislation specified that the project should include "inner city, suburban, urban, and rural schools." The consortium specified that inner-city and suburban schools were all located in metropolitan areas (Nashville, Memphis, Knoxville, or Chattanooga). Schools with more than half of their students on free or reduced price lunch were defined as inner-city. Schools in the outlying areas of metropolitan cities were classified as suburban. Schools in non-metropolitan areas were classified as urban or rural depending on location. Urban schools were located in towns of over 2,500 persons, serving primarily an urban population according to the definition provided by the U.S. Census. All other schools were classified as rural. Rural schools were typically located several miles away from metropolitan areas and were situated in counties with large amounts of farmland.

Initially, 180 schools in about 50 districts expressed an interest in participating. Only about 100 schools had enough kindergarten students to be eligible to participate. A minimum of 57 students was necessary, providing enough students for one class of each of three conditions (with 13, 22, and 22 students, respectively). Taking into account the requirements to include four types of schools (inner city, suburban, urban, and rural), and to span the State of Tennessee geographically, 79 schools in 42 districts were selected to participate. ${ }^{6}$ This included 17 inner-city schools and 16 suburban schools from metropolitan areas, plus 8 urban and 38 rural schools.

The number of schools was reduced slightly in subsequent years. In the 1986-1987 school year, one kindergarten-only school merged with another elementary school that joined STAR for grades 1-3. Three schools withdrew from the Project at the end of kindergarten, leaving 76 schools in grade 1. One additional school withdrew at the end of grade 1, leaving 75 schools in grades 2 and 3 (the third and fourth year of the Project). The four schools withdrew for several reasons: two could not maintain the randomization required by STAR, and several found the paperwork and additional testing too onerous.

As a result of the purposeful sampling process, Project STAR schools were slightly larger than the statewide average. Prior to STAR, the average mathematics and reading scores of STAR schools were slightly lower than the statewide averages. Other comparisons show that STAR schools and districts were similar to the statewide averages on most measures (see Word et al., 1990, Section I.G).

Comparison schools. Twenty-one non-project schools comprise a comparison sample beginning when STAR students were in first grade (1986-1987). The comparison schools, selected from 13 of the same districts as STAR schools, had similar characteristics to STAR schools in their respective districts. They did not participate in the class-size reduction program but administered the same achievement tests in the spring of 1987, 1988, and 1989, when STAR students were in grades 1, 2, and 3 , respectively. One comparison school did not provide achievement test scores in 1989, leaving 20 schools for that year. The STAR schools and comparison schools

[^3]were compared on measures of academic achievement gathered in grade 2 the year preceding the experiment, and were shown to be very similar (see Word et al., 1990, Table I-4).

Unlike STAR students, students in the comparison schools were assigned to classes in the usual manner, which is often non-random. The two methods of assigning students to classes were compared in Zaharias, Achilles, and Cain (1995).

## Study Design and Implementation

The STAR experiment involved one cohort of students followed for four years students entering kindergarten in 1985 (or those who began public schooling in first grade in 1986). Within each school, all students entering kindergarten were assigned at random to one of three experimental conditions: a small class ( S ) with $13-17$ students, a regular class ( R ) with 22-25 students, or a regular class with a full-time teacher aide (RA) and 22-25 students. Students entering the school by November 1 of the school year, as determined by teachers' records, were considered to part of the STAR cohort for that year. A 'distribution plan' was followed to determine the number of classes of each type in schools with more than three kindergarten classes (see Word et al., 1990, Table II-1).

In total, 128 small classes, 101 regular classes, and 99 regular-aide classes were formed in kindergarten. Since kindergarten was not legally mandated in Tennessee at the time, a substantial number of students joined the STAR sample when they entered first grade. They, too, were assigned at random to the three experimental conditions at the time of entry (as long as they entered the school by November 1 of 1986).

The randomization was conducted by members of the STAR Consortium and monitored at the school level by graduate students from the four universities. The samples were compared on gender, race, and free-lunch composition to look for any systematic bias that may have arisen; none was found. Teachers were assigned at random to the classes. Other than class size and teacher aides, no other experimental changes were implemented; the intent of the Project was to maintain normal school policies and practices so that the effects of reduced class sizes could be shown clearly.

Once assigned to a class type, students were to remain in the assigned class type as long as they were in the project. Students with the longest duration participated from kindergarten (1985-1986) through grade 3 (1988-1989). In all, 26.6\% of the 11,601 STAR students participated for four consecutive years. Of the remainder, 22.0\% entered in first grade and participated through third grade.

Additional factors that affected the study design. Beyond the randomization of students into class types, three operational factors affected the design of the STAR experiment. First, at the end of the kindergarten year, the STAR consortium decided on one design modification. There had been no significant differences in the achievement of regular ( $R$ ) classes and teacher-aide ( $R A$ ) classes in the kindergarten year. Thus,

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approximately one-half of R students were randomly assigned to RA classes for the second year (and beyond), and approximately one-half of RA students were assigned at random to R classes for the second year (and beyond). No students were purposely reassigned into or out of small (S) classes. No further modifications of this sort were made in subsequent years.

Second, during the summer between grade 1 and grade 2 (summer 1987), a three-day training course was given to 54 second-grade teachers (out of 340) from 15 STAR schools. The training was the same for all 54 teachers, since the assignment to class types had not yet been made. No special attempt was made to prepare teachers to take advantage of a small-class setting. Comparisons of grade-2 achievement scores showed no significant difference between the classes of trained and untrained teachers (see Word et al., 1990, Chapter VI). ${ }^{7}$ Teachers who participated in the training are flagged in the student data file.

Third, ordinary student mobility over the years affected the composition and size of STAR classes. Students moving into STAR schools from non-STAR schools during the four-year experiment were assigned at random to one of the class types, with the constraint that small classes could not exceed 17 students.

Students moving from one STAR school to another were assigned to the same type of class as they had participated in previously (space allowing). Students moving out of a STAR school diminished the class enrollment, occasionally causing the regular classes to become as small as some of the small classes. The extent of this "class size drift" is documented in Achilles (1999); its potential impact on statistical results is discussed in Boyd-Zaharias et al. (1995) and Hedges, Nye, and Konstantopolous (2000). Table 1 shows the actual class enrollments in each year of the Project.

As a result of mobility, some students participated in STAR for one, two, or three years according to different patterns. For example, some may have participated in STAR for two consecutive years (e.g., grades 1 and 2) or for two nonconsecutive years (e.g., grades 1 and 3); others may have participated for two consecutive years but beginning at different ages (e.g., grades K and 1, or grades 2 and 3 ). The primary patterns that characterize most STAR students were summarized into a pair of codes in the student data file (Class type composite CMPSTYPE; Duration composite CMPSDURA). These were used in one study to analyze patterns of small-class participation (Finn, Gerber, Achilles, \& Boyd-Zaharias, 2001).

## End-of-year Measures

Measures of academic performance and self-concept/motivation were administered in the spring of each year of STAR (1986-1989). Both norm-referenced and criterion-

[^4]Table 1. Distribution of STAR Classes by Grade (K-3) by Designation S (Small), R (Regular), and RA (Regular and Aide)

|  |  |  | clas |  |  | clas |  |  | clas |  |  | cla |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | S | R | RA | S | R | RA | S | R | RA | S | R | RA |
| B |  | 8 |  |  | 2 |  |  | 3 |  |  | $\begin{aligned} & 2 \\ & 2 \end{aligned}$ |  |  |
| A | $\begin{aligned} & 13 \\ & 14 \\ & 15 \\ & 16 \\ & 17 \end{aligned}$ | $\begin{aligned} & 19 \\ & 22 \\ & 23 \\ & 31 \\ & 24 \end{aligned}$ | $\begin{aligned} & 4 \\ & 4 \end{aligned}$ | $1$ | $\begin{aligned} & \hline 14 \\ & 18 \\ & 31 \\ & 16 \\ & 33 \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ |  | $\begin{aligned} & \hline 16 \\ & 27 \\ & 32 \\ & 29 \\ & 19 \end{aligned}$ | 1 |  | $\begin{aligned} & \hline 15 \\ & 17 \\ & 31 \\ & 31 \\ & 27 \end{aligned}$ |  | 1 |
| B | $\begin{aligned} & 18 \\ & 19 \\ & 20 \\ & 21 \end{aligned}$ |  | $\begin{gathered} \hline 1 \\ 7 \\ 6 \\ 14 \end{gathered}$ | $\begin{gathered} \hline 2 \\ 6 \\ 6 \\ 12 \end{gathered}$ | $\begin{aligned} & 6 \\ & 3 \\ & 1 \end{aligned}$ | $\begin{gathered} 2 \\ 4 \\ 10 \\ 18 \end{gathered}$ | $\begin{gathered} 3 \\ 6 \\ 18 \end{gathered}$ | $6$ | $\begin{aligned} & 3 \\ & 2 \\ & 7 \end{aligned}$ | $\begin{gathered} 3 \\ 1 \\ 11 \end{gathered}$ | $\begin{gathered} 10 \\ 5 \end{gathered}$ | $\begin{gathered} \hline 1 \\ 9 \\ 11 \end{gathered}$ | $\begin{gathered} 4 \\ 13 \\ 12 \end{gathered}$ |
| C | $\begin{aligned} & 22 \\ & 23 \\ & 24 \\ & 25 \end{aligned}$ |  | $\begin{gathered} 20 \\ 16 \\ 19 \\ 6 \end{gathered}$ | $\begin{gathered} 20 \\ 21 \\ 14 \\ 6 \end{gathered}$ |  | $\begin{gathered} 27 \\ 19 \\ 16 \\ 7 \end{gathered}$ | $\begin{gathered} \hline 15 \\ 20 \\ 11 \\ 9 \end{gathered}$ |  | $\begin{gathered} 23 \\ 20 \\ 22 \\ 9 \end{gathered}$ | $\begin{aligned} & 21 \\ & 21 \\ & 25 \\ & 15 \end{aligned}$ |  | $\begin{gathered} \hline 13 \\ 10 \\ 15 \\ 116 \end{gathered}$ | $\begin{aligned} & 16 \\ & 14 \\ & 14 \\ & 15 \end{aligned}$ |
| B | $\begin{aligned} & 26 \\ & 27 \\ & 28 \\ & 29 \\ & 30 \end{aligned}$ |  | $4$ | $\begin{aligned} & \hline 3 \\ & 6 \\ & 1 \end{aligned}$ |  | $\begin{aligned} & \hline 5 \\ & 2 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | $\begin{aligned} & 9 \\ & 4 \\ & 2 \\ & 2 \\ & 1 \end{aligned}$ |  | 6 4 1 2 | $\begin{aligned} & \hline 7 \\ & 1 \\ & 0 \\ & 2 \end{aligned}$ |  | 5 5 2 2 | $\begin{gathered} 12 \\ 8 \\ 6 \\ 2 \end{gathered}$ |
| TOTAL |  | 127 | 99 | 99 | 124 | 115 | 100 | 133 | 100 | 107 | 140 | 90 | 107 |
|  |  | 325 |  |  | 339 |  |  | 340 |  |  | 337 |  |  |

$A=$ range for (S); $B=$ "out of range"; $C=$ range for both (R) and (RA) classes.
SOURCE: Achilles (1999).

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referenced achievement tests were administered during the spring term on testing dates specified by the State.

Academic performance. The norm-referenced achievement tests were the Stanford Achievement Tests (SATs) developed by the Psychological Corporation (1983). The database contains reading, mathematics, and listening scores for grades $\mathrm{K}-3$, and additional topics in grade 3 (see Table 2). The scores are all in the form of item-response-theory (IRT) scale scores, which can be compared across grades.

Beginning in first grade, the Basic Skills First (BSF) tests, criterion-referenced tests developed by the Tennessee State Department of Education, were also administered to each student. The tests covered the State's learning objectives in reading and mathematics, with four items per objective ("domain"). Students were considered to

Table 2. Assessment scores on the STAR student data file, grades K-3

| Score | Grade |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | K | 1 | 2 | 3 |
| Total reading scale score SAT | X | X | X | X |
| Total math scale score SAT | X | X | X | X |
| Total listening scale score SAT | X | X | X | X |
| Total language scale score SAT |  |  |  | X |
| Science scale score SAT |  |  |  | X |
| Social science scale score SAT |  |  |  | X |
| Spelling scale score SAT |  |  |  | X |
| Vocabulary scale score SAT |  |  |  | X |
| Math computation scale score SAT |  |  |  | X |
| Concept of numbers scale score SAT |  |  |  | X |
| Math applications scale score SAT |  |  |  | X |
| Word study skills scale score SAT | X | X | X | X |
| Reading raw score BSF |  | X | X | X |
| Math raw score BSF |  | X | X | X |
| Reading number objectives mastered BSF |  | X | X | X |
| Math number objectives mastered BSF |  | X | X | X |
| Reading percent objectives mastered BSF |  | X | X | X |
| Math percent objectives mastered BSF |  | X | X | X |
| Motivation raw score SCAMIN | X | X | X | X |
| Self-concept raw score SCAMIN | X | X | X | X |

SAT: Stanford Achievement Tests
BSF: Basic Skills First
have mastered the objective if they answered 3 of the 4 items correctly. The database contains total scores (total number of items answered correctly) and number of objectives mastered in reading and mathematics ${ }^{8}$ for grades 1-3. Because the number of objectives differed from grade to grade, as well as the actual content domains, BSF scores cannot be meaningfully compared from one grade to another.

Self-concept/motivation. In grades K-3, students completed a self-concept and motivation inventory, the SCAMIN (Milchus, Farrah, \& Reitz, 1968). The SCAMIN asks students to indicate pictorially their response to 24 situations. For example, what 'face' (happy, sad, indifferent) would the student wear if s/he "had to tell his/her parents they lost their coat?" The SCAMIN is group administered, with one form for prekindergarten and kindergarten students, and another for students in grades 1-3. The database contains total self-concept and motivation scores for each student in each grade.

## Additional Stages of Data Collection

The STAR experiment ended in the spring of 1989, when most students had completed third grade. In fourth grade and beyond, all students returned to full-size classes. With the continued cooperation of the Tennessee schools and the State Department of Education, ${ }^{9}$ researchers continued to collect data on the STAR students as they progressed through the grades. Thus, comparisons can be made between students in later grades who had attended small classes in K-3 and those who had been in regular or regular/aide classes.

The additional data are discussed in five parts (stages). Each stage of data collection used different procedures.

- Academic achievement scores in grades 4-8;
- Classroom participation ratings in grades 4 and 8 ;
- Identification with school in grade 8.
- College-entrance examination participation and scores;
- High-school transcripts, including courses taken, grades received, and graduation/dropout.


## Academic Achievement in Grades 4-8

The year that STAR students entered grade 4, Tennessee implemented a new student assessment system, the Tennessee Comprehensive Assessment Program (TCAP). The TCAP assessment battery included norm-referenced tests from the Comprehensive Tests of Basic Skills (CTBS/McGraw Hill, 1989) and BSF criterion-referenced tests for

[^5]
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each grade in reading and mathematics. Scores on these tests were made available by the Tennessee State Department of Education, as students progressed from grade 4 (1989-1990) through grade 8 (1993-1994). ${ }^{10}$ Table 3 lists the specific subtests by grade.

Some schools in Tennessee did not participate fully in the first year of TCAP. As a result, fourth-grade data were not available for students in 17 Project STAR schools. The reduction affected minority students in particular; in third grade, approximately 34\% of STAR students were minority, compared to approximately $20 \%$ of the fourth-grade sample. In subsequent years, all schools in the State participated.

Scores on the CTBS are not directly comparable to those on the SATs. However, IRT scale scores were available for each CTBS subtest so that comparisons can be made meaningfully across grades 4-8.

Table 3. Assessment scores on the STAR student data file, grades 4-8

|  |  |  | Grade |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Score |  |  |  |  |  |
|  |  | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ |
| Reading number objectives mastered BSF |  | $\mathbf{8}$ |  |  |  |
| Math number objectives mastered BSF | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ |
| Total reading scale score CTBS | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ |
| Total math scale score CTBS | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ |
| Total language scale score CTBS | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ |
| Total battery scale score CTBS | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ |
| Science scale score CTBS | $\mathbf{X}$ | $\mathbf{X}$ |  | $\mathbf{X}$ | $\mathbf{X}$ |
| Social science scale score CTBS | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ |
| Reading comprehension scale score CTBS | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ |
| Spelling scale score CTBS | $\mathbf{X}$ | $\mathbf{X}$ |  | $\mathbf{X}$ | $\mathbf{X}$ |
| Vocabulary scale score CTBS | $\mathbf{X}$ | $\mathbf{X}$ |  | $\mathbf{X}$ | $\mathbf{X}$ |
| Math computation scale score CTBS | $\mathbf{X}$ | $\mathbf{X}$ |  | $\mathbf{X}$ | $\mathbf{X}$ |
| Math concepts and applications scale score CTBS | $\mathbf{X}$ | $\mathbf{X}$ |  | $\mathbf{X}$ | $\mathbf{X}$ |
| Language expression scale score CTBS | $\mathbf{X}$ |  | $\mathbf{X}$ | $\mathbf{X}$ |  |
| Language mechanics scale score CTBS | $\mathbf{X}$ | $\mathbf{X}$ |  | $\mathbf{X}$ | $\mathbf{X}$ |
| Study skills scale score CTBS | $\mathbf{X}$ | $\mathbf{X}$ |  | $\mathbf{X}$ | $\mathbf{X}$ |

BSF: Basic Skills First
CTBS: Comprehensive Tests of Basic Skills

[^6]As in earlier grades, the BSF tests were customized for Tennessee to assess skill levels learned from the State's mathematics and language arts curriculum. Each test was comprised of items assessing performance in a number of domains. Answering 75\% of the items correctly in a given domain was termed "mastery." The database contains the number of domains mastered in mathematics and reading by STAR students in each grade (4-8). The BSF tests are not directly comparable across grade levels.

## Classroom Participation

During the 1989-1990 school year, fourth-grade teachers rated students' behavior on the Student Participation Questionnaire (SPQ; Finn, Folger, \& Cox, 1991). The questionnaire is comprised of 31 items, 28 of which were combined into four scales: Effort (e.g., "Pays attention in class"), Initiative-taking (e.g., "Does more than just the assigned work"), Nonparticipatory behavior (e.g., "Annoys or interferes with peers' work"), and Valuing school outcomes (e.g., "Is critical of peers who do well in school"). Each item is rated in terms of the frequency of occurrence from "never" (1), to "sometimes" (3), to "always" (5).

A random sample of students in each classroom was chosen who had participated in STAR classes in the preceding years. To lessen the burden on teachers, no teacher was asked to rate more than 10 students in her class. The form was completed in November of the fourth-grade year. The ratings were used to compare the behavior of students who had been in small classes with that of students in regular or teacher-aide classes in K-3 (Finn, Fulton, Zaharias, \& Nye, 1989). The form has subsequently been used by these researchers and others in a variety of classroom studies (Finn, Pannozzo, \& Voelkl, 1995; Molnar, Smith, \& Zahorik, 2000).

After initial success with the Student Participation Questionnaire, a shortened form was developed to be completed by both the English and mathematics teachers of students in higher grades. The form includes 13 questions from the fourth-grade form, plus one question more germane to older students ("Is verbally or physically abusive to the teacher). This form was completed by two teachers of each identified STAR student in eighth grade (1993-1994).

Both forms of the Student Participation Questionnaire are contained in Appendix A. The database contains ratings on the individual items as well as scale scores for approximately 2,200 students in grade 4 , and approximately 2,900 students in grade 8. ${ }^{11}$ Approximately 1,000 of these cases were the same students in both grades. ${ }^{12}$

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## Identification With School

When STAR students were in eighth grade (1993-1994), a subsample completed a selfreport questionnaire measuring "identification with school" (Voelkl, 1996, 1997). Identification was comprised of two dimensions: the student's feeling of 'belongingness' in school (e.g., "l feel proud of being part of my school;" "School is one of my favorite places to be"), and the student's valuing of school and school-related outcomes (e.g., "School is more important than most people think;" "I can get a good job even if my grades are bad"). Low identification with school has been shown to be related to school problems such as cheating (Finn \& Frone, 2004), substance use (Voelkl \& Frone, 2000), and dropping out (Pannozzo, Finn, \& Boyd-Zaharias, 2004).

The Identification with School Questionnaire is contained in Appendix B. Nine items assess feelings of belongingness, and 6 items assess valuing. Response categories for all items are "strongly agree," "agree," "disagree," and "strongly disagree." Scale analysis revealed that the two factors can be scored separately, or as a single total score (Voelkl, 1996).

The data file contains item responses, belongingness and valuing scores, and a total identification score for 3,648 students, of whom 2,975 were also rated by their teachers on the Student Participation Questionnaire.

Peer effects: The file also includes responses to 7 items that assessed peers' attitudes to school and potential influences on the respondent; these are also listed in Appendix B. To date, these items have only been used in one research study (Radziwon, 2003).

## College Entrance Examinations

With the cooperation of ACT, Inc., and the College Board and Educational Testing Service (ETS), economists Alan Krueger and Diane Whitmore linked STAR information with ACT/SAT examination records (Krueger \& Whitmore, 2001a). The two test publishers organize their files by graduating class. Thus, students graduating in 1998, regardless of where they resided, would be matched if they took the SAT or ACT at any time in their junior or senior year. ${ }^{13}$ STAR students who did not match the files by name, birth date, and Social Security number were classified as not taking the test.

In all, $32.4 \%$ of the STAR sample took the ACT tests, and $4.6 \%$ took the SAT. The database contains total test scores and subtest scores for the test the student took (Quantitative and Verbal scores for the SATs, and subject-area test scores for the ACTs). If a student took the test more than once, only the first administration is included.

[^8]The file also contains two "converted scores." Variable HSACTCON is the total ACT score for those students who took the ACT, and the SAT total-converted to the ACT metric-for those students who took the SAT (see Krueger and Whitmore, 2001a). Variable HSSATCON is similar, but all scores are on the SAT scale. No conversions were possible for subtests.

## High School Transcripts

In 1998-2000, after most STAR students graduated from high school, the staff of HEROS, Inc., gathered high school records on as many of the students as possible. Using the latest test data on file, lists of students were created according to the high schools they would most likely have attended if they remained in the same school districts/schools for the ensuing years. Transcripts were requested from each district office. Some districts provided the transcripts, and others referred the researchers directly to the schools. In a number of instances, the researchers went directly to the schools to copy or record the information. There was extensive follow-up to retrieve as many records as possible.

With two years of work, transcript information was obtained for approximately 5,300 cases, of which 3,922 provided usable course-taking data, ${ }^{14}$ and 4,992 provided valid graduation/dropout information. Because of the importance of the graduation/dropout variable, cases that were missing or ambiguous in the school transcripts were verified through records of the Tennessee State Department of Education.

The formats and completeness of the transcripts varied, creating a huge task of classifying the courses and coding course grades. ${ }^{15}$ Two systematic irregularities in the data are addressed in the STAR-and-Beyond files. First, some transcripts were incomplete because students transferred schools or left without graduating. Variable HSYRSCOR was created to indicate the number of years of course-taking data available for the student. Course-taking information was included in the database for students with 3 or 4 years of data, and for students with 2 years of data in grades 11 and $12 .{ }^{16}$ Approximately $73 \%$ of the transcripts provided 4 years of course information.

Second, only partial course taking information was provided by the schools of 411 students. The information was recorded on an "abbreviated form," which did not give enough detail to code semesters of mathematics taken or any science courses. The highest level mathematics course was coded for these students, as well as all foreign language course variables; these cases are flagged in the data file (variable HSCTSCR $=1$ ).

[^9]
### 1.14 BACKGROUND AND DATA COLLECTION

All course grades were placed on a 0-100 scale, the most common form used in the transcripts. An overall high school grade average (HSGPAOVE) was computed for all students with data on at least 8 courses; most transcripts, however, were complete or nearly complete.

The data file contains information about courses and course grades:

- The number of semesters of French, German, Latin, and Spanish taken at each of 4 levels, and the highest level reached in any language; ${ }^{17}$
- The total number of semesters of (any) foreign languages taken at each level, and the total number of semesters of language taken;
- The number of semesters of mathematics taken at each of five levels, the highest level reached, and the total number of semesters of mathematics;
- The number of semesters of science taken in high school;
- Grade average for all foreign language courses taken, all mathematics courses taken, and all science courses taken;
- The overall high school grade average (variable HSGPAOVE).

High school graduation. ${ }^{18}$ Despite our best efforts, it was not possible to classify every student definitively as a graduate or dropout. Variable HSGRDADD is a 5-part classification, in which "educated best guesses" about graduation/drop out ("probably graduated" or "probably dropped out") are indicated for $7.5 \%$ of the sample whose status remained ambiguous after coding was complete; details are given in Chapter 2.

A second variable, HSGRDCOL, was formed by combining students who graduated or probably graduated into one classification (graduated), and all others into a second classification (did not graduate). This variable was used in an analysis of early school experiences and dropping out (Finn, Gerber, \& Boyd-Zaharias, 2005).

## Final Sample Sizes

Table 4 shows the number of STAR students who provided data in each grade (K-8 and in high school); students in the comparison schools are not included in these counts. During the experimental years (and in grade 4), the number of schools ranged from 75 to 79 . The number increased in subsequent years, up to a maximum of 525 schools in grade 6.

There are fewer students in grade 5 , when matching STAR students with State records did not work as well as in later grades. The number of schools in grade 6 and 8 are

[^10]substantially larger, in part because different types of schools include these grades; for example, grade 6 is housed in K-6 schools, middle schools, K-12 schools, and others. ${ }^{19}$

Table 4 also gives the number of schools from which any data were collected in a particular grade. Subsets of the schools participated in each focused data collection (e.g., participation and identification measures). The numbers of students in these samples are smaller because students were not selected to participate, rather than nonresponse.

Course taking and graduation data were obtained for students in 159 high schools. One or more students in each of 145 schools took college entrance examinations (ACTs/SATs), but all 11,601 students could be classified as having taken or not taken the exams.

Table 5 shows the number of students in each pair of data stages. This may be helpful for analyzing several components of the STAR data jointly.

[^11]Table 4. Number of students and schools providing data at each stage

| Data | Grade |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9-12 |
| Achievement test scores | 5907 | 6684 | 6559 | 6464 | 6339 | 2593 | 6441 | 4942 | 6361 |  |
| Motivation and self-concept scores | 5038 | 5852 | 6118 | 6129 |  |  |  |  |  |  |
| Participation study (grades 4 and 8) |  |  |  |  | 2217 |  |  |  | 2978 |  |
| Identification study (grade 8) |  |  |  |  |  |  |  |  | 3648 |  |
| High school course taking |  |  |  |  |  |  |  |  |  | 3922 |
| High school graduation status |  |  |  |  |  |  |  |  |  | 4992 |
| High school SAT/ACT scores |  |  |  |  |  |  |  |  |  | 3880 |
| Total number of schools | 79 | 76 | 75 | 75 | 76 | 56 | 525 | 181 | 406 | 161 |

Table 5. Number of students providing data in each pair of stages

|  | Grades 4-8 Achievement tests | Grade 4 Participation study | Grade 8 Participation study | Grade 8 Identification study | High school course taking data | High school graduation status | High school SAT/ACT score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grades K-3 Achievement tests | 8240 | 2217 | 2930 | 3587 | 3867 | 4911 | 3818 |
| Grades 4-8 Achievement tests |  | 2203 | 2975 | 3645 | 3615 | 4501 | 3682 |
| Grade 4 Participation study |  |  | 1015 | 1218 | 1276 | 1426 | 1229 |
| Grade 8 Participation study |  |  |  | 2975 | 1791 | 2062 | 1705 |
| Grade 8 Identification study |  |  |  |  | 2172 | 2518 | 2067 |
| High school course-taking |  |  |  |  |  | 3831 | 2449 |
| High school graduation status |  |  |  |  |  |  | 2710 |

## CHAPTER 2

## THE DATA FILES AND THEIR CONTENTS

This chapter is comprised of two sections. The first section lists the four files in the STAR-and-Beyond database and overviews the contents of each. The second section gives details of variable sets and selected specific variables which, in our opinion, may need additional clarification. This information is intended to help secondary analysts choose variables for particular analyses. We recommend that secondary users review this section in particular.

## Four STAR-and-Beyond Data Files

## STAR STUDENT FILE

SPSS file name: STAR Students.sav
Codebook: Chapter 3
Number of cases: 11,601
Grade span: K-12
Contents:

- Basic data collected during Project STAR, including student demographics, type of class attended in each grade ( $\mathrm{K}-3$ ), achievement test scores, attendance, self-concept and motivation scores. Derived variables indicating the extent of participation in small classes;
- Teacher characteristics for each grade (K-3), school urbanicity;
- Achievement test scores for ensuing grades (4-8);
- Classroom participation ratings, grades 4 (one teacher per student) and 8 (two teachers per student);
- School engagement and peer effects, self-reported in grade 8;
- Courses taken and grade averages in mathematics, science, and foreign languages in high school (9—12), overall high school grade average;
- High school graduation status;
- Participation and scores in college entrance examinations;
- "Flags" indicating the presence or absence of data at each stage.


## COMPARISON STUDENT FILE

SPSS file name: Comparison Students.sav
Codebook: Chapter 3 - Variables marked with asterisks (*) only Number of cases: 1,780
Grade span: 1-3
Contents:

- School and class identifiers for students 21 schools in the same grades as the STAR cohort;
- Class enrollment;
- Achievement scores on the same tests/scales as administered to STAR students in grades $1-3$.


## STAR K-3 SCHOOL FILE

SPSS file name: STAR K-3 Schools.sav
Codebook: Chapter 4, Part 1
Number of schools: 80
Grade span: 1-3
Contents:

- School demographic variables each year, attendance, grade range;
- "Flags" indicating school participation in STAR each year.


## HIGH-SCHOOL DATA FILE

SPSS file name: STAR High Schools.sav
Codebook: Chapter 4, Part 2
Number of schools: 161
Grade span: Not applicable; data collected in 1998 Contents:

- School demographic variables, enrollment, grade range;
- School graduation rate;
- Credits required for graduation in mathematics, science, foreign language, social studies, computers, English;
- Advanced course offerings in mathematics, foreign language.


## Information about Selected Variables

This section provides information about specific variables in the STAR-and-Beyond database. The focus is on constructed variables, variables not described thoroughly in other publications, and variables that have unusual distributions. The organization of variables is the same as that used in the Codebook (Chapter 3).

## IDENTIFICATION NUMBERS

School Identification Numbers: Each school was assigned a 6-digit identifying number consisting of 3 digits identifying the district and 3 digits that identify the school. The 3 -digit school identifiers, and thus the full 6 -digit IDs, are unique to each school in the sample.

Teacher Identification Numbers: Each teacher was assigned an 8-digit identifying number consisting of the 6 -digit school identification number and 2 digits identifying the teacher within the particular school.

Student Identification Numbers: Each STAR student was assigned a unique 5-digit identification number, ranging from 10000 to 21600 . Students in the comparison schools had IDs in the range 30001 to 31780 .

## FLAG VARIABLES

In-STAR Flags: Four flags were created to indicate whether the student attended a STAR school in each grade K-3. All classes at the respective grade level in STAR schools participated in the Project; that is, all kindergarten classes in 1985-1986, all first-grade classes in 1986-1987, and so on.

Achievement-data Flags: Nine flags indicate whether the student has one or more achievement test scores available in each grade, K-8.

High School Data Flags: Other flags indicate whether an ACT or SAT score is available for the student, ${ }^{20}$ whether course taking information is available, and whether graduation/dropout codes are available.

Summer Training Flag: A separate variable, included with second grade data, indicates whether the teachers participated in the STAR summer training program (variable G2TTRAIN).

[^12]
### 2.4 DATA FILES AND VARIABLES

## DEMOGRAPHICS

Demographic information for students, teachers, and some for schools, is included in the data record of each student. Additional school demographic information is included in the school-level data files. The demographic characteristics of STAR classes can be obtained by aggregating student characteristics. ${ }^{21}$

## CLASS SIZE; CLASS TYPE COMPOSITE VARIABLES

Class enrollment during STAR is indicated in two ways. The STAR designation of the class as small ( $13-17$ students), regular (22-25 students), or regular with a full time teacher aide is indicated for each student in each year. The actual number of students in the class is also provided (variables GKCLASSS, G1CLASSS, etc.) in grades K-4.

In addition, four composite variables were constructed to help with data analysis:

- The total number of years the student participated in Project STAR (YEARSSTA); range 1-4 years.
- The total number of years the student attended small classes (YEARSSMA); range $0-4$ years, with 0 indicating the student was never in a small class (i.e., attended regular and/or regular-with-aide classes throughout).
- A pair of variables (CMPSTYPE and CMPSDURA) indicated the pattern of participation in different class types, given student mobility, during the four years of Project STAR. These are useful for studying the cumulative effects of small classes, especially on outcomes in grades 4 and beyond.

The variables were formed by considering every combination of settings students had over the four-year period. First, each student was first coded as "small class," "regular class," or "missing" for each year of the Project. In this classification, regular classes included full-size classes with and without teacher aides. "Missing" could arise for several reasons, for example, some students did not enter school until first grade (and would be coded as missing in kindergarten), and some students left STAR schools before third grade. A small number of students left a STAR school after one or two years of participation, only to return after a one- or two-year hiatus.

Second, the composite variables were formed as follows. Students who were in a small class for one, two, three, or four years were coded as "small" on CMPSTYPE, and $1,2,3$, or 4 , respectively, on CMPSDURA. These assignments were made regardless of whether the student was missing or in regular classes

[^13]in the other years. Students who were in a STAR regular class for one, two, three, or four years, and missing otherwise, were coded as "regular" on CMPSTYPE, and 1, 2, 3, or 4, respectively, on CMPSDURA. All combinations of class types in $\mathrm{K}-3$ and the resulting codes are given in Table 6.

Certain students ( $n=613$ ) were assigned missing values on CMPSTYPE and CMPSDURA: students who entered STAR after first grade, and thus did not have the opportunity to participate in small classes for 3 or 4 years, students who moved from a regular to a small class after first grade, and students who changed class types (from regular to small or from small to regular) two or more times.

## ATTENDANCE, SPECIAL EDUCATION, RETENTION

Attendance: The number of days students were present and absent from school were recorded in grades K, 1, and 3 . Since districts have different numbers of days in the school year, the total (present + absent) varies across schools or districts.

Special Education: Special education participation is indicated for kindergarten and grade 1. The distributions of these variables indicate that there may have been problems in recording this information.

Retention: Variable GKREPEAT indicates whether a student in the first year of STAR (1985-1986) had also attended kindergarten the previous year. A variable in subsequent grades indicates whether the student was recommended for promotion to the next grade at the end of the school year (G1PROMOT, G2PROMOT, G3PROMOT); no comparable variable was recorded for kindergarten. Actual promotions to the next grade were not recorded. An analysis of the retention data is reported in Chapter VII of Word et al. (1990).

## ACHIEVEMENT TEST SCORES

The achievement test scores are described in Chapter I. The following are notes for secondary analysts:

- The norm-referenced test battery was changed from the Stanford Achievement Tests (SATs) to the Comprehensive Tests of Basic Skills (CTBS) when students entered grade 4.
- The criterion-referenced tests (BSFs) are based on a different number of objectives in each grade. The number of objectives is equal to the maximum value of the "number of objectives mastered" variable for that grade/topic.


### 2.6 DATA FILES AND VARIABLES

- The BSF test scores are negatively skewed for both topics (reading and mathematics) in each grade. Some accommodation for skewness may be needed when analyzing these scores.
- We have no clear explanation for the smaller number of achievement test scores in grade 5. The attempt to match STAR files with those of the Tennessee State Department of Education did not yield as many cases at the time. The issue has not been pursued since then.


## ENGAGEMENT VARIABLES

Student Participation Questionnaire (SPQ): The SPQs for grades 4 and 8 are included in Appendix A. The fourth-grade form indicates which items are in each scale. Item responses are also given on the data file so analyses can be conducted with individual items or by creating different scalings (see, for example, Finn, Pannozzo, \& Voelkl, 1995). The data file also includes several items that were not part of any scale:

- Grade 4 - student's attendance at after-school events; the teacher's rating of the student's academic performance; participation in special education.
- Grade 8 - attendance (classes missed in math, English); teacher-parent conversations.

Most teachers responded to every item on the SPQ. However, for occasional items left blank, the item mode was inserted before computing scale scores. For example, in fourth grade, 94 cases had one item response inserted, 15 had two item responses inserted, 4 had three item responses inserted, and 2 cases had four item responses inserted.

Identification with School Questionnaire: The Identification with School Questionnaire is included in Appendix B. Item responses, Belonging and Valuing subscale scores, and a total identification score are contained on the data file. In addition to 16 identification items, 6 items assessing peers' influence are embedded in the questionnaire (see the end of Appendix B) and are also contained on the data file.

## HIGH SCHOOL COURSES AND GRADES

Course taking information is included in the data file for 3,922 cases whose transcripts provided 3 or 4 years of data between grade 9 and grade 12, or else 2 years of data in grades 11 and $12 .{ }^{22}$ Variable HSYRSCOR indicates the number of years of data available for the particular student. Approximately $13 \%$ of the

[^14]students provided 2 years of data. Approximately $14 \%$ provided 3 years of data, of which over $90 \%$ provided data for grades 9,10 , and 11 .

In the data file, the number of courses taken varies systematically depending on the number of years of data available. Secondary analysts should consider whether to include all students in an analysis and use HSYRSCOR as a control variable, or to exclude students with 2 years (and possibly 3 years) of data.

The highest level course taken in a discipline is not related directly to the number of years of data, since all cases have grade-11 data, and most have grade-12 data as well. Higher level courses are likely to be taken in these grades.

Students sometimes repeat courses they fail. The counts and grade averages on the data file include both occasions. Other students, doing well, may take more than one math course, for example, in a given semester. Both factors may result in the total number of semesters of course work exceeding 8, the typical number of semesters in a high school program.

Foreign Language Courses: The numbers of semesters of French, German, Latin, and Spanish taken at each of 4 levels are included on the data file. Course levels were determined by the course names (e.g., French 1, French 2, French 3, French 4). Advanced language courses were coded as level 5 for three students who had taken many previous classes.

In addition, the total number of semesters of (any) foreign languages taken in high school is included on the data file (variable HSFLANGT), as well as the highest level of any foreign language taken (variable HSLVLFLA).

Science Courses: The total number of semesters of science taken is included on the data file (variable HSCIENTO).

Mathematics Courses: Mathematics courses were classified into 5 levels, using an updated version of the taxonomy developed by Rock and Pollack (1995). ${ }^{23}$

- Level 1: Basic mathematics, pre-algebra courses, and introduction to computers;
- Level 2: Algebra 1 and other courses involving beginning algebra;
- Level 3: Algebra 2, introductory geometry, and courses involving algebra 2 topics;
- Level 4: Algebra 3, advanced geometry, and other advanced courses exclusive of calculus;
- Level 5: Calculus and analytic geometry.

[^15]
### 2.8 DATA FILES AND VARIABLES

AP courses, with the exception of calculus, were classified as one level higher than the level indicated by the course title.

The number of semesters of mathematics taken at each level is included on the data file, as well as the total number of semesters of mathematics taken (variable HSMATHTO). The highest level of mathematics reached is also included on the file (variable HSLVLMTH). ${ }^{24}$

Grades: Grades were recorded by schools in several forms, most commonly 0-100 or letter grades. Letter grades were converted to a numeric scale as follows:

| A+ | 97 | B+ | 87 | C+ | 77 | $\mathrm{D}+$ | 67 | F | 59 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| A | 95 | B | 85 | C | 75 | D | 65 |  |  |  |
| A- | 92 | $\mathrm{~B}-$ | 82 | $\mathrm{C}-$ | 72 | $\mathrm{D}-$ | 62 | P (passing) | 80 |  |

Grade averages for science, mathematics, and languages were computed if any course grades were available for the student. The "overall GPA" for all high school courses was computed if the student provided data on 8 or more courses (one semester each).

## COLLEGE ENTRANCE EXAMS

Many more students took ACT exams than SATs. Variable HSACTON is recommended for secondary analysis. Its value is equal to the original ACT total score for students who took the ACT, and an SAT $\ddagger$ ACT converted score for those who took the SATs (see Krueger \& Whitmore, 2001a). ${ }^{25}$

Flag variable FLAGSATA indicates correctly the number of cases on the data file with ACT or SAT scores (3880). Variables HSSAT, HSACT, and HSTEST, adjacent to the exam scores in the data file, indicate which test(s) the student took. These were created by Krueger and Whitmore when looking for STAR students in the examination files. They include some students who were found in the SAT files, but who, for one reason or another, did not have accompanying test scores. These variables may be used to identify students who took the SAT, the ACT, both, or neither.

[^16]
## HIGH SCHOOL GRADUATION

Graduation information for 4992 cases was coded in two variables. Variable HSGRDADD has five values:

- Dropped out (14.7\%) - The student's transcript was marked to indicate that $s / h e$ had dropped out, and/or the records of the State Education Department indicated drop out;
- Graduated (74.3\%) - The student's transcript was marked to indicate that $\mathrm{s} / \mathrm{he}$ had graduated, and/or State Education Department records indicate that $\mathrm{s} / \mathrm{he}$ graduated;
- GED (3.4\%) - The student's transcript and/or State records indicated that s/he had received a GED diploma in lieu of a regular high school diploma;
- Probably dropped out (4.3\%) - A judgment made by the research team based on multiple criteria. High school records indicated a history of low or failing grades, which ended prior to the last semester of the senior year; no formal indication that the student transferred to another school and no record that the student received a high school diploma in Tennessee. ${ }^{26}$ Most students in this classification had poor attendance records and/or multiple disciplinary problems, coupled with one or more in-grade retentions.
- Probably graduated (3.2\%) - A judgment made by the research team. High school transcript indicated four years of passing grades, but was not marked formally to indicate that the student graduated. Most students in this classification had no record of attendance or disciplinary problems and had met the school's and State's requirement for graduation.

Variable HSGRDCOL is a recoded version of HSGRDADD in which five categories have been collapsed into two:

- Graduated (77.6\%) - Graduated or probably graduated;
- Did not graduate ( $22.4 \%$ ) - Dropped out or probably dropped out, or received an alternative (GED) diploma.

[^17]
## CHAPTER 3 STUDENT DATA FILE

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### 3.2 STUDENT DATA

## TYPES OF VARIABLES IN STUDENT FILE

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3. CLASS SIZE; CLASS TYPE COMPOSITE VARIABLES
4. ATTENDANCE, SPECIAL EDUCATION, RETENTION
5. ACHIEVEMENT TEST SCORES
6. ENGAGEMENT VARIABLES
7. HIGH SCHOOL COURSE TAKING AND GRADES
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### 3.6 STUDENT DATA

## CODEBOOK

## Student Demographic Variables

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| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| GENDER | Student gender* |  |  |  |
|  | Format: F1.0 |  |  | Valid |
| Value | Label | N | Percent | Percent |
| 1 | Male | 6124 | 52.8 | 52.9 |
| 2 | Female | 5457 | 47.0 | 47.1 |
| Total of valid cases | 11581 | 99.8 | 100.0 |  |
| System missing | 20 | 0.2 |  |  |


| RACE | Student race/ethnicity* <br> Format: F1.0 |  |  |  |
| :--- | :--- | ---: | :--- | :---: |
| Value | Label | N |  |  |
| 1 | White | 7200 | 62.1 | Valid |
| 2 | Black | 4180 | 36.0 | 36.8 |
| 3 | Asian | 32 | 0.3 | 0.3 |
| 4 | Hispanic | 21 | 0.2 | 0.2 |
| 5 | Native American | 14 | 0.1 | 0.1 |
| 6 | Other | 20 | 0.2 | 0.2 |
| Total of valid cases | 11467 | 98.8 | 100.0 |  |
| System missing | 134 | 1.2 |  |  |

```
BIRTHMON Student month of birth*
    Format: F2.0
    Range: 1 to 12
    System missing: N = 68
BIRTHDAY Student day of birth*
    Format: F2.0
    Range: 1 to 31
    System missing: N = 68
```

| BIRTHYEA | Student year of birth* <br> Format: F4.0 |  |  |  |
| :--- | :--- | ---: | ---: | ---: |
|  |  |  |  | Valid |
| Value | Label | N | 58 | 0.5 |
| 1977 |  | 645 | 5.6 | 0.5 |
| 1978 |  | 3917 | 33.8 | 34.0 |
| 1979 |  | 2889 | 59.4 | 59.7 |
| 1980 |  | 11533 | 0.2 | 0.2 |
| 1981 |  | 68 | 0.4 | 100.0 |
| Total of valid cases |  |  |  |  |
| System missing |  |  |  |  |

## Flag Variables

FLAGSGK In STAR in kindergarten
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | ---: | :---: |
| 0 | No | 5276 | 45.5 | 45.5 |
| 1 | Yes | 6325 | 54.5 | 54.5 |
| Total of valid cases | 11601 | 100.0 |  |  |
| System missing | 0 | 0.0 |  |  |

FLAGSG1 In STAR in grade 1
Format: F1.0

|  |  |  |  | Valid |
| :--- | :--- | ---: | :---: | :---: |
| Value | Label | N | Percent | Percent |
| 0 | No | 4772 | 41.1 | 41.1 |
| 1 | Yes | 6829 | 58.9 | 58.9 |
| Total of | valid cases | 11601 | 100.0 |  |
| System missing | 0 | 0.0 |  |  |

FLAGSG2 In STAR in grade 2
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :---: | ---: | :---: | :---: |
| 0 | No | 4761 | 41.0 | 41.0 |
| 1 | Yes | 6840 | 59.0 | 59.0 |
| Total of valid cases | 11601 | 100.0 |  |  |
| System missing | 0 | 0.0 |  |  |

### 3.8 STUDENT DATA

FLAGSG3 In STAR in grade 3
Format: F1.0

| Value | Label | N | Percent | Valid |
| :--- | :--- | ---: | ---: | :---: |
| 0 | No | 4799 | 41.4 | 41.4 |
| 1 | Yes | 6802 | 58.6 | 58.6 |
| Total of | valid cases | 11601 | 100.0 |  |
| System missing | 0 | 0.0 |  |  |

FLAGGK Achievement data available kindergarten
Format: F1.0

|  |  |  |  | Valid |
| :--- | :--- | ---: | ---: | :---: |
| Value | Label | N | Percent | Percent |
| 0 | No | 5694 | 49.1 | 49.1 |
| 1 | Yes | 5907 | 50.9 | 50.9 |
| Total of | valid cases | 11601 | 100.0 |  |
| System | missing | 0 | 0.0 |  |

FLAGG1 Achievement data available grade 1
Format: F1.0

|  |  |  |  | Valid |
| :--- | :--- | ---: | :---: | :---: |
| Value | Label | N | Percent | Percent |
| 0 | No | 4917 | 42.4 | 42.4 |
| 1 | Yes | 6684 | 57.6 | 57.6 |
| Total of valid cases | 11601 | 100.0 |  |  |
| System missing | 0 | 0.0 |  |  |

FLAGG2 Achievement data available grade 2
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | :---: |
| 0 | No | 5042 | 43.5 | 43.5 |
| T | Yes | 6559 | 56.5 | 56.5 |
| Total of | valid cases | 11601 | 100.0 |  |
| System missing | 0 | 0.0 |  |  |

FLAGG3 Achievement data available grade 3
Format: F1.0

|  |  |  |  | Valid |
| :--- | :--- | ---: | :---: | :---: |
| Value | Label | N | Percent | Percent |
| 0 | No | 5137 | 44.3 | 44.3 |
| 1 | Yes | 6464 | 55.7 | 55.7 |
| Total of valid cases | 11601 | 100.0 |  |  |
| System missing | 0 | 0.0 |  |  |

FLAGG4 Achievement data available grade 4
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | :---: |
| 0 | No | 5262 | 45.4 | 45.4 |
| 1 | Yes | 6339 | 54.6 | 54.6 |
| Total of valid cases | 11601 | 100.0 |  |  |
| System missing | 0 | 0.0 |  |  |

FLAGG5 Achievement data available grade 5
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | :---: |
| 0 | No | 9008 | Percent | Percent |
| 1 | Yes | 2593 | 22.4 | 77.6 |
| Total of valid cases | 11601 | 100.0 | 22.4 |  |
| System missing | 0 | 0.0 |  |  |

FLAGG6 Achievement data available grade 6
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | :---: |
| 0 | No | 5160 | 44.5 | 44.5 |
| 1 | Yes | 6441 | 55.5 | 55.5 |
| Total of valid cases | 11601 | 100.0 |  |  |
| System missing | 0 | 0.0 |  |  |

FLAGG7 Achievement data available grade 7
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | :---: |
| 0 | No | 6659 | 57.4 | 57.4 |
| 1 | Yes | 4942 | 42.6 | 42.6 |
| Total of valid cases | 11601 | 100.0 |  |  |
| System missing | 0 | 0.0 |  |  |

FLAGG8 Achievement data available grade 8
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | :---: |
| 0 | No | 5240 | 45.2 | 45.2 |
| 1 | Yes | 6361 | 54.8 | 54.8 |
| Total of valid cases | 11601 | 100.0 |  |  |
| System missing | 0 | 0.0 |  |  |

### 3.10 STUDENT DATA

| FLAGP | In participation study grade 4 Format: F1.0 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Label | N | Percent | Valid Percent |
| 0 | No | 9384 | 80.9 | 80.9 |
| 1 | Yes | 2217 | 19.1 | 19.1 |
| Total | valid cases | 11601 | 100.0 |  |
| Syste | ssing | 0 | 0.0 |  |

FLAGIDN8 In identification study grade 8
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :---: | ---: | :---: | :---: |
| 0 | No | 7953 | 68.6 | 68.6 |
| 1 | Yes | 3648 | 31.4 | 31.4 |
| Total of | valid cases | 11601 | 100.0 |  |
| System missing | 0 | 0.0 |  |  |

FLAGPRT8 In participation study grade 8
Format: F1.0

|  |  |  |  | Valid |
| :--- | :--- | ---: | :---: | :---: |
| Value | Label | N | Percent | Percent |
| 0 | No | 8623 | 74.3 | 74.3 |
| 1 | Yes | 2978 | 25.7 | 25.7 |
| Total of valid cases | 11601 | 100.0 |  |  |
| System missing | 0 | 0.0 |  |  |

FLAGSATA Valid SAT/ACT score available
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :---: | ---: | :---: | :---: |
| 0 | No | 7721 | 66.6 | 66.6 |
| 1 | Yes | 3880 | 33.4 | 33.4 |
| Total of | valid cases | 11601 | 100.0 |  |
| System missing | 0 | 0.0 |  |  |

FLAGHSCO At least two years of high school course data available
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | :---: | :---: |
| 0 | No | 7679 | 66.2 | 66.2 |
| 1 | Yes | 3922 | 33.8 | 33.8 |
| Total of | valid cases | 11601 | 100.0 |  |
| System missing | 0 | 0.0 |  |  |


| FLAGH | Data on high <br> Format: F1.0 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Valid |
| Value | Label | N | Percent | Percent |
| 0 | No | 6609 | 57.0 | 57.0 |
| 1 | Yes | 4992 | 43.0 | 43.0 |
| Total | valid cases | 11601 | 100.0 |  |
| Syste | ssing | 0 | 0.0 |  |

## Class Type Variables

GKCLASST Class type kindergarten
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | :--- | :--- | :---: |
| 1 | Small class | 1900 | 16.4 | 30.0 |
| 2 | Regular class | 2194 | 18.9 | 34.7 |
| 3 | Regular + aide | 2231 | 19.2 | 35.3 |
|  | class |  |  |  |
| Total of valid cases | 6325 | 54.5 | 100.0 |  |
| System missing | 5276 | 45.5 |  |  |


| G1CLASST | Class type grade <br> Format: F1.0 |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
|  |  |  |  | Valid |
| Value | Label | Nercent | Percent |  |
| 1 | Small class | 1925 | 16.6 | 28.2 |
| 2 | Regular class | 2584 | 22.3 | 37.8 |
| 3 | Regular + aide | 2320 | 20.0 | 34.0 |
|  | class | 6829 | 58.9 | 100.0 |
| Total of valid cases | 4772 | 41.1 |  |  |

## G2CLASST Class type grade 2

Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | :--- | :--- | :---: |
| 1 | Small class | 2016 | 17.4 | 29.5 |
| 2 | Regular class | 2329 | 20.1 | 34.0 |
| 3 | Regular + aide | 2495 | 21.5 | 36.5 |
|  | class |  |  |  |
| Total of valid cases | 6840 | 59.0 | 100.0 |  |
| System missing | 4761 | 41.0 |  |  |

### 3.12 STUDENT DATA

| G3CLASST | Class type grade $\mathbf{3}$ <br> Format: F1.0 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Value | Label | N | Percent | Valid |
| 1 | Small class | 2174 | 18.7 | 32.0 |
| 2 | Regular class | 2085 | 18.0 | 30.7 |
| 3 | Regular + aide | 2543 | 21.9 | 37.4 |
|  | class |  |  |  |
| Total of valid cases | 6802 | 58.6 | 100.0 |  |
| System missing | 4799 | 41.4 |  |  |

CMPSTYPE Class type composite
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | :---: | ---: |
| 1 | Small | 3202 | 27.6 | 29.1 |
| 2 | Regular | 3045 | 26.2 | 27.7 |
| 3 | Aide | 4741 | 40.9 | 43.1 |
| Total of | valid cases | 10988 | 94.7 | 100.0 |
| System missing | 613 | 5.3 |  |  |

CMPSDURA Duration composite
Format: F1.0

| Value Label |  |  | Valid |
| :--- | ---: | :---: | :---: |
| Percent |  |  |  |

YEARSSTA Number of years in STAR
Format: F5.0

| Value Label |  |  | Valid |
| :--- | ---: | :---: | :---: |
| Percent |  |  |  |


| YEARSSMA | Number of years in small classes <br> Format: F5.0 |  |  |  |
| :--- | :--- | ---: | ---: | ---: |
|  |  |  |  | Valid |
| Value | Label | 7920 | 68.3 | 68.3 |
| 0 |  | 1585 | 13.7 | 13.7 |
| 1 |  | 515 | 6.2 | 6.2 |
| 2 |  | 857 | 4.5 | 4.5 |
| 3 |  | 11601 | 100.0 | 7.4 |
| 4 | 0 | 0.0 | 100.0 |  |
| Total of valid cases |  |  |  |  |

## Kindergarten School Variables



## Kindergarten Teacher Variables

| GKTCHID | Kindergarten teacher ID <br> Format: F8.0 <br> Range: 11203801 to 26494505 <br> System missing: $N=5276$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| GKTGEN | Teacher gender kindergarten <br> Format: F1.0 |  |  |  |
| Value | Label | N | Percent | Valid Percent |
| 1 | Male | 0 | 0.0 | 0.0 |
| 2 | Female | 6325 | 54.5 | 100.0 |
| Total of | valid cases | 6325 | 54.5 | 100.0 |
| System mi | ssing | 5276 | 45.5 |  |

### 3.14 STUDENT DATA

| GKTRACE | Teacher race/ethnicity kindergarten <br> Format: F1.0 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Value | Label | N | Percent | Valid |
| 1 | White | 5246 | 45.2 | 83.5 |
| 2 | Black | 1036 | 8.9 | 16.5 |
| 3 | Asian | 0 | 0.0 | 0.0 |
| 4 | Hispanic | 0 | 0.0 | 0.0 |
| 5 | Native American | 0 | 0.0 | 0.0 |
| 6 | Other | 0 | 0.0 | 0.0 |
| Total of valid cases | 6282 | 54.2 | 100.0 |  |
| System missing | 5319 | 45.8 |  |  |

## GKTHIGHD Teacher highest degree kindergarten

Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | :---: |
| 1 | Associates | 0 | 0.0 | 0.0 |
| 2 | Bachelors | 4119 | 35.5 | 65.3 |
| 3 | Masters | 1981 | 17.1 | 31.4 |
| 4 | Masters | 161 | 1.4 | 2.6 |
| 5 | Specialist | 43 | 0.4 | 0.7 |
| 6 | Doctoral | 0 | 0.0 | 0.0 |
| Total of valid cases | 6304 | 54.3 | 100.0 |  |
| System missing | 5297 | 45.7 |  |  |


| GKTCAREE | Teacher career ladder level kindergarten <br>  <br>  <br> Format: F1.0 |  |  |  |
| :--- | :--- | ---: | :---: | ---: |
| Value | Label |  |  | Valid |
| 1 | Chose not to be on | 0 | 0.0 | 0.0 |
|  | Career ladder |  |  |  |
| 2 | Apprentice | 514 | 4.4 | 9.0 |
| 3 | Probation | 334 | 2.9 | 5.8 |
| 4 | Ladder level 1 | 4671 | 40.3 | 81.5 |
| 5 | Ladder level 2 | 119 | 1.0 | 2.1 |
| 6 | Ladder level 3 | 54 | 0.5 | 0.9 |
| 7 | Pending | 37 | 0.3 | 0.6 |
| Total of valid cases | 5729 | 49.4 | 100.0 |  |
| System missing | 5872 | 50.6 |  |  |


| GKTYE | Years of $t$ <br> Format: F2 | ching | nce kir |  |
| :---: | :---: | :---: | :---: | :---: |
| Value | Label | N | Percent | Valid |
| 0 |  | 302 | 2.6 | 4.8 |
| 1 |  | 312 | 2.7 | 4.9 |
| 2 |  | 268 | 2.3 | 4.3 |
| 3 |  | 374 | 3.2 | 5.9 |
| 4 |  | 209 | 1.8 | 3.3 |
| 5 |  | 399 | 3.4 | 6.3 |
| 6 |  | 445 | 3.8 | 7.1 |
| 7 |  | 187 | 1.6 | 3.0 |
| 8 |  | 512 | 4.4 | 8.1 |
| 9 |  | 236 | 2.0 | 3.7 |
| 10 |  | 351 | 3.0 | 5.6 |
| 11 |  | 414 | 3.6 | 6.6 |
| 12 |  | 523 | 4.5 | 8.3 |
| 13 |  | 495 | 4.3 | 7.9 |
| 14 |  | 229 | 2.0 | 3.6 |
| 15 |  | 224 | 1.9 | 3.6 |
| 16 |  | 143 | 1.2 | 2.3 |
| 17 |  | 154 | 1.3 | 2.4 |
| 18 |  | 58 | 0.5 | 0.9 |
| 19 |  | 55 | 0.5 | 0.9 |
| 20 |  | 144 | 1.2 | 2.3 |
| 21 |  | 103 | 0.9 | 1.6 |
| 22 |  | 64 | 0.6 | 1.0 |
| 24 |  | 68 | 0.6 | 1.1 |
| 27 |  | 35 | 0.3 | 0.6 |
| Total | valid cases | 6304 | 54.3 | 100.0 |
| Syste | ssing | 5297 | 45.7 |  |

### 3.16 STUDENT DATA

| GKCLASSS | Class size kindergarten <br> Format: F5.0 |  |  | Valid Percent |
| :---: | :---: | :---: | :---: | :---: |
|  | Label | N | Percent |  |
| 12 |  | 96 | 0.8 | 1.5 |
| 13 |  | 247 | 2.1 | 3.9 |
| 14 |  | 308 | 2.7 | 4.9 |
| 15 |  | 360 | 3.1 | 5.7 |
| 16 |  | 512 | 4.4 | 8.1 |
| 17 |  | 493 | 4.2 | 7.8 |
| 18 |  | 54 | 0.5 | 0.9 |
| 19 |  | 247 | 2.1 | 3.9 |
| 20 |  | 240 | 2.1 | 3.8 |
| 21 |  | 546 | 4.7 | 8.6 |
| 22 |  | 880 | 7.6 | 13.9 |
| 23 |  | 851 | 7.3 | 13.5 |
| 24 |  | 792 | 6.8 | 12.5 |
| 25 |  | 300 | 2.6 | 4.7 |
| 26 |  | 182 | 1.6 | 2.9 |
| 27 |  | 189 | 1.6 | 3.0 |
| 28 |  | 28 | 0.2 | 0.4 |
| Total of | valid cases | 6325 | 54.5 | 100.0 |
| System mi | ssing | 5276 | 45.5 |  |

## Kindergarten Student Variables

GKFREELU Free/reduced lunch status kindergarten
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | :--- | :--- | ---: |
| 1 | Free lunch | 3052 | 26.3 | 48.4 |
| 2 | Non-free lunch | 3248 | 28.0 | 51.6 |
| Total of | valid cases | 6300 | 54.3 | 100.0 |
| System missing | 5301 | 45.7 |  |  |

GKREPEAT Repeating kindergarten in 1985-1986 school year Format: F1.0

|  |  |  |  | Valid |
| :--- | :---: | :---: | :---: | :---: |
| Value | Label | N | Percent | Percent |
| 1 | Yes | 6044 | 52.1 | 96.0 |
| 2 | No | 253 | 2.2 | 4.0 |
| Total of valid cases | 6297 | 54.3 | 100.0 |  |
| System missing | 5304 | 45.7 |  |  |



### 3.18 STUDENT DATA

```
GKMOTIVR Motivation raw score SCAMIN kindergarten
    Format: F5.0
    Range: 0 to 36
    System missing: N = 6563
GKSELFCO Self-concept raw score SCAMIN kindergarten
    Format: F5.0
    Range: 0 to 72
    System missing: N = 6563
```


## Grade 1 School Variables



## Grade 1 Teacher Variables

G1TCHID Grade 1 teacher ID*
Format: F8.0
Range: 11203804 to 26494510
System missing: N = 4772
G1TGEN Teacher gender grade 1
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Male | 29 | 0.2 | 0.4 |
| 2 | Female | 6781 | 58.5 | 99.6 |
| Total of | valid cases | 6810 | 58.7 | 100.0 |
| System missing | 4791 | 41.3 |  |  |

*Variable also in comparison student data file

| G1TRACE | Teacher race/ethnicity grade <br> Format: F1.0 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Value | Label | N | Percent | Valid |
| 1 | White | 5623 | 48.5 | 82.6 |
| 2 | Black | 1187 | 10.2 | 17.4 |
| 3 | Asian | 0 | 0.0 | 0.0 |
| 4 | Hispanic | 0 | 0.0 | 0.0 |
| 5 | Native American | 0 | 0.0 | 0.0 |
| 6 | Other | 0 | 0.0 | 0.0 |
| Total of valid cases | 6810 | 58.7 | 100.0 |  |
| System missing | 4791 | 41.3 |  |  |

G1THIGHD Teacher highest degree grade 1
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | :---: |
| 1 | Associates | 0 | Percent | Percent |
| 2 | Bachelors | 4456 | 38.0 | 0.0 |
| 3 | Masters | 2294 | 19.8 | 65.4 |
| 4 | Masters | 0 | 0.0 | 33.7 |
| 5 | Specialist | 38 | 0.3 | 0.0 |
| 6 | Doctoral | 22 | 0.2 | 0.6 |
| Total of valid cases | 6810 | 58.7 | 0.3 |  |
| System missing | 4791 | 41.3 |  |  |


| G1TCAREE | Teacher career ladd <br> Format: F1.0 | r le | $\text { rade } 1$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Value | Label | N | Percent | Valid Percent |
| 1 | Chose not to be on career ladder | 506 | 4.4 | 7.5 |
| 2 | Apprentice | 718 | 6.2 | 10.6 |
| 3 | Probation | 666 | 5.7 | 9.8 |
| 4 | Ladder level 1 | 4492 | 38.7 | 66.2 |
| 5 | Ladder level 2 | 114 | 1.0 | 1.7 |
| 6 | Ladder level 3 | 291 | 2.5 | 4.3 |
| 7 | Pending | 0 | 0.0 | 0.0 |
| Total of | valid cases | 6787 | 58.5 | 100.0 |
| System mis | ssing | 4814 | 41.5 |  |

### 3.20 STUDENT DATA

## G1TYEARS Years of total teaching experience grade 1 Format: F2.0

| Value Label | N | Percent | Valid Percent |
| :---: | :---: | :---: | :---: |
| 0 | 287 | 2.5 | 4.2 |
| 1 | 362 | 3.1 | 5.3 |
| 2 | 443 | 3.8 | 6.5 |
| 3 | 307 | 2.6 | 4.5 |
| 4 | 329 | 2.8 | 4.8 |
| 5 | 286 | 2.5 | 4.2 |
| 6 | 282 | 2.4 | 4.1 |
| 7 | 331 | 2.9 | 4.9 |
| 8 | 334 | 2.9 | 4.9 |
| 9 | 309 | 2.7 | 4.5 |
| 10 | 168 | 1.4 | 2.5 |
| 11 | 371 | 3.2 | 5.4 |
| 12 | 324 | 2.8 | 4.8 |
| 13 | 330 | 2.8 | 4.8 |
| 14 | 164 | 1.4 | 2.4 |
| 15 | 205 | 1.8 | 3.0 |
| 16 | 229 | 2.0 | 3.4 |
| 17 | 166 | 1.4 | 2.4 |
| 18 | 228 | 2.0 | 3.3 |
| 19 | 154 | 1.3 | 2.3 |
| 20 | 211 | 1.8 | 3.1 |
| 21 | 119 | 1.0 | 1.7 |
| 22 | 39 | 0.3 | 0.6 |
| 23 | 138 | 1.2 | 2.0 |
| 24 | 44 | 0.4 | 0.6 |
| 25 | 63 | 0.5 | 0.9 |
| 26 | 33 | 0.3 | 0.5 |
| 27 | 125 | 1.1 | 1.8 |
| 28 | 24 | 0.2 | 0.4 |
| 29 | 44 | 0.4 | 0.6 |
| 30 | 13 | 0.1 | 0.2 |
| 31 | 67 | 0.6 | 1.0 |
| 32 | 74 | 0.6 | 1.1 |
| 33 | 44 | 0.4 | 0.6 |
| 35 | 25 | 0.2 | 0.4 |
| 36 | 34 | 0.3 | 0.5 |
| 37 | 22 | 0.2 | 0.3 |
| 38 | 15 | 0.1 | 0.2 |
| 39 | 42 | 0.4 | 0.6 |
| 42 | 25 | 0.2 | 0.4 |
| Total of valid cases | 6810 | 58.7 | 100.0 |
| System missing | 4791 | 41.3 |  |

## Grade 1 Class Variables

| G1CLASSS | Class size grade $1 *$ <br> Format: F5.0 |  |  | Valid |
| :---: | :---: | :---: | :---: | :---: |
|  | Label | N | Percent |  |
| 12 |  | 24 | 0.2 | 0.4 |
| 13 |  | 182 | 1.6 | 2.7 |
| 14 |  | 252 | 2.2 | 3.7 |
| 15 |  | 465 | 4.0 | 6.8 |
| 16 |  | 272 | 2.3 | 4.0 |
| 17 |  | 578 | 5.0 | 8.5 |
| 18 |  | 144 | 1.2 | 2.1 |
| 19 |  | 190 | 1.6 | 2.8 |
| 20 |  | 340 | 2.9 | 5.0 |
| 21 |  | 756 | 6.5 | 11.1 |
| 22 |  | 924 | 8.0 | 13.5 |
| 23 |  | 897 | 7.7 | 13.1 |
| 24 |  | 648 | 5.6 | 9.5 |
| 25 |  | 400 | 3.4 | 5.9 |
| 26 |  | 364 | 3.1 | 5.3 |
| 27 |  | 162 | 1.4 | 2.4 |
| 28 |  | 84 | 0.7 | 1.2 |
| 29 |  | 87 | 0.7 | 1.3 |
| 30 |  | 60 | 0.5 | 0.9 |
| Total of | valid cases | 6829 | 58.9 | 100.0 |
| System mi | ssing | 4772 | 41.1 |  |

## Grade 1 Student Variables

G1FREELU Free/reduced lunch status grade 1
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | :--- | :--- | ---: |
| 1 | Free lunch | 3429 | 29.6 | 51.6 |
| 2 | Non-free lunch | 3221 | 27.8 | 48.4 |
| Total of $\left.\begin{array}{ll}\text { valid cases } & 6650 \\ \text { System missing } & 4951\end{array}\right) 42.7$ | 100.0 |  |  |  |

### 3.22 STUDENT DATA



* Variable also in comparison student data file

| G1TLISTS | Total listening scale score SAT grade 1* <br> Format: F5.0 <br> Range: 477 to 708 <br> System missing: $N=5045$ |
| :---: | :---: |
| G1WORDSK | Word study skills scale score SAT grade 1* <br> Format: F5.0 <br> Range: 317 to 601 <br> System missing: $N=5629$ |
| G1READBS | Reading raw score BSF grade 1* <br> Format: F5.0 <br> Range: 2 to 32 <br> System missing: $N=5065$ |
| G1MATHBS | Math raw score BSF grade 1* <br> Format: F5.0 <br> Range: 3 to 44 <br> System missing: N = 5088 |
| G1READ_B | Reading number objectives mastered BSF grade 1* <br> Format: F5.0 <br> Range: 0 to 8 <br> System missing: N = 5888 |
| G1MATH_B | Math number objectives mastered BSF grade 1* <br> Format: F5.0 <br> Range: 0 to 11 <br> System missing: N = 5916 |
| G1READ_C | Reading percent objectives mastered BSF grade 1* <br> Format: F5.0 <br> Range: 0 to 100 <br> System missing: N = 5888 |
| G1MATH_C | Math percent objectives mastered BSF grade 1* <br> Format: F5.0 <br> Range: 0 to 100 <br> System missing: N = 5916 |
| G1MOTIVR | Motivation raw score SCAMIN grade 1 <br> Format: F5.0 <br> Range: 27 to 60 <br> System missing: N = 5749 |

*Variable also in comparison student data file

### 3.24 STUDENT DATA

```
G1SELFCO Self-concept raw score SCAMIN grade 1
    Format: 5.0
    Range: 14 to 60
    System missing: N = 5749
```


## Grade 2 School Variables

| G2SCHID | Grade 2 School ID* |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Format: F6.0 |  |  |  |
|  | Range: 112038 to 264945 |  |  |  |
|  | System mis | 4761 |  |  |
| G2SURBAN | School urbanicity grade 2 |  |  |  |
| Value | Label | N | Percent | Valid <br> Percent |
| 1 | Inner city | 1481 | 12.8 | 21.6 |
| 2 | Suburban | 1710 | 14.7 | 25.0 |
| 3 | Rural | 3167 | 27.3 | 46.3 |
| 4 | Urban | 482 | 4.2 | 7.0 |
| Total of val | valid cases | 6840 | 59.0 | 100.0 |
| System mis | ssing | 4761 | 41.0 |  |

## Grade 2 Teacher Variables

```
G2TCHID Grade 2 teacher ID*
```

    Format: F8.0
    Range: 112030807 to 26494516
    System missing: \(N=4761\)
    G2TGEN Teacher gender grade 2
Format: F1.0

| Value | Label |  | Valid |  |
| :--- | :---: | :---: | :---: | :---: |
| 1 | Male | 71 | Percent | Percent |
| 2 | Female | 6709 | 57.6 | 1.0 |
| Total of | valid cases | 6780 | 58.4 | 99.0 |
| System missing | 4821 | 41.6 | 100.0 |  |


| G2TRACE | Teacher race/ethnicity grade 2 <br> Format: F1.0 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Value | Label | N | Percent | Valid |
| 1 | Whitercent |  |  |  |

## G2THIGHD Teacher highest degree grade 2

Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | ---: | :---: |
| 1 | Associates | 0 | 0.0 | 0.0 |
| 2 | Bachelors | 4250 | 36.6 | 62.7 |
| 3 | Masters | 2427 | 20.9 | 35.8 |
| 4 | Masters | 0 | 0.0 | 0.0 |
| 5 | Specialist | 67 | 0.6 | 1.0 |
| 6 | Doctoral | 36 | 0.3 | 0.5 |
| Total of valid cases | 6780 | 58.4 | 100.0 |  |
| System missing | 4821 | 41.6 |  |  |

G2TCAREE Teacher career ladder level grade 2
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | :---: | :---: |
|  | Chose not to be on | 755 | 6.5 | 11.2 |
|  | Career ladder |  |  |  |
| 2 | Apprentice | 482 | 4.2 | 7.2 |
| 3 | Probation | 411 | 3.5 | 6.1 |
| 4 | Ladder level 1 | 4703 | 40.5 | 70.0 |
| 5 | Ladder level 2 | 123 | 1.1 | 1.8 |
| 6 | Ladder level 3 | 247 | 2.1 | 3.7 |
| 7 | Pending | 0 | 0.0 | 0.0 |
| Total of valid cases | 6721 | 57.9 | 100.0 |  |
| System missing | 4880 | 42.1 |  |  |

### 3.26 STUDENT DATA

G2TYEARS Years of total teaching experience grade 2 Format: F2.0

| Value Label |  |  | Valid |
| :--- | ---: | ---: | ---: |
| Percent |  |  |  |


| G2TTRAIN | Attend STAR teache <br> Format: F2.0 | tra | $\text { de } 2$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Value | Label | N | Percent | Valid Percent |
| 1 | Yes, attended STAR training | 1108 | 9.6 | 16.2 |
| 2 | No, did not attend STAR training | 5732 | 49.4 | 83.8 |
| Total of | valid cases | 6840 | 59.0 | 100.0 |
| System mi | ssing | 4761 | 41.0 |  |

## Grade 2 Class Variables

G2CLASSS Class size grade 2*
Format: F5.0

| Value |  |  |  |
| :--- | ---: | :---: | :---: |
| Label | N | Percent | Valid <br> Percent |
| 12 | 36 | 0.3 | 0.5 |
| 13 | 208 | 1.8 | 3.0 |
| 14 | 378 | 3.3 | 5.5 |
| 15 | 480 | 4.1 | 7.0 |
| 16 | 480 | 4.1 | 7.0 |
| 17 | 323 | 2.8 | 4.7 |
| 18 | 108 | 0.9 | 1.6 |
| 19 | 133 | 1.1 | 1.9 |
| 20 | 60 | 0.5 | 0.9 |
| 21 | 378 | 3.3 | 5.5 |
| 22 | 968 | 8.3 | 14.2 |
| 23 | 943 | 8.1 | 13.8 |
| 24 | 1128 | 9.7 | 16.5 |
| 25 | 600 | 5.2 | 8.8 |
| 26 | 338 | 2.9 | 4.9 |
| 27 | 135 | 1.2 | 2.0 |
| 28 | 28 | 0.2 | 0.4 |
| 29 | 116 | 1.0 | 1.7 |
| Total of valid cases | 6840 | 59.0 | 100.0 |
| System missing | 4761 | 41.0 |  |

### 3.28 STUDENT DATA

## Grade 2 Student Variables


*Variable also in comparison student data file

```
G2MATHBS Math raw score BSF grade 2*
        Format: F5.0
        Range: 11 to 60
        System missing: N = 5138
G2READ_B Reading number objectives mastered BSF grade 2*
        Format: F5.0
        Range: 0 to 12
        System missing: N = 5148
G2MATH_B Math number objectives mastered BSF grade 2*
        Format: F5.0
        Range: 0 to 15
        System missing: N = 5130
G2READ_C Reading percent objectives mastered BSF grade 2*
    Format: F5.0
    Range: 18 to 100
    System missing: N = 5130
G2MATH_C Math percent objectives mastered BSF grade 2
    Format: F5.0
    Range: 0 to 100
    System missing: N = 5130
G2MOTIVR Motivation raw score SCAMIN grade 2
    Format: F5.0
    Range: 16 to 60
    System missing: N = 5483
G2SELFCO Self-concept raw score SCAMIN grade 2
    Format: F5.0
    Range: 15 to 60
    System missing: N = 5483
```


## Grade 3 School Variables

```
G3SCHID Grade 3 School ID*
Format: F6.0
Range: 112038 to 264945
System missing: \(N=4799\)
```

*Variable also in comparison student data file

### 3.30 STUDENT DATA

| G3SURBAN | School urbanicity <br> Format: F1.0 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | nrade 3 |  | Valid |
| Value | Label | 1335 | 11.5 | 19.6 |
| 1 | Inner city | 1720 | 14.8 | 25.3 |
| 2 | Suburban | 3240 | 27.9 | 47.6 |
| 3 | Rural | 507 | 4.4 | 7.5 |
| 4 | Urban | 6802 | 58.6 | 100.0 |
| Total of valid cases | 4799 | 41.4 |  |  |
| System missing |  |  |  |  |

## Grade 3 Teacher Variables

| G3TCHID | Grade 3 teacher <br> Format: F8.0 <br> Range: 11203810 <br> System missing: | $\begin{gathered} 264945 \\ 4800 \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
| G3TGEN | Teacher gender <br> Format: F1.0 | $3$ |  |  |
| Value | Label | N | Percent | Valid <br> Percent |
| 1 | Male | 228 | 2.0 | 3.4 |
| 2 | Female | 6523 | 56.2 | 96.6 |
| Total of v | valid cases | 6751 | 58.2 | 100.0 |
| System mis | ssing | 4850 | 41.8 |  |
| G3TRACE | Teacher race/eth <br> Format: F1.0 | ity gr | 3 |  |
| Value | Label | N | Percent | Valid Percent |
| 1 | White | 5328 | 45.9 | 78.9 |
| 2 | Black | 1409 | 12.1 | 20.9 |
| 3 | Asian | 14 | 0.1 | 0.2 |
| 4 | Hispanic | 0 | 0.0 | 0.0 |
| 5 | Native American | 0 | 0.0 | 0.0 |
| 6 | Other | 0 | 0.0 | 0.0 |
| Total of val | valid cases | 6751 | 58.2 | 100.0 |
| System mis | ssing | 4850 | 41.8 |  |


| G3THIGHD | Teacher highest degree grade <br>  <br> Format: F1.0 |  |  |  |
| :--- | :--- | ---: | :--- | ---: |
| Value | Label | N | Percent | Valid |
| 1 | Associates | 0 | 0.0 | 0.0 |
| 2 | Bachelors | 3762 | 32.4 | 55.8 |
| 3 | Masters | 2885 | 24.9 | 42.8 |
| 4 | Masters | 0 | 0.0 | 0.0 |
| 5 | Specialist | 89 | 0.8 | 1.3 |
| 6 | Doctoral | 0 | 0.0 | 0.0 |
| Total of valid cases | 6736 | 58.1 | 100.0 |  |
| System missing | 4865 | 41.9 |  |  |

G3TCAREE Teacher career ladder level grade 3
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :---: | :---: |
| 1 | Chose not to be on | 497 | 4.3 | 7.4 |
|  | career ladder |  |  |  |
| 2 | Apprentice | 316 | 2.7 | 4.7 |
| 3 | Probation | 550 | 4.7 | 8.1 |
| 4 | Ladder level 1 | 4437 | 38.2 | 65.7 |
| 5 | Ladder level 2 | 484 | 4.2 | 7.2 |
| 6 | Ladder level 3 | 467 | 4.0 | 6.9 |
| 7 | Pending | 0 | 0.0 | 0.0 |
| Total of valid cases | 6751 | 58.2 | 100.0 |  |
| System missing | 4850 | 41.8 |  |  |

## G3TYEARS Years of total teaching experience grade 3

Format: F2.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :---: | :---: | :---: | :---: |
| 0 | 215 | 1.9 | 3.2 |  |
| 1 | 154 | 1.3 | 2.3 |  |
| 2 | 216 | 1.9 | 3.2 |  |
| 3 | 234 | 2.0 | 3.5 |  |
| 4 | 210 | 1.8 | 3.1 |  |
| 5 | 292 | 2.5 | 4.3 |  |
| 6 | 155 | 1.3 | 2.3 |  |
| 7 | 285 | 2.5 | 4.2 |  |
| 8 | 304 | 2.6 | 4.5 |  |
| 9 | 308 | 2.7 | 4.6 |  |
| 10 | 188 | 1.6 | 2.8 |  |
| 11 | 229 | 2.0 | 3.4 |  |
| 12 | 246 | 2.1 | 3.6 |  |
| 13 | 284 | 2.4 | 4.2 |  |
| 14 | 357 | 3.1 | 5.3 |  |


| 15 | 390 | 3.4 | 5.8 |
| :--- | ---: | ---: | ---: |
| 16 | 234 | 2.0 | 3.5 |
| 17 | 266 | 2.3 | 3.9 |
| 18 | 263 | 2.3 | 3.9 |
| 19 | 369 | 3.2 | 5.5 |
| 20 | 130 | 1.1 | 1.9 |
| 21 | 155 | 1.3 | 2.3 |
| 22 | 215 | 1.9 | 3.2 |
| 23 | 118 | 1.0 | 1.7 |
| 24 | 117 | 1.0 | 1.7 |
| 25 | 95 | 0.8 | 1.4 |
| 26 | 156 | 1.3 | 2.3 |
| 27 | 15 | 0.1 | 0.2 |
| 28 | 70 | 0.6 | 1.0 |
| 29 | 70 | 0.6 | 1.0 |
| 30 | 100 | 0.9 | 1.5 |
| 31 | 94 | 0.8 | 1.4 |
| 32 | 25 | 0.2 | 0.4 |
| 33 | 52 | 0.4 | 0.8 |
| 34 | 15 | 0.1 | 0.2 |
| 36 | 77 | 0.7 | 1.1 |
| 37 | 23 | 0.2 | 0.3 |
| 38 | 25 | 0.2 | 0.4 |
| Total of valid cases | 6751 | 58.2 | 100.0 |
| System missing | 4850 | 41.8 |  |

## G3TTRAIN Attend STAR teacher training grade 3

Format: F2.0

| Value | Label | N | Percent | Valid Percent |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Yes, attended STAR training | 1161 | 10.0 | 17.1 |
| 2 | No, did not attend STAR training | 5641 | 48.6 | 82.9 |
| Total | valid cases | 6802 | 58.6 | 100.0 |
| System | sing | 4799 | 41.4 |  |

## Grade 3 Class Variables

| G3CLASSS | Class size grade 3* <br> Format: F5.0 |  |  |  |
| :--- | :--- | ---: | ---: | ---: |
| Value | Label | N |  | Percent | | Valid |
| :--- |
| Percent |

## Grade 3 Student Variables

| G3FREELU | Free/reduced 1 <br> Format: F1.0 | at | $\text { de } 3$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Value | Label | N | Percent | Valid <br> Percent |
| 1 | Free lunch | 3293 | 28.4 | 50.5 |
| 2 | Non-free lunch | 3227 | 27.8 | 49.5 |
| Total of | valid cases | 6520 | 56.2 | 100.0 |
| System mi | ssing | 5081 | 43.8 |  |


| G3PROMOT | Recommended for prom <br> Format: F1.0 | tio | grade | grade |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Valid |
| Value | Label | N | Percent | Percent |
| 1 | Yes, recommended | 6142 | 52.9 | 95.9 |
| 2 | No, not recommended | 260 | 2.2 | 4.1 |
| Total of | valid cases | 6402 | 55.2 | 100.0 |
| System mi | ssing | 5199 | 44.8 |  |

### 3.34 STUDENT DATA

```
G3PRESEN Days present at school grade 3
    Format: F5.0
    Range: 1 to 180
    System missing: N = 5021
G3ABSENT Days absent from school grade 3
    Format: F5.0
    Range: 0 to 77
    System missing: N = 5014
G3TREADS Total reading scale scores SAT Grade 3*
    Format: F5.0
    Range: 499 to 775
    System missing: N = 5601
G3TMATHS Total math scale score SAT grade 3*
    Format: F5.0
    Range: 487 to 774
    System missing: N = 5524
G3TLLANGS Total language scale score SAT grade 3*
    Format: F5.0
    Range: 512 to 785
    System missing: N = 5511
G3TLISTS Total listening scale score SAT grade 3*
    Format: F5.0
    Range: 524 to 779
    System missing: N = 5527
G3SCIENC Science scale score SAT grade 3
    Format: F5.0
    Range: 464 to 757
    System missing: N = 5280
G3SOCIAL Social science scale score SAT grade 3*
    Format: F5.0
    Range: 486 to 744
    System missing: N = 5275
G3SPELLS Spelling scale score SAT grade 3*
    Format: F5.0
    Range: 463 to 746
    System missing: N = 5264
```

```
G3VOCABS Vocabulary scale score SAT grade 3*
    Format: F5.0
    Range: 487 to 754
    System missing: N = 5279
G3MATHCO Math computation scale score SAT grade 3*
        Format: F5.0
        Range: 451 to 739
        System missing: N = 5254
G3MATHNU Concept of numbers scale score SAT grade 3*
        Format: F5.0
        Range: 452 to 739
        System missing: N = 5255
G3MATHAP Math applications scale score SAT grade 3*
    Format: F5.0
    Range: 427 to 726
    System missing: N = 5254
G3WORDSK Word study skills scale score SAT grade 3*
    Format: F5.0
    Range: 477 to 740
    System missing: N = 5252
G3READBS Reading raw score BSF grade 3*
    Format: F5.0
    Range: 6 to 40
    System missing: N = 5695
G3MATHBS Math raw score BSF grade 3*
    Format: F5.0
    Range: 8 to 60
    System missing: N = 5599
G3READ_B Reading number objectives mastered BSF grade 3*
    Format: F5.0
    Range: 0 to 10
    System missing: N = 5327
G3MATH_B Math number objectives mastered BSF grade 3*
    Format: F5.0
    Range: 0 to 15
    System missing: N = 5361
```


### 3.36

```
G3READ_C Reading percent objectives mastered BSF grade 3*
    Format: F5.0
    Range: 0 to 100
    System missing: N = 5695
G3MATH_C Math percent objectives mastered BSF grade 3*
    Format: F5.0
    Range: 0 to 100
    System missing: N = 5599
G3MOTIVR Motivation raw score SCAMIN grade 3
    Format: F5.0
    Range: 17 to 60
    System missing: N = 5472
G3SELFCO Self-concept raw score SCAMIN grade 3
    Format: 5.0
    Range: 12 to 60
    System missing: N = 5472
```


## Grade 4 School Variables

G4SCHID Grade 4 School ID
Format: F6.0
Range: 112038 to 264945
System missing: $\mathrm{N}=6895$

G4SURBAN School urbanicity grade 4
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Inner city | 326 | 2.8 | 7.5 |
| 2 | Suburban | 1069 | 9.2 | 24.5 |
| 3 | Rural | 2596 | 22.4 | 59.6 |
| 4 | Urban | 363 | 3.1 | 8.3 |
| Total of valid cases | 4354 | 37.5 | 100.0 |  |
| System missing | 7247 | 62.5 |  |  |

## Grade 4 Teacher Variables

| G4TCHID | Grade 4 teacher <br> Format: F8.0 <br> Range: 11203813 <br> System missing: | $264945$ $9384$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
| G4TGEN | Teacher gender <br> Format: F1.0 |  |  |  |
| Value | Label | N | Percent | Valid Percent |
| 1 | Male | 125 | 1.1 | 5.6 |
| 2 | Female | 2092 | 18.0 | 94.4 |
| Total of v | valid cases | 2217 | 19.1 | 100.0 |
| System mis | ssing | 9384 | 80.9 |  |
| G4TRACE | ```Teacher race/eth Format: F1.0``` | ity gr | 4 |  |
| Value | Label | N | Percent | Valid Percent |
| 1 | White | 1840 | 15.9 | 83.9 |
| 2 | Black | 353 | 3.0 | 16.1 |
| 3 | Asian | 0 | 0.0 | 0.0 |
| 4 | Hispanic | 0 | 0.0 | 0.0 |
| 5 | Native American | 0 | 0.0 | 0.0 |
| 6 | Other | 0 | 0.0 | 0.0 |
| Total of va | valid cases | 2193 | 18.9 | 100.0 |
| System mis | ssing | 9408 | 81.1 |  |

## Grade 4 Class Variables

| G4NCLASS <br> Value | Number students class ros <br> Format: F5.0 <br> Label <br> N | grade 4 <br> Percent | Percent |
| :---: | :---: | :---: | :---: |
| 11 | 3 | 0.0 | 0.1 |
| 13 | 1 | 0.0 | 0.0 |
| 14 | 1 | 0.0 | 0.0 |
| 17 | 12 | 0.1 | 0.5 |
| 18 | 14 | 0.1 | 0.6 |
| 19 | 19 | 0.2 | 0.9 |
| 20 | 16 | 0.1 | 0.7 |
| 21 | 37 | 0.3 | 1.7 |
| 22 | 105 | 0.9 | 4.7 |
| 23 | 167 | 1.4 | 7.5 |
| 24 | 251 | 2.2 | 11.3 |
| 25 | 247 | 2.1 | 11.1 |

26
27
28
29
30
31
32
Total of valid cases
System missing

343
341
287
167
146
50
10
2217
9384
$3.0 \quad 15.5$
$2.9 \quad 15.4$
2.512 .9
$1.4 \quad 7.5$
$1.3 \quad 6.6$
$0.4 \quad 2.3$
$0.1 \quad 0.5$
$19.1 \quad 100.0$
80.9

G4NWHITE Number white students class roster grade 4 Format: F5.0
Range: 0 to 31
System missing: N = 9384

G4NBLACK Number black students class roster grade 4
Format: F5.0
Range: 0 to 30
System missing: N = 9384
G4NOTHER Number other race/ethnicity students class roster grade 4
Format: F5.0
Range: 0 to 5
System missing: N = 9384
G4PERNWH Percent non-white students in classroom
Format: F5.0
Range: 0 to 100
System missing: N = 9384
G4NFREEL Number students on free-reduced lunch class roster grade 4
Format: F5.0
Range: 0 to 28
System missing: N = 9523

## Grade 4 Student Variables

G4TREADS Total reading scale score CTBS grade 4
Format: F5.0
Range: 499 to 775
System missing: $N=5596$

```
G4TMATHS Total math scale score CTBS grade 4
    Format: F5.0
    Range: 492 to 840
    System missing: N = 7270
G4TLANGS Total language scale score CTBS grade 4
        Format: F5.0
        Range: 558 to 841
        System missing: N = 7359
G4TBATTS Total battery scale score CTBS grade 4
    Format: F5.0
    Range: 526 to 829
    System missing: N = 7288
G4SCIENC Science scale score CTBS grade 4
    Format: F5.0
    Range: 564 to 859
    System missing: N = 7277
G4SOCIAL Social science scale score CTBS grade 4
    Format: F5.0
    Range: 560 to 866
    System missing: N = 7276
G4READCO Reading comprehension scale score CTBS grade 4
    Format: F5.0
    Range: 528 to 836
    System missing: N = 7346
G4SPELLS Spelling scale score CTBS grade 4
    Format: F5.0
    Range: 496 to 826
    System missing: N = 7266
G4VOCABS Vocabulary scale score CTBS grade 4
    Format: F5.0
    Range: 526 to 830
    System missing: N = 7347
G4MATHCO Math computation scale score CTBS grade 4
    Format: F5.0
    Range: 487 to 821
    System missing: N = 7263
```


### 3.40 STUDENT DATA

```
G4MATH_A Math concepts and applications scale score CTBS
        grade 4
    Format: F5.0
    Range: 496 to 858
    System missing: N = 7268
G4LANGEX Language expression scale score CTBS grade 4
    Format: F5.0
    Range: 567 to 839
    System missing: N = 7351
G4LANGME Language mechanics scale score CTBS grade 4
    Format: F5.0
    Range: 549 to 843
    System missing: N = 7351
G4STUDYS Study skills scale score CTBS grade 4
    Format: F5.0
    Range: 503 to 859
    System missing: N = 7276
G4READBS Reading number objectives mastered BSF grade 4
    Format: F5.0
    Range: 0 to 7
    System missing: N = 7339
G4MATHBS Math number objectives mastered BSF grade
    Format: F5.0
    Range: 0 to 8
    System missing: N = 7261
```


## Grade 4 Student Participation Questionnaire

G4PTATTN Grade 4 Participation: Pays attention in class Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Never | 40 | 0.3 | 1.8 |
| 2 |  | 181 | 1.6 | 8.2 |
| 3 | Sometimes | 537 | 4.6 | 24.3 |
| 4 |  | 854 | 7.4 | 38.6 |
| 5 | Always | 2217 | 5.2 | 27.1 |
| Total of valid cases | 9384 | 80.1 | 100.0 |  |
| System missing |  |  |  |  |


| G4PTHWRK | Grade 4 Participation: <br> Format: F1.0 |  | Completes homework on time |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Label | N | Percent | Valid <br> Percent |
| 1 | Never | 61 | 0.5 | 2.8 |
| 2 |  | 170 | 1.5 | 7.7 |
| 3 | Sometimes | 416 | 3.6 | 18.8 |
| 4 |  | 638 | 5.5 | 28.9 |
| 5 | Always | 926 | 8.0 | 41.9 |
| Total of | valid cases | 2217 | 19.1 | 100.0 |
| System mi | ssing | 9384 | 80.9 |  |


| G4PTOTH | Grade 4 Participation: Works well with others <br> Format: F1.0 |  |  |  |
| :--- | :--- | ---: | :--- | ---: |
|  |  |  |  |  |
| Value | Label | N | Percent | Valid |
| 1 | Never | 40 | 0.3 | 1.8 |
| 2 |  | 170 | 1.5 | 7.7 |
| 3 | Sometimes | 705 | 3.5 | 18.3 |
| 4 |  | 841 | 6.6 | 34.4 |
| 5 | Always | 2217 | 7.2 | 37.9 |
| Total of valid cases | 9384 | 80.9 | 100.0 |  |
| System missing |  |  |  |  |

G4PTMTRL Grade 4 Participation: Loses materials
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Never | 675 | 5.8 | 30.1 |
| 2 |  | 511 | 4.4 | 23.2 |
| 3 | Sometimes | 628 | 5.4 | 28.5 |
| 4 |  | 309 | 2.7 | 14.0 |
| 5 | Always | 923 | 0.8 | 4.2 |
| Total of valid cases | 9385 | 19.1 | 100.0 |  |
| System missing |  | 80.9 |  |  |

G4PTLATE Grade 4 Participation: Comes late to class
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :---: | :---: |
| 1 | Never | 1629 | 14.0 | 73.5 |
| 2 |  | 259 | 2.2 | 11.7 |
| 3 | Sometimes | 204 | 1.8 | 9.2 |
| 4 |  | 90 | 0.8 | 4.1 |
| 5 | Always | 35 | 0.3 | 1.6 |
| Total of valid cases | 2217 | 19.1 | 100.0 |  |
| System missing | 9384 | 80.9 |  |  |

### 3.42 STUDENT DATA

| G4PTRIES | Grade 4 Participation: Tries to do work well <br> Format: F1.0 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Value | Label | N | Percent | Valid |
| 1 | Never | 109 | 0.9 | 4.9 |
| 2 |  | 233 | 2.0 | 10.5 |
| 3 | Sometimes | 497 | 4.3 | 22.4 |
| 4 |  | 616 | 5.3 | 27.8 |
| 5 | Always | 2217 | 6.6 | 34.4 |
| Total of valid cases | 9384 | 80.9 | 100.0 |  |
| System missing |  |  |  |  |

G4PTRSTL Grade 4 Participation: Acts restless
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :---: | :---: |
| 1 | Never | 878 | 7.6 | 39.6 |
| 2 |  | 522 | 4.5 | 23.5 |
| 3 | Sometimes | 487 | 4.2 | 22.0 |
| 4 |  | 225 | 1.9 | 10.1 |
| 5 | Always | 105 | 0.9 | 4.7 |
| Total of valid cases | 9217 | 19.1 | 100.0 |  |
| System missing |  |  |  |  |

G4PTDISC Grade 4 Participation: Participates in discussions Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :---: | :---: |
| 1 | Never | 116 | 1.0 | 5.2 |
| 2 |  | 260 | 2.2 | 11.7 |
| 3 | Sometimes | 650 | 5.6 | 29.3 |
| 4 |  | 569 | 4.9 | 25.7 |
| 5 | Always | 622 | 5.4 | 28.1 |
| Total of valid cases | 2217 | 19.1 | 100.0 |  |
| System missing | 9384 | 80.9 |  |  |

G4PTWORK Grade 4 Participation: Completes seat work Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Never | 50 | 0.4 | Percent | | Percent |
| :--- |



G4PTPERS Grade 4 Participation: Is persistent
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :---: | ---: |
| 1 | Never | 210 | 1.8 | 9.5 |
| 2 |  | 338 | 2.9 | 15.3 |
| 3 | Sometimes | 652 | 5.6 | 29.4 |
| 4 |  | 584 | 5.0 | 26.4 |
| 5 | Always | 232 | 3.7 | 19.5 |
| Total of valid cases | 9385 | 19.1 | 100.0 |  |
| System missing |  | 80.9 |  |  |

### 3.44 STUDENT DATA

| G4PT | Grade 4 Participation: Doesn't know what's going <br> Format: F1.0 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Valid |
| Value | Label | N | Percent | Percent |
| 1 | Never | 990 | 8.5 | 44.7 |
| 2 |  | 514 | 4.4 | 23.2 |
| 3 | Sometimes | 491 | 4.2 | 22.2 |
| 4 |  | 167 | 1.4 | 7.5 |
| 5 | Always | 54 | 0.5 | 2.4 |
| Total | valid cases | 2216 | 19.0 | 100.0 |
| Syste | ssing | 9385 | 80.9 |  |

G4PTEXTR Grade 4 Participation: Does extra work
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :---: | :---: |
| 1 | Never | 543 | 4.7 | 24.5 |
| 2 |  | 444 | 3.8 | 20.0 |
| 3 | Sometimes | 667 | 5.7 | 30.1 |
| 4 |  | 212 | 3.0 | 15.8 |
| 5 | Always | 2216 | 1.8 | 9.6 |
| Total of valid cases | 9385 | 80.9 | 100.0 |  |
| System missing |  |  |  |  |

G4PTWTHD Grade 4 Participation: Is withdrawn
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :--- | :---: |
| 1 | Never | 1390 | 12.0 | 62.7 |
| 2 |  | 385 | 3.3 | 17.4 |
| 3 | Sometimes | 290 | 2.5 | 13.1 |
| 4 |  | 115 | 1.0 | 5.2 |
| 5 | Always | 36 | 0.3 | 1.6 |
| Total of valid cases | 2216 | 19.1 | 100.0 |  |
| System missing | 9385 | 80.9 |  |  |

G4PTEFRT Grade 4 Participation: Makes effort
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Never | 92 | 0.8 | 4.2 |
| 2 |  | 207 | 1.8 | 9.3 |
| 3 | Sometimes | 526 | 4.5 | 23.7 |
| 4 |  | 669 | 5.8 | 30.2 |
| 5 | Always | 722 | 6.2 | 32.6 |
| Total of valid cases | 2216 | 19.1 | 100.0 |  |
| System missing | 9385 | 80.9 |  |  |


| G4PTCRIT | Grade 4 Participation: Is critical of achievers <br> Format: F1.0 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Value | Label | N | Percent | Valid |
| 1 | Never | 1667 | 14.4 | 75.2 |
| 2 |  | 306 | 2.6 | 13.8 |
| 3 | Sometimes | 183 | 1.6 | 8.3 |
| 4 |  | 48 | 0.4 | 2.2 |
| 5 |  | 12 | 0.1 | 0.5 |
| Total of valid cases | 2216 | 19.1 | 100.0 |  |
| System missing | 9385 | 80.9 |  |  |


| G4PT | Grade 4 Participation: Asks questions <br> Format: F1.0 |  |  | Valid <br> Percent |
| :---: | :---: | :---: | :---: | :---: |
|  | Label | N | Percent |  |
| 1 | Never | 147 | 1.3 | 6.6 |
| 2 |  | 206 | 1.8 | 9.3 |
| 3 | Sometimes | 855 | 7.4 | 38.6 |
| 4 |  | 600 | 5.2 | 27.1 |
| 5 | Always | 406 | 3.5 | 18.3 |
| Total | valid cases | 2214 | 19.1 | 100.0 |
| Syste | ssing | 9387 | 80.9 |  |

G4PTALKS Grade 4 Participation: Talks too much
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :---: | :---: |
| 1 | Never | 402 | 3.5 | 18.2 |
| 2 |  | 568 | 4.9 | 25.7 |
| 3 | Sometimes | 724 | 6.2 | 32.7 |
| 4 |  | 299 | 2.6 | 13.5 |
| 5 | Always | 221 | 1.9 | 10.0 |
| Total of valid cases | 9387 | 19.1 | 100.0 |  |
| System missing |  | 80.9 |  |  |

G4PTINTV Grade 4 Participation: Lacks initiative
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :---: | :---: |
| 1 | Never | 811 | 7.0 | 36.6 |
| 2 |  | 506 | 4.4 | 22.9 |
| 3 | Sometimes | 507 | 4.4 | 22.9 |
| 4 |  | 252 | 2.2 | 11.4 |
| 5 | Always | 137 | 1.2 | 6.2 |
| Total of valid cases | 2213 | 19.1 | 100.0 |  |
| System missing | 9388 | 80.9 |  |  |

### 3.46 STUDENT DATA

| G4PTEASY | Grade 4 Participation: Prefers easy problems <br> Format: F1.0 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Value | Label | N | Percent | Valid |
| 1 | Never | 382 | 3.3 | 17.3 |
| 2 |  | 481 | 4.1 | 21.7 |
| 3 | Sometimes | 754 | 6.5 | 34.1 |
| 4 |  | 388 | 3.3 | 17.5 |
| 5 | 208 | 1.8 | 9.4 |  |
| Total of valid cases | 2213 | 19.1 | 100.0 |  |
| System missing | 9388 | 80.9 |  |  |


| G4PTCRTS | Grade 4 Participation: Criticizes subject matter  <br>  Format: F1.0 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Value | Label | N | Percent | Palid |
| 1 | Never | 1490 | 12.8 | 67.3 |
| 2 |  | 448 | 3.9 | 20.2 |
| 3 | Sometimes | 193 | 1.7 | 8.7 |
| 4 |  | 65 | 0.6 | 2.9 |
| 5 |  | 17 | 0.1 | 0.8 |
| Total of valid cases | 2213 | 19.1 | 100.0 |  |
| System missing | 9388 | 80.9 |  |  |

G4PTFNSH | Grade 4 Participation: Tries to finish difficult |
| :--- |
| work |

Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Never | 117 | 1.0 | 5.3 |
| 2 |  | 218 | 1.9 | 9.9 |
| 3 | Sometimes | 413 | 3.6 | 18.7 |
| 4 |  | 625 | 5.4 | 28.2 |
| 5 | Always | 840 | 7.2 | 38.0 |
| Total of valid cases | 9388 | 19.1 | 100.0 |  |
| System missing |  | 80.9 |  |  |



G4PTSEEK Grade 4 Participation: Seeks reference material Format: F1.0

| Value | Label |  |  | Valid <br> Percent |
| :--- | :--- | ---: | :---: | :---: |
| 1 | Never | 345 | Percent | 3.0 |
| 2 |  | 385 | 3.3 | 15.6 |
| 3 | Sometimes | 739 | 6.4 | 17.4 |
| 4 |  | 432 | 3.7 | 19.4 |
| 5 | Always | 2212 | 2.7 | 14.1 |
| Total of valid cases | 9388 | 19.1 | 100.0 |  |
| System missing |  | 80.9 |  |  |

G4PTDSRG Grade 4 Participation: Is easily discouraged
Format: F1.0


### 3.48 STUDENT DATA

| G4PTDISS | Grade 4 Participation: Discusses subject matter <br> outside of class <br> Format: F1.0 |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
|  |  |  |  |  |
| Value | Label | N | Percent | Palid |
| 1 | Never | 427 | 3.7 | 19.3 |
| 2 |  | 370 | 3.2 | 16.7 |
| 3 | Sometimes | 776 | 6.7 | 35.1 |
| 4 |  | 398 | 3.4 | 18.0 |
| 5 | 242 | 2.1 | 10.9 |  |
| Total of valid cases | 2213 | 19.1 | 100.0 |  |
| System missing | 9388 | 80.9 |  |  |

G4PTEXTC Grade 4 Participation: Attends school events Format F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | ---: |
| Varcent | Percent |  |  |  |

G4PTPERF Grade 4 Participation: Overall academic performance Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | :---: | :---: |
| Vercent |  |  |  |  |

G4PTSPED Grade 4 Participation: Attends special education Format: F1.0

|  |  |  |  | Valid |
| :--- | :--- | :---: | :---: | :---: |
| Value | Label | N | Percent | Percent |
| 1 | No | 1909 | 16.5 | 87.9 |
| 2 | Yes | 264 | 2.3 | 12.1 |
| Total of | valid cases | 2173 | 18.7 | 100.0 |
| System missing | 9428 | 81.3 |  |  |

```
G4PTEFFR Grade 4 Participation subscore: Effort
    Format: F5.0
    Range: 15 to 65
    System missing: N = 9389
G4PTINIT Grade 4 Participation subscore: Initiative
    Format: F5.0
    Range: 8 to 40
    System missing: N = 9389
G4PTNONP Grade 4 Participation subscore: Nonparticipatory
        behavior
        Format: F5.0
        Range: 4 to 20
        System missing: N = 9389
G4PTVALU Grade 4 Participation subscore: Value
    Format: F5.0
    Range: 3 to 15
    System missing: N = 9389
```


## Grade 5 School Variables

```
G5SCHID Grade 5 School ID
Format: F6.0
Range: 112038 to 264945
System missing: \(N=9008\)
```


## Grade 5 Student Variables

```
G5TREADS Total reading scale score CTBS grade 5
Format: F5.0
Range: 545 to 851
System missing: N = 9010
G5TMATHS Total math scale score CTBS grade 5
Format: F5.0
Range: 532 to 857
System missing: N = 9012
G5TLANGS Total language scale score CTBS grade 5
Format: F5.0
Range: 576 to 859
System missing: N = 9010
```

```
G5TBATTS Total battery scale score CTBS grade 5
    Format: F5.0
    Range: 551 to 837
    System missing: N = 9014
G5SCIENC Science scale score CTBS grade 5
    Format: F5.0
    Range: 586 to 888
    System missing: N = 9016
G5SOCIAL Social science scale score CTBS grade 5
    Format: F5.0
    Range: 587 to 871
    System missing: N = 9017
G5READCO Reading comprehension scale score CTBS grade 5
    Format: F5.0
    Range: 553 to 860
    System missing: N = 9010
G5SPELLS Spelling scale score CTBS grade 5
    Format: F5.0
    Range: 536 to 847
    System missing: N = 9010
G5VOCABS Vocabulary scale score CTBS grade 5
    Format: F5.0
    Range: 537 to 841
    System missing: N = 9009
G5MATHCO Math computation scale score CTBS grade 5
    Format: F5.0
    Range: 530 to 832
    System missing: N = 9011
G5MATH_A Math concepts and applications scale score CTBS
    grade 5
    Format: F5.0
    Range: 533 to 881
    System missing: N = 9012
G5LANGEX Language expression scale score CTBS grade 5
    Format: F5.0
    Range: 578 to 860
    System missing: N = 9010
```

```
G5LANGME Language mechanics scale score CTBS grade 5
    Format: F5.0
    Range: 574 to 858
    System missing: N = 9009
G5STUDYS Study skills scale score CTBS grade 5
    Format: F5.0
    Range: 558 to 873
    System missing: N = 9014
G5READBS Reading number objectives mastered BSF grade 5
    Format: F5.0
    Range: 0 to 7
    System missing: N = 9012
G5MATHBS Math number objectives mastered BSF grade 5
    Format: F5.0
    Range: 0 to 9
    System missing: N = 9029
```


## Grade 6 School Variables

```
G6SCHID Grade 6 School ID
Format: F6.0
Range: 105012 to 265956
System missing: \(N=5160\)
```


## Grade 6 Student Variables

```
G6TREADS Total reading scale score CTBS grade 6
Format: F5.0
Range: 571 to 878
System missing: N = 5173
G6TMATHS Total math scale score CTBS grade 6
Format: F5.0
Range: 553 to 874
System missing: N = 5179
G6TLANGS Total language scale score CTBS grade 6
Format: F5.0
Range: 595 to 872
System missing: N = 5183
```

```
G6SCIENC Science scale score CTBS grade 6
    Format: F5.0
    Range: 595 to 899
    System missing: N = 5181
G6SOCIAL Social science scale score CTBS grade 6
    Format: F5.0
    Range: 601 to 880
    System missing: N = 5176
G6READBS Reading number objectives mastered BSF grade 6
    Format: F5.0
    Range: 0 to 7
    System missing: N = 8848
G6MATHBS Math number objectives mastered BSF grade 6
    Format: F5.0
    Range: 0 to 9
    System missing: N = 8859
```


## Grade 7 School Variables

```
G7SCHID Grade 7 School ID
Format: F6.0
Range: 112032 to 264950
System missing: \(N=6659\)
```


## Grade 7 Student Variables

```
G7TREADS Total reading scale score CTBS grade 7
Format: F5.0
Range: 588 to 892
System missing: \(N=6695\)
G7TMATHS Total math scale score CTBS grade 7
Format: F5.0
Range: 602 to 920
System missing: N = 6713
G7TLANGS Total language scale score CTBS grade 7
Format: F5.0
Range: 605 to 895
System missing: N = 6715
```

```
G7TBATTS Total battery scale score CTBS grade 7
    Format: F5.0
    Range: 612 to 902
    System missing: N = 6751
G7SCIENC Science scale score CTBS grade 7
    Format: F5.0
    Range: 627 to 912
    System missing: N = 6724
G7SOCIAL Social science scale score CTBS grade 7
    Format: F5.0
    Range: 625 to 898
    System missing: N = 6726
G7READCO Reading comprehension scale score CTBS grade 7
    Format: F5.0
    Range: 581 to 875
    System missing: N = 6692
G7SPELLS Spelling scale score CTBS grade 7
    Format: F5.0
    Range: 571 to 898
    System missing: N = 6686
G7VOCABS Vocabulary scale score CTBS grade 7
    Format: F5.0
    Range: 595 to 908
    System missing: N = 6691
G7MATHCO Math computation scale score CTBS grade 7
    Format: F5.0
    Range: 561 to 940
    System missing: N = 6695
G7MATH_A Math concepts and applications scale score CTBS
    grade 7
    Format: F5.0
    Range: 638 to 900
    System missing: N = 6700
G7LANGEX Language expression scale score CTBS grade 7
    Format: F5.0
    Range: 605 to 905
    System missing: N = 6699
```

```
G7LANGME Language mechanics scale score CTBS grade 7
    Format: F5.0
    Range: 605 to 884
    System missing: N = 6690
G7STUDYS Study skills scale score CTBS grade 7
    Format: F5.0
    Range: 627 to 899
    System missing: N = 6722
G7READBS Reading number objectives mastered BSF grade 7
    Format: F5.0
    Range: 0 to 7
    System missing: N = 6709
G7MATHBS Math number objectives mastered BSF grade 7
    Format: F5.0
    Range: 0 to 10
    System missing: N = 6728
```


## Grade 8 School Variables

```
G8SCHID Grade 8 School ID
Format: F6.0
Range: 104010 to 265956
System missing: \(N=5087\)
G8SURBAN School urbanicity grade 8 Format: F1.0
\begin{tabular}{llllc} 
Value & Label & N & Percent & \begin{tabular}{c} 
Valid \\
Percent
\end{tabular} \\
\hline 1 & Inner city & 1266 & 10.9 & 19.4 \\
2 & Suburban & 1779 & 15.3 & 27.3 \\
3 & Rural & 2925 & 25.2 & 44.9 \\
4 & Urban & 544 & 4.7 & 8.4 \\
Total of valid cases & 6514 & 56.2 & 100.0 \\
System missing & 5087 & 43.8 &
\end{tabular}
```


## Grade 8 Student Variables

```
G8TREADS Total reading scale score CTBS grade 8
Format: F5.0
Range: 588 to 892
System missing: N = 5377
```

```
G8TMATHS Total math scale score CTBS grade 8
    Format: F5.0
    Range: 572 to 920
    System missing: N = 5388
G8TLLANGS Total language scale score CTBS grade 8
    Format: F5.0
    Range: 605 to 895
    System missing: N = 5404
G8TBATTS Total battery scale score CTBS grade 8
    Format: F5.0
    Range: 599 to 902
    System missing: N = 6042
G8SCIENC Science scale score CTBS grade 8
    Format: F5.0
    Range: 627 to 912
    System missing: N = 5389
G8SOCIAL Social science scale score CTBS grade 8
    Format: F5.0
    Range: 625 to 898
    System missing: N = 5392
G8READCO Reading comprehension scale SCORE CTBS grade 8
    Format: F5.0
    Range: 581 to 875
    System missing: N = 5981
G8SPELLS Spelling scale score CTBS grade 8
    Format: F5.0
    Range: 571 to 898
    System missing: N = 5980
G8VOCABS Vocabulary scale score CTBS grade 8
    Format: F5.0
    Range: 595 to 908
    System missing: N = 5991
G8MATHCO Math computation scale score CTBS grade 8
    Format: F5.0
    Range: 561 to 940
    System missing: N = 5986
```

```
G8MATH_A Math concepts and applications scale score CTBS
        grade 8
    Format: F5.0
    Range: 583 to 900
    System missing: N = 5981
G8LANGEX Language expression scale score CTBS grade 8
    Format: F5.0
    Range: 605 to 905
    System missing: N = 5990
G8LANGME Language mechanics scale score CTBS grade 8
    Format: F5.0
    Range: 605 to 884
    System missing: N = 5984
G8STUDYS Study skills scale score CTBS grade 8
    Format: F5.0
    Range: 627 to 899
    System missing: N = 6001
G8READBS Reading number objectives mastered BSF grade 8
    Format: F5.0
    Range: 0 to 7
    System missing: N = 6333
G8MATHBS Math number objectives mastered BSF grade 8
    Format: F5.0
    Range: 0 to 10
    System missing: N = 6344
```


## Grade 8 Identification with School Questionnaire

```
G8IDPROU Grade 8 Identification: I feel proud being part of school
Format: F1.0
\begin{tabular}{llrrc} 
Value & Label & & & Valid \\
\hline 1 & Strongly agree & 998 & 8.6 & 27.4 \\
2 & Agree & 2350 & 20.3 & 64.4 \\
3 & Disagree & 243 & 2.1 & 6.7 \\
4 & Strongly disagree & 57 & .5 & 1.6 \\
Total of valid cases & 3648 & 31.4 & 100.0 \\
System missing & 7953 & 68.6 &
\end{tabular}
```

| G8IDRSPT | Grade 8 Identification: I am treated with respect Format: F1.0 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Label | N | Percent | Valid Percen |
| 1 | Strongly agree | 755 | 6.5 | 20.7 |
| 2 | Agree | 2184 | 18.8 | 59.9 |
| 3 | Disagree | 605 | 5.2 | 16.6 |
| 4 | Strongly disagree | 104 | 0.9 | 2.9 |
| Total of | valid cases | 3648 | 31.4 | 100.0 |
| System mi | ssing | 7953 | 68.6 |  |

G8IDGDJB Grade 8 Identification: I can get a good job even if grades bad
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Strongly agree | 138 | Percent | Percent |
| 2 | Agree | 704 | 6.2 | 3.8 |
| 3 | Disagree | 1900 | 16.4 | 19.3 |
| 4 | Strongly disagree | 906 | 7.8 | 52.1 |
| Total of valid cases | 3648 | 31.4 | 100.0 |  |
| System missing | 7953 | 68.6 |  |  |

## G8IDATTN Grade 8 Identification: I only get attention when $I$ cause trouble

Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Strongly agree | 87 | Percent | Percent |
| 2 | Agree | 233 | 2.7 | 2.4 |
| 3 | Disagree | 1793 | 15.5 | 6.4 |
| 4 | Strongly disagree | 1535 | 13.2 | 49.2 |
| Total of valid cases | 3648 | 31.4 | 100.0 |  |
| System missing | 7953 | 68.6 |  |  |

G8IDACTV Grade 8 Identification: I participate in a lot of activities at school
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | :--- | :--- | :---: |
| 1 | Strongly agree | 1330 | 11.5 | 36.5 |
| 2 | Agree | 1567 | 13.5 | 43.0 |
| 3 | Disagree | 620 | 5.3 | 17.0 |
| 4 | Strongly disagree | 131 | 1.1 | 3.6 |
| Total of valid cases | 3648 | 31.4 | 100.0 |  |
| System missing | 7953 | 68.6 |  |  |

### 3.58 STUDENT DATA

| G8IDIMPT | Grade 8 Identification: School is important in my <br> life <br>  <br>  <br>  <br> Format: F1.0 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Value | Label | N | Percent | Valid |
| 1 | Strongly agree | 1362 | 11.7 | 37.3 |
| 2 | Agree | 1759 | 15.2 | 48.2 |
| 3 | Disagree | 391 | 3.4 | 10.7 |
| 4 | Strongly disagree | 136 | 1.2 | 3.7 |
| Total of valid cases | 3648 | 31.4 | 100.0 |  |
| System missing | 7953 | 68.6 |  |  |

## G8IDPOPU Grade 8 Identification: I am less popular when I get better grades

Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | ---: |
| Varcent | Percent |  |  |  |

## G8IDUSLS Grade 8 Identification: What we learn in class is useless

Format: F1.0

| Value | Label |  |  | Valid <br> Percent |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Strongly agree | 122 | 1.1 | 3.3 |
| 2 | Agree | 513 | 4.4 | 14.1 |
| 3 | Disagree | 1723 | 14.9 | 47.2 |
| 4 | Strongly disagree | 1290 | 11.1 | 35.4 |
| Total of valid cases | 3648 | 31.4 | 100.0 |  |
| System missing | 7953 | 68.6 |  |  |

G8IDFRNL Grade 8 Identification: My friends like school a lot Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | :---: | :---: |
| 1 | Strongly agree | 199 | 1.7 | 5.5 |
| 2 | Agree | 1462 | 12.6 | 40.1 |
| 3 | Disagree | 1526 | 13.2 | 41.9 |
| 4 | Strongly disagree | 459 | 4.0 | 12.6 |
| Total of valid cases | 3646 | 31.4 | 100.0 |  |
| System missing | 7955 | 68.6 |  |  |

```
G8IDCARE Grade 8 Identification: My teachers don't care about me
```

Format: F1.0

| Value | Label |  |  | Valid <br> Percent |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Strongly agree | 86 | 0.7 | 2.4 |
| 2 | Agree | 315 | 2.7 | 8.6 |
| 3 | Disagree | 1799 | 15.5 | 49.3 |
| 4 | Strongly disagree | 1448 | 12.5 | 39.7 |
| Total of valid cases | 3648 | 31.4 | 100.0 |  |
| System missing | 7953 | 68.6 |  |  |

## G8IDPLAC Grade 8 Identification: I like being any place other than school

Format: F1.0

|  |  |  | Valid |  |
| :--- | :--- | ---: | :---: | :---: |
| Value | Label | N | Percent | Percent |
| 1 | Strongly agree | 426 | 3.7 | 11.8 |
| 2 | Agree | 1259 | 10.9 | 34.8 |
| 3 | Disagree | 1616 | 13.9 | 44.6 |
| 4 | Strongly disagree | 321 | 2.8 | 8.9 |
| Total of valid cases | 3622 | 31.2 | 100.0 |  |
| System missing | 7979 | 68.8 |  |  |

## G8IDPROB Grade 8 Identification: I can talk to teachers about problems

Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | :---: | :---: |
| N | Percent | Percent |  |  |

## G8IDUSEF Grade 8 Identification: What we learn in school will <br> be useful on job

Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :--- | :---: |
| 1 | Strongly agree | 1712 | 14.8 | 47.3 |
| 2 | Agree | 1583 | 13.6 | 43.7 |
| 3 | Disagree | 258 | 2.2 | 7.1 |
| 4 | Strongly disagree | 68 | 0.6 | 1.9 |
| Total of valid cases | 3621 | 31.2 | 100.0 |  |
| System missing | 7980 | 68.8 |  |  |

## G8IDFRNC Grade 8 Identification: My friends don't care about bad grades

Format: F1.0

| Value | Label | N | Percent | Valid Percent |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Strongly agree | 309 | 2.7 | 8.5 |
| 2 | Agree | 1147 | 9.9 | 31.7 |
| 3 | Disagree | 1610 | 13.9 | 44.5 |
| 4 | Strongly disagree | 550 | 4.7 | 15.2 |
| Total | valid cases | 3616 | 31.2 | 100.0 |
| System | sing | 7985 | 68.8 |  |

## G8IDTRYG Grade 8 Identification: Trying hard makes others dislike me

Format: F1.0

| Value | Label |  |  | Valid <br> Percent |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Strongly agree | 42 | Percent | 0.4 |
| 2 | Agree | 164 | 1.4 | 1.2 |
| 3 | Disagree | 1962 | 16.9 | 54.5 |
| 4 | Strongly disagree | 1447 | 12.5 | 40.0 |
| Total of valid cases | 3615 | 31.2 | 100.0 |  |
| System missing | 7986 | 68.8 |  |  |


| G8IDFAVR | ```Grade 8 Identific be Format: F1.0``` |  |  | place |
| :---: | :---: | :---: | :---: | :---: |
| Value | Label | N | Percent | Valid Percent |
| 1 | Strongly agree | 214 | 1.8 | 5.9 |
| 2 | Agree | 1273 | 11.0 | 35.2 |
| 3 | Disagree | 1590 | 13.7 | 43.9 |
| 4 | Strongly disagree | 544 | 4.7 | 15.0 |
| Total of | valid cases | 3621 | 31.2 | 100.0 |
| System mi | ssing | 7980 | 68.8 |  |

## G8IDINTR Grade 8 Identification: People are interested in what I say

Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | :---: | ---: |
| 1 | Strongly agree | 235 | Percent | Percent |
| 2 | Agree | 2215 | 19.0 | 6.5 |
| 3 | Disagree | 982 | 8.5 | 61.2 |
| 4 | Strongly disagree | 189 | 1.6 | 27.1 |
| Total of valid cases | 3621 | 31.2 | 100.0 |  |
| System missing | 7980 | 68.8 |  |  |


| G8IDWAST | Grade 8 Identific <br> Format: F1.0 | on: | is was | of time |
| :---: | :---: | :---: | :---: | :---: |
| Value | Label | N | Percent | Valid <br> Percent |
| 1 | Strongly agree | 92 | 0.8 | 2.5 |
| 2 | Agree | 311 | 2.7 | 8.6 |
| 3 | Disagree | 1864 | 16.1 | 51.5 |
| 4 | Strongly disagree | 1354 | 11.7 | 37.4 |
| Total of | valid cases | 3621 | 31.2 | 100.0 |
| System mi | ssing | 7980 | 68.8 |  |
| G8IDDROP | Grade 8 Identifica mistake | ion: | ng out | a huge |
|  | Format: F1.0 |  |  |  |
| Value | Label | N | Percent | Valid Percent |
| 1 | Strongly agree | 2808 | 24.2 | 77.5 |
| 2 | Agree | 570 | 4.9 | 15.7 |
| 3 | Disagree | 72 | 0.6 | 2.0 |
| 4 | Strongly disagree | 171 | 1.5 | 4.7 |
| Total of | valid cases | 3621 | 31.2 | 100.0 |
| System mi | ssing | 7980 | 68.8 |  |

G8IDFRNU Grade 8 Identification: My friends upset when I do schoolwork
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | ---: |
| Varcent | Percent |  |  |  |

G8IDMIMP Grade 8 Identification: School is more important
than people think

Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | :---: | :---: |
| Varcent |  |  |  |  |


| G8IDFRNW | Grade 8 Identifica waste of time <br> Format: F1.0 | $\text { ion: } M y$ | ends th | school |
| :---: | :---: | :---: | :---: | :---: |
| Value | Label | N | Percent | Valid Percent |
| 1 | Strongly agree | 317 | 2.7 | 8.8 |
| 2 | Agree | 1004 | 8.7 | 27.8 |
| 3 | Disagree | 1747 | 15.1 | 48.3 |
| 4 | Strongly disagree | 549 | 4.7 | 15.2 |
| Total of | valid cases | 3617 | 31.2 | 100.0 |
| System mi | ssing | 7984 | 68.8 |  |
| G8IDFRNS | Grade 8 Identifica school |  | $f \mathrm{my} \mathrm{fr}$ | Is go to |
|  | Format: F1.0 |  |  |  |
|  |  |  |  | Valid |
| Value | Label | N | Percent | Percent |
| 1 | Strongly agree | 1881 | 16.2 | 52.0 |
| 2 | Agree | 1367 | 11.8 | 37.8 |
| 3 | Disagree | 255 | 2.2 | 7.1 |
| 4 | Strongly disagree | 113 | 1.0 | 3.1 |
| Total of | valid cases | 3616 | 31.2 | 100.0 |
| System mi | ssing | 7985 | 68.8 |  |
| G8IDBLNG | Grade 8 Identificat <br> Format: F5.0 <br> Range: 8 to 39 <br> System missing: N | $7953$ | re: Belo |  |
| G8IDVALU | ```Grade 8 Identifica Format: F5.0 Range: 5 to 31 System missing: N``` | $7953$ | re: Valu |  |
| G8IDTOTL | ```Grade 8 Identifica Format: F5.0 Range: 13 to 67 System missing: N``` | ion to $7953$ | score |  |

## Grade 8 Student Participation Questionnaire

| G8PEABSN | Grade 8 Participation, English: Absenteeism  <br>  Format: F1.0 |  |  |  |
| :--- | :--- | ---: | :---: | :---: |
|  |  |  |  | Valid |
| Value | Label | N | Percent | Percent |
| 1 | $1-2$ absences | 660 | 5.7 | 27.4 |
| 2 | $3-6$ absences | 969 | 8.4 | 40.3 |
| 3 | 7 or more absences | 776 | 6.7 | 32.3 |
| Total of valid cases | 2405 | 20.7 | 100.0 |  |
| System missing | 9196 | 79.3 |  |  |


| G8PEPRNT | Grade 8 Participation, <br>  <br>  <br> Format: F1.0 |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
|  |  |  |  |  |
| Value | Label | N | Percent | Valid |
| 0 | No contacts | 2030 | 17.5 | 77.1 |
| 1 | 1-2 contacts | 465 | 4.0 | 17.7 |
| 2 | 3 or more contacts | 138 | 1.2 | 5.2 |
| Total of valid cases | 2633 | 22.7 | 100.0 |  |
| System missing | 8968 | 77.3 |  |  |


| G8PEATTN | $\begin{aligned} & \text { Grade } 8 \mathrm{~Pa} \\ & \text { class } \\ & \text { Format: F1 } \end{aligned}$ | $\text { on, } \mathrm{Er}$ | : Pays | ntion in |
| :---: | :---: | :---: | :---: | :---: |
| Value | Label | N | Percent | Valid <br> Percent |
| 1 | Never | 37 | 0.3 | 1.2 |
| 2 |  | 176 | 1.5 | 5.9 |
| 3 | Sometimes | 757 | 6.5 | 25.4 |
| 4 |  | 1272 | 11.0 | 42.7 |
| 5 | Always | 736 | 6.3 | 24.7 |
| Total of | valid cases | 2978 | 25.7 | 100.0 |
| System mis | ssing | 8623 | 74.3 |  |

G8PEMTRL Grade 8 Participation, English: Loses materials Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | :---: | :---: |
| Vercent |  |  |  |  |

### 3.64 STUDENT DATA

| G8PEASGN | Grade 8 Participation, English: Completes assignments |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Valid |
| Value | Label | N | Percent | Percent |
| 1 | Never | 40 | 0.3 | 1.3 |
| 2 |  | 197 | 1.7 | 6.6 |
| 3 | Sometimes | 601 | 5.2 | 20.2 |
| 4 |  | 1130 | 9.7 | 37.9 |
| 5 | Always | 1010 | 8.7 | 33.9 |
| Total of va | valid cases | 2978 | 25.7 | 100.0 |
| System mis | ssing | 8623 | 74.3 |  |
| G8PELATE | Grade 8 Participation, English: Comes late to class Format: F1.0 |  |  |  |
|  |  |  |  | Valid |
| Value | Label | N | Percent | Percent |
| 1 | Never | 1974 | 17.0 | 66.3 |
| 2 |  | 497 | 4.3 | 16.7 |
| 3 | Sometimes | 369 | 3.2 | 12.4 |
| 4 |  | 111 | 1.0 | 3.7 |
| 5 | Always | 27 | 0.2 | 0.9 |
| Total of va | valid cases | 2978 | 25.7 | 100.0 |
| System mis | ssing | 8623 | 74.3 |  |
| G8PEPERS | Grade 8 Participation, English: Is persistentFormat: F1.0 |  |  |  |
|  |  |  |  | Valid |
| Value | Label | N | Percent | Percent |
| 1 | Never | 227 | 2.0 | 7.6 |
| 2 |  | 401 | 3.5 | 13.5 |
| 3 | Sometimes | 960 | 8.3 | 32.2 |
| 4 |  | 943 | 8.1 | 31.7 |
| 5 | Always | 447 | 3.9 | 15.0 |
| Total of va | valid cases | 2978 | 25.7 | 100.0 |
| System mis | ssing | 8623 | 74.3 |  |


| G8PECRTS | Grade 8 Participation, English: Criticizes subject <br> matter <br> Format: F1.0 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Value | Label | N | Percent | Valid |
| 1 | Never | 1705 | 14.7 | 57.3 |
| 2 |  | 628 | 5.4 | 21.1 |
| 3 | Sometimes | 445 | 3.8 | 14.9 |
| 4 |  | 174 | 1.5 | 5.8 |
| 5 | Always | 26 | 0.2 | 0.9 |
| Total of valid cases | 2978 | 25.7 | 100.0 |  |
| System missing | 8623 | 74.3 |  |  |

## G8PEMORE Grade 8 Participation, English: Does more than

 assigned workFormat: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :---: | :---: |
| 1 | Never | 1130 | 9.7 | 37.9 |
| 2 |  | 675 | 5.8 | 22.7 |
| 3 | Sometimes | 610 | 5.3 | 20.5 |
| 4 |  | 404 | 3.5 | 13.6 |
| 5 | Always | 159 | 1.4 | 5.3 |
| Total of valid cases | 8623 | 25.7 | 100.0 |  |
| System missing |  |  |  |  |

G8PEANOY Grade 8 Participation, English: Annoys others Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Never | 1530 | 13.2 | 51.4 |
| 2 |  | 609 | 5.2 | 20.4 |
| 3 | Sometimes | 534 | 4.6 | 17.9 |
| 4 |  | 229 | 2.0 | 7.7 |
| 5 | 76 | 0.7 | 2.6 |  |
| Total of valid cases | 2978 | 25.7 | 100.0 |  |
| System missing | 8623 | 74.3 |  |  |

G8PEVALU Grade 8 Participation, English: Thinks course is
valuable valuable
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :---: | :---: |
| 1 | Never | 168 | 1.4 | 5.6 |
| 2 |  | 345 | 3.0 | 11.6 |
| 3 | Sometimes | 796 | 6.9 | 26.7 |
| 4 |  | 933 | 8.0 | 31.3 |
| 5 | 736 | 6.3 | 24.7 |  |
| Total of valid cases | 2978 | 25.7 | 100.0 |  |
| System missing | 8623 | 74.3 |  |  |

G8PECRIT Grade 8 Participation, English: Is critical of achievers
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :---: | :---: |
| 1 | Never | 2104 | 18.1 | 70.7 |
| 2 |  | 512 | 4.4 | 17.2 |
| 3 | Sometimes | 265 | 2.3 | 8.9 |
| 4 |  | 74 | 0.6 | 2.5 |
| 5 | 23 | 0.2 | 0.8 |  |
| Total of valid cases | 2978 | 25.7 | 100.0 |  |
| System missing | 8623 | 74.3 |  |  |

G8PEDISC | Grade 8 Participation, English: Participates in |
| :--- |
| discussions |

Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :---: | :---: |
| 1 | Never | 217 | 1.9 | 7.3 |
| 2 |  | 418 | 3.6 | 14.0 |
| 3 | Sometimes | 1034 | 8.9 | 34.7 |
| 4 |  | 787 | 6.8 | 26.4 |
| 5 | 522 | 4.5 | 17.5 |  |
| Total of valid cases | 2978 | 25.7 | 100.0 |  |
| System missing | 8623 | 74.3 |  |  |


| E | Grade 8 Participation, <br> Format: F1.0 |  | Needs reprimanding |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Label | N | Percent | Valid <br> Percent |
| 1 | Never | 2011 | 17.3 | 67.5 |
| 2 |  | 478 | 4.1 | 16.1 |
| 3 | Sometimes | 323 | 2.8 | 10.8 |
| 4 |  | 134 | 1.2 | 4.5 |
| 5 | Always | 32 | 0.3 | 1.1 |
| Total | valid cases | 2978 | 25.7 | 100.0 |
| System | ssing | 8623 | 74.3 |  |

G8PEABUS Grade 8 Participation, English: Abusive to teacher Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :---: | :---: |
| 1 | Never | 2622 | 22.6 | 88.0 |
| 2 |  | 202 | 1.7 | 6.8 |
| 3 | Sometimes | 101 | 0.9 | 3.4 |
| 4 |  | 45 | 0.4 | 1.5 |
| 5 | Always | 8 | 0.1 | 0.3 |
| Total of valid cases | 2978 | 25.7 | 100.0 |  |
| System missing | 8623 | 74.3 |  |  |


| G8PEDISS | Grade 8 Participation, English: Discusses subject <br> matter outside of class <br>  <br> Format: F1.0 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Value | Label | N | Percent | Palid |
| 1 | Never | 1036 | 8.9 | 34.8 |
| 2 |  | 633 | 5.5 | 21.3 |
| 3 | Sometimes | 861 | 7.4 | 28.9 |
| 4 |  | 332 | 2.9 | 11.1 |
| 5 | 116 | 1.0 | 3.9 |  |
| Total of valid cases | 2978 | 25.7 | 100.0 |  |
| System missing | 8623 | 74.3 |  |  |

G8PEEFFR Grade 8 Participation, English subscore: Effort
Format: F5.0
Range: 5 to 25
System missing: N = 8623
G8PEINIT Grade 8 Participation, English subscore: Initiative
Format: F5.0
Range: 3 to 15
System missing: N = 8623

| G8PENONP | Grade 8 Participation, English subscore:  <br>  Nonparticipatory behavior |
| :--- | :--- | :--- | :--- |
|  | Format: F5.0 |


| G8PMMTRL | Grade 8 Participation, Mathematics: Loses material <br>  <br>  <br> Format: F1.0 |  |  |  |
| :--- | :--- | ---: | :---: | :---: |
|  |  |  |  | Valid |
| Value | Label | N | Percent | Percent |
| 1 | Never | 888 | 7.7 | 29.8 |
| 2 |  | 889 | 7.7 | 29.9 |
| 3 | Sometimes | 814 | 7.0 | 27.3 |
| 4 |  | 333 | 2.9 | 11.2 |
| 5 | 54 | .5 | 1.8 |  |
| Total of valid cases | 2978 | 25.7 | 100.0 |  |
| System missing | 8623 | 74.3 |  |  |

G8PMASGN Grade 8 Participation, Mathematics: Completes

Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | ---: |
| N | Percent | Percent |  |  |

## G8PMLATE Grade 8 Participation, Mathematics: Comes late to class

Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :--- | :---: |
| 1 | Never | 1995 | 17.2 | 67.0 |
| 2 |  | 510 | 4.4 | 17.1 |
| 3 | Sometimes | 336 | 2.9 | 11.3 |
| 4 |  | 31 | 0.9 | 3.6 |
| 5 | Always | 2978 | 25.3 | 1.0 |
| Total of valid cases | 8623 | 74.3 | 100.0 |  |
| System missing |  |  |  |  |

### 3.70 STUDENT DATA

G8PMPERS Grade 8 Participation, Mathematics: Is persistent Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | :---: | :---: | :---: |
| 1 | Never | 305 | 2.6 | 10.2 |
| 2 |  | 503 | 4.3 | 16.9 |
| 3 | Sometimes | 925 | 8.0 | 31.1 |
| 4 |  | 748 | 6.4 | 25.1 |
| 5 | Always | 497 | 4.3 | 16.7 |
| Total of valid cases | 2978 | 25.7 | 100.0 |  |
| System missing | 8623 | 74.3 |  |  |

G8PMCRTS Grade 8 Participation, Mathematics: Criticizes subject matter
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :--- | ---: |
| 1 | Never | 1761 | 15.2 | 59.1 |
| 2 |  | 669 | 5.8 | 22.5 |
| 3 | Sometimes | 360 | 3.1 | 12.1 |
| 4 |  | 154 | 1.3 | 5.2 |
| 5 | Always | 2978 | 0.3 | 1.1 |
| Total of valid cases | 8623 | 74.3 | 100.0 |  |
| System missing |  |  |  |  |

G8PMMORE Grade 8 Participation, Mathematics: Does more than assigned work
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :---: | ---: |
| 1 | Never | 1078 | 9.3 | 36.2 |
| 2 |  | 622 | 5.4 | 20.9 |
| 3 | Sometimes | 694 | 6.0 | 23.3 |
| 4 |  | 376 | 3.2 | 12.6 |
| 5 | 208 | 1.8 | 7.0 |  |
| Total of valid cases | 2978 | 25.7 | 100.0 |  |
| System missing | 8623 | 74.3 |  |  |


| G8PMANOY | Grade 8 Participation, Mathematics: Annoys others <br>  <br>  <br>  <br> Format: F1.0 |  |  |  |
| :--- | :--- | ---: | :---: | :---: |
|  |  |  |  | Valid |
| Value | Label | N | Percent | Percent |
| 1 | Never | 1628 | 14.0 | 54.7 |
| 2 |  | 632 | 5.4 | 21.2 |
| 3 | Sometimes | 465 | 4.0 | 15.6 |
| 4 |  | 183 | 1.6 | 6.1 |
| 5 | 71 | 0.6 | 2.4 |  |
| Total of valid cases | 2979 | 25.7 | 100.0 |  |
| System missing | 8623 | 74.3 |  |  |

## G8PMVALU Grade 8 Participation, Mathematics: Thinks course is valuable

Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Never | 133 | 1.1 | 4.5 |
| 2 |  | 316 | 2.7 | 10.6 |
| 3 | Sometimes | 849 | 7.3 | 28.5 |
| 4 |  | 910 | 7.8 | 30.6 |
| 5 | Always | 2978 | 6.6 | 25.9 |
| Total of valid cases | 8623 | 74.3 | 100.0 |  |
| System missing |  |  |  |  |

## G8PMCRIT Grade 8 Participation, Mathematics: Is critical of achievers

Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :--- | ---: |
| 1 | Never | 2200 | 19.0 | 73.9 |
| 2 |  | 458 | 3.9 | 15.4 |
| 3 | Sometimes | 75 | 2.0 | 7.8 |
| 4 |  | 14 | 0.6 | 2.5 |
| 5 | Always | 0.1 | 0.5 |  |
| Total of valid cases | 8623 | 25.7 | 100.0 |  |
| System missing |  | 74.3 |  |  |

### 3.72 STUDENT DATA

## G8PMDISC Grade 8 Participation, Mathematics: Participates in discussions

Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | ---: |
| N | 241 | Percent | Percent |  |
| 1 | Never | 420 | 3.1 | 8.1 |
| 2 |  | 1012 | 8.7 | 14.1 |
| 3 | Sometimes | 745 | 6.4 | 34.0 |
| 4 |  | 560 | 4.8 | 25.0 |
| 5 | Always | 2978 | 25.7 | 18.8 |
| Total of valid cases | 8623 | 74.3 |  |  |
| System missing |  |  |  |  |

G8PMREPR Grade 8 Participation, Mathematics: Needs reprimanding
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | :--- | ---: |
| 1 | Never | 2154 | 18.6 | 72.3 |
| 2 |  | 442 | 3.8 | 14.8 |
| 3 | Sometimes | 266 | 2.3 | 8.9 |
| 4 |  | 87 | 0.7 | 2.9 |
| 5 | Always | 29 | 0.2 | 1.0 |
| Total of valid cases | 2978 | 25.7 | 100.0 |  |
| System missing | 8623 | 74.3 |  |  |

G8PMABUS Grade 8 Participation, Mathematics: Abusive to teacher
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | ---: | :---: |
| 1 | Never | 2689 | 23.2 | 90.3 |
| 2 |  | 178 | 1.5 | 6.0 |
| 3 | Sometimes | 74 | 0.6 | 2.5 |
| 4 |  | 27 | 0.2 | 0.9 |
| 5 | 10 | 0.1 | 0.3 |  |
| Total of valid cases | 2978 | 25.7 | 100.0 |  |
| System missing | 8623 | 74.3 |  |  |

```
G8PMDISS Grade 8 Participation, Mathematics: Discusses
    subject matter outside of class
    Format: F1.0
\begin{tabular}{llrcc} 
Value & Label & N & Percent & \begin{tabular}{c} 
Valid \\
Percent
\end{tabular} \\
\hline 1 & Never & 978 & 8.4 & 32.8 \\
2 & & 652 & 5.6 & 21.9 \\
3 & Sometimes & 829 & 7.1 & 27.8 \\
4 & & 416 & 3.6 & 14.0 \\
5 & Always & 103 & 0.9 & 3.5 \\
Total of valid cases & 2978 & 25.7 & 100.0 \\
System missing & 8623 & 74.3 &
\end{tabular}
G8PMEFFR Grade 8 Participation, Mathematics subscore: Effort
    Format: F5.0
    Range: 5 to 25
    System missing: N = 8623
G8PMINIT Grade 8 Participation, Mathematics subscore:
        Initiative
        Format: F5.0
        Range: 3 to 15
        System missing: N = 8623
G8PMNONP Grade 8 Participation, Mathematics subscore:
    Nonparticipatory behavior
    Format: F5.0
    Range: 3 to 15
    System missing: N = 8623
```


## High School Variables

```
HSID High School ID
Format: F6.0
Range: 106017 to 267958
System missing: N = 6280
```


## High School Student Variables

```
HSFRNCH1 Number of semesters French 1 high school
Format: F5.0
Range: 0 to 5
System missing: \(\mathrm{N}=7679\)
```

```
HSFRNCH2 Number of semesters French 2 high school
    Format: F5.0
    Range: 0 to 6
    System missing: N = 7679
HSFRNCH3 Number of semesters French 3 high school
        Format: F5.0
        Range: 0 to 2
        System missing: N = 7679
HSFRNCH4 Number of semesters French 4 high school
        Format: F5.0
        Range: 0 to 2
        System missing: N = 7679
HSGRMN1 Number of semesters German 1 high school
        Format: F5.0
    Range: 0 to 4
    System missing: N = 7679
HSGRMN2 Number of semesters German 2 high school
        Format: F5.0
        Range: 0 to 3
        System missing: N = 7679
HSGRMN3 Number of semesters German 3 high school
        Format: F5.0
        Range: 0 to 2
        System missing: N = 7679
HSGRMN4 Number of semesters German 4 high school
    Format: F5.0
    Range: 0 to 1
    System missing: N = 7679
HSLATIN1 Number of semesters Latin 1 high school
    Format: F5.0
    Range: 0 to 4
    System missing: N = 7679
HSLATIN2 Number of semesters Latin 2 high school
    Format: F5.0
    Range: 0 to 3
    System missing: N = 7679
```

| HSLATIN3 | Number of semesters Latin 3 high school <br> Format: F5.0 <br> Range: 0 to 2 <br> System missing: N = 7679 |
| :---: | :---: |
| HSLATIN4 | Number of semesters Latin 4 high school <br> Format: F5.0 <br> Range: 0 to 2 <br> System missing: $N=7679$ |
| HSSPANI1 | Number of semesters Spanish 1 high school <br> Format: F5.0 <br> Range: 0 to 6 <br> System missing: $N=7679$ |
| HSSPANI2 | Number of semesters Spanish 2 high school <br> Format: F5.0 <br> Range: 0 to 4 <br> System missing: $N=7679$ |
| HSSPANI3 | Number of semesters Spanish 3 high school <br> Format: F5.0 <br> Range: 0 to 2 <br> System missing: $N=7679$ |
| HSSPANI4 | Number of semesters Spanish 4 high school <br> Format: F5.0 <br> Range: 0 to 2 <br> System missing: $N=7679$ |
| HSSPANI5 | Number of semesters Spanish 5 high school <br> Format: F5.0 <br> Range: 0 to 1 <br> System missing: $N=7679$ |
| HSFLANG1 | Number of semesters foreign language level 1 high school <br> Format: F5.0 <br> Range: 0 to 4 <br> System missing: $N=7679$ |
| HSFLANG2 | Number of semesters foreign language level 2 high school <br> Format: F5.0 <br> Range: 0 to 4 <br> System missing: $N=7679$ |

### 3.76 STUDENT DATA

```
HSFLANG3 Number of semesters foreign language level 3 high
        school
    Format: F5.0
    Range: 0 to 2
    System missing: N = 7679
HSFLANG4 Number of semesters foreign language level 4 high
        school
    Format: F5.0
    Range: 0 to 2
    System missing: N = 7679
HSFLANGT Total number of semesters foreign language high
        school
        Format: F5.0
        Range: 0 to 10
        System missing: N = 7679
HSMATH1 Number of semesters math 1 high school
    Format: F5.0
    Range: 0 to 14
    System missing: N = 8087
HSMATH2 Number of semesters math 2 high school
    Format: F5.0
    Range: 0 to 8
    System missing: N = 7679
HSMATH3 Number of semesters math 3 high school
        Format: F5.0
        Range: 0 to 10
        System missing: N = 7679
HSMATH4 Number of semesters math 4 high school
        Format: F5.0
        Range: 0 to 6
        System missing: N = 7679
HSMATH5 Number of semesters math 5 high school
        Format: F5.0
        Range: 0 to 4
        System missing: N = 7679
```



### 3.78 STUDENT DATA

| HSLVLMTH | Highest math level high school <br> Format: F1.0 |  |  |  |
| :--- | :--- | ---: | ---: | ---: |
|  |  |  |  | Valid |
| Value | Label | 235 | 2.0 | Percent | Percent

HSYRSCOR Number of years of high school course taking data Format: F1.0

| Value Label |  |  | Valid |
| :--- | ---: | :---: | :---: |
| Percent |  |  |  |

```
HSCTSRC Source of high school course taking data
```

Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | :--- | :--- | :---: |
| 1 | Transcript | 3511 | 30.3 | 89.5 |
| 2 | Abbreviated form | 411 | 3.5 | 10.5 |
| Total of valid cases | 3922 | 33.8 | 100.0 |  |
| System missing | 7679 | 66.2 |  |  |

HSSAT Took SAT test high school
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | ---: |
| 0 | No | 11071 | Percent | Percent |
| 1 | Yes | 528 | 95.4 | 95.4 |
| Total of valid cases | 11599 | 100.0 | 4.6 |  |
| System missing | 2 | 0.0 | 100.0 |  |




HSGRDCOL High school graduation status (collapsed additional codes)
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | :--- | :---: | :---: |
| 0 | No | 1120 | Percent | Percent |
| 1 | Yes | 3872 | 33.7 | 22.4 |
| Total of | valid cases | 4992 | 43.0 | 100.0 |
| System missing | 6609 | 57.0 |  |  |

## CHAPTER 4 SCHOOL DATA FILES

Types of Variables in K-3 School File
Types of Variables in High School File
K-3 School Codebook
High School Codebook
page 4.2
page 4.2
page 4.3
page 4.11

### 4.2 SCHOOL DATA

## TYPES OF VARIABLES IN K-3 SCHOOL FILE

## FLAG VARIABLES

Grade K-3 participating school flags ..... 4.3
SCHOOL DEMOGRAPHIC VARIABLES
Urbanicity ..... 4.3
Grade range ..... 4.3
School enrollment ..... 4.4
Average daily attendance ..... 4.6
Average daily membership ..... 4.6
Chapter 1 status ..... 4.4
Percent of students receiving free/reduced price lunch ..... 4.5
Percent of students bused ..... 4.5
Percent of students by race/ethnicity ..... 4.5
TYPES OF VARIABLES IN HIGH SCHOOL FILE
Beginning Page
SCHOOL DEMOGRAPHIC VARIABLES
Urbanicity ..... 4.11
Enrollment ..... 4.11
Grade levels ..... 4.11
Percent of minority students ..... 4.12
Percent of students receiving free/reduced price lunch ..... 4.12
Percent of student who did not graduate with cohort. ..... 4.12
GRADUATION REQUIREMENTS
Mathematics ..... 4.13
Science ..... 4.13
Foreign language ..... 4.13
Social studies ..... 4.14
Computer science ..... 4.14
English ..... 4.14
COURSE OFFERINGS
Mathematics ..... 4.14
Foreign language ..... 4.16

## K-3 SCHOOL CODEBOOK

## School Demographic Variables



Flag Variables
FLAGGK School in STAR in kindergarten
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | :---: |
| 0 | No | 1 | Percent | Percent |
| 1 | Yes | 79 | 1.3 | 1.3 |
| Total of valid cases | 80 | 108.9 | 98.8 |  |
| System missing | 0 | 0.0 |  |  |

### 4.4 SCHOOL DATA

FLAGG1 School in STAR in grade 1
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | :---: | :---: |
| 0 | No | 4 | Percent | Percent |
| 1 | Yes | 76 | 5.0 | 5.0 |
| Total of valid cases | 80 | 100.0 | 95.0 |  |
| System missing | 0 | 0.0 |  |  |

FLAGG2 School in STAR in grade 2
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | :---: |
| 0 | No | 5 | Percent | Percent |
| 1 | Yes | 75 | 6.3 | 6.3 |
| Total of valid cases | 80 | 93.8 | 93.8 |  |
| System missing | 0 | 100.0 |  |  |
|  |  |  | 0.0 |  |

FLAGG3 School in STAR in grade 3
Format: F1.0

|  |  |  |  | Valid |
| :--- | :--- | ---: | ---: | :---: |
| Value | Label | N | Percent | Percent |
| 0 | No | 5 | 6.3 | 6.3 |
| 1 | Yes | 75 | 93.8 | 93.8 |
| Total of | valid cases | 80 | 100.0 |  |
| System missing | 0 | 0.0 |  |  |

## Kindergarten School Variables

GKENRMNT School enrollment kindergarten
Format: F4.0
Range: 106 to 1400
System missing: $\mathrm{N}=1$
GKCHAPT1 Chapter 1 school kindergarten
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :---: | :---: | :---: | :---: |
| 1 | Yes | 64 | 80.0 | 81.0 |
| 2 | No | 15 | 18.8 | 19.0 |
| Total of valid cases | 79 | 98.8 | 100.0 |  |
| System missing | 1 | 1.3 |  |  |

```
GKFRLNCH Percent students receiving free/reduced price lunch
    kindergarten
    Format: F3.0
    Range: 1 to 99
    System missing: N = 1
GKBUSED Percent students bused kindergarten
    Format: F3.0
    Range: 0 to 100
    System missing: N = 1
GKNATVAM Percent students Native American kindergarten
    Format: F4.0
    Range: 1 to 1
    System missing: N = 79
GKASIAN Percent students Asian kindergarten
    Format: F4.0
    Range: 0 to 2
    System missing: N = 70
GKBLACK Percent students Black kindergarten
    Format: F4.0
    Range: 1 to 100
    System missing: N = 16
GKHSPANC Percent students Hispanic kindergarten
    Format: F4.0
    Range: 0 to 10
    System missing: N = 77
GKWHITE Percent students White kindergarten
    Format: F4.0
    Range: 1 to 100
    System missing: N = 12
GKOTHRAC Percent students other race/ethnicity kindergarten
    Format: F4.0
    Range: 0 to 0
    System missing: N = 1
```


## Grade 1 School Variables

```
G1ENRMNT School enrollment grade 1
Format: F4.0
Range: 154 to 1131
System missing: N = 4
```


### 4.6 SCHOOL DATA

```
G1AVGDAT Average daily attendance grade 1
    Format: F4.0
    Range: 134 to 968
    System missing: N = 4
G1AVGDMB Average daily membership grade 1
    Format: F4.0
    Range: 140 to 999
    System missing: N = 4
G1CHAPT1 Chapter 1 school grade 1
    Format: F1.0
\begin{tabular}{lcccc} 
Value & Label & & & Valid \\
\hline 1 & Yes & 63 & 78.8 & 82.9 \\
2 & No & 13 & 16.3 & 17.1 \\
Total of & valid cases & 76 & 95.0 & 100.0 \\
System missing & 4 & 5.0 &
\end{tabular}
G1FRLNCH Percent students receiving free/reduced price lunch
    grade 1
    Format: F3.0
    Range: 2 to 99
    System missing: N = 4
G1BUSED Percent students bused grade 1
    Format: F3.0
    Range: 0 to 99
    System missing: N = 4
G1NATVAM Percent students Native American grade 1
    Format: F4.0
    Range: 0 to 0
    System missing: N = 4
G1ASIAN Percent students Asian grade 1
    Format: F4.0
    Range: 0 to 3
    System missing: N = 4
G1BLACK Percent students Black grade 1
    Format: F4.0
    Range: 0 to 99
    System missing: N = 4
```

```
G1HSPANC Percent students Hispanic grade 1
    Format: F4.0
    Range: 0 to 1
    System missing: N = 4
G1WHITE Percent students White grade 1
    Format: F4.0
    Range: 0 to 99
    System missing: N = 4
G1OTHRAC Percent students other race/ethnicity grade 1
    Format: F4.0
    Range: 0 to 1
    System missing: N = 4
```



## G2FRLNCH Percent students receiving free/reduced price lunch <br> grade 2

    Format: F3.0
    Range: 0 to 97
    System missing: N = 5
    
### 4.8 SCHOOL DATA

```
G2BUSED Percent students bused grade 2
    Format: F3.0
    Range: 0 to 99
    System missing: N = 5
G2NATVAM Percent students Native American grade 2
    Format: F4.0
    Range: 0 to 1
    System missing: N = 5
G2ASIAN Percent students Asian grade 2
    Format: F4.0
    Range: 0 to 2
    System missing: N = 5
G2BLACK Percent students Black grade 2
    Format: F4.0
    Range: 0 to 99
    System missing: N = 5
G2HSPANC Percent students Hispanic grade 2
    Format: F4.0
    Range: 0 to 6
    System missing: N = 5
G2WHITE Percent students White grade 2
    Format: F4.0
    Range: 0 to 99
    System missing: N = 5
G2OTHRAC Percent students other race/ethnicity grade 2
    Format: F4.0
    Range: 0 to 3
    System missing: N = 5
Grade 3 School Variables
G3ENRMNT School enrollment grade 3
    Format: F4.0
    Range: 323 to 1009
    System missing: N = 5
```

```
G3AVGDAT Average daily attendance grade 3
    Format: F4.0
    Range: 290 to 953
    System missing: N = 6
G3AVGDMB Average daily membership grade 3
    Format: F4.0
    Range: 300 to 978
    System missing: N = 5
G3CHAPT1 Chapter 1 school grade 3
    Format: F1.0
\begin{tabular}{lcccc} 
Value & Label & & & Valid \\
\hline 1 & Yes & 62 & 77.5 & 82.7 \\
2 & No & 13 & 16.3 & 17.3 \\
Total of & valid cases & 75 & 93.8 & 100.0 \\
System missing & 5 & 6.3 &
\end{tabular}
G3FRLNCH Percent students receiving free/reduced price lunch
    grade 3
    Format: F3.0
    Range: 1 to 98
    System missing: N = 5
G3BUSED Percent students bused grade 3
    Format: F3.0
    Range: 0 to 99
    System missing: N = 5
G3NATVAM Percent students Native American grade 3
    Format: F4.0
    Range: 0 to 2
    System missing: N = 5
G3ASIAN Percent students Asian grade 3
    Format: F4.0
    Range: 0 to 3
    System missing: N = 5
G3BLACK Percent students Black grade 3
    Format: F4.0
    Range: 0 to 99
    System missing: N = 5
```


### 4.10 SCHOOL DATA

```
G3HSPANC Percent students Hispanic grade 3
    Format: F4.0
    Range: 0 to 5
    System missing: N = 5
G3WHITE Percent students White grade 3
    Format: F4.0
    Range: 0 to 99
    System missing: N = 5
G3OTHRAC Percent students other race/ethnicity grade 3
    Format: F4.0
    Range: 0 to 1
    System missing: N = 5
```


## HIGH SCHOOL CODEBOOK

## School Demographic Variables



### 4.12 SCHOOL DATA

| HGHGRADE | Highest academic grade level of school <br> Format: F2.0 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | Valid |
| Value | Label | 158 | Percent | Percent |
| 12 |  | 158 | 98.1 | 100.0 |
| Total of valid cases | 3 | 1.9 | 100.0 |  |
| System missing |  |  |  |  |

NUMGRADE Number of grades in school
Format: F2.0

|  |  |  | Valid |
| :--- | ---: | ---: | ---: |
| Value | Label | N | Percent | Percent | Per |
| :--- |
| 3 |

```
MNRTYPCT Percent of students minority
    Format: F4.0
    Range: 0.00 to 100.00
    System missing: N = 0
FRLCHPCT Percent of students receiving free/reduced lunch
    Format: F4.0
    Range: 0.00 to 100.00
    System missing: N = 1
NOGRDPCT Percent of 9th grade students in 94-95 who did not
    graduate
    Format: F4.0
    Range: 1 to 57
    System missing: N = 18
```


## Graduation Requirements




| MINSCIEN | Minimum sc <br> Format: F2 | its | aduatio |  |
| :---: | :---: | :---: | :---: | :---: |
| Value | Label | N | Percent | Valid <br> Percent |
| 3 |  | 143 | 88.8 | 96.6 |
| 4 |  | 2 | 1.2 | 1.4 |
| 6 |  | 3 | 1.9 | 2.0 |
| Total of | valid cases | 148 | 91.9 | 100.0 |
| System mi | ssing | 13 | 8.1 |  |

MINFORLG Minimum foreign language credits for graduation Format: F2.0

|  |  |  | Valid |
| :--- | ---: | ---: | :---: |
| Value | Label | N | Percent | Percent | Per | 1 |
| :--- | :--- |
| 0.6 | 0.7 |
| 0 | 142 |
| 88.2 | 95.9 |
| 3 | 1 |
| 4 | 4 |
| Total of valid cases | 148 |
| System missing | 13 |

### 4.14 SCHOOL DATA

| MINSOCST | Minimum social studies credits for graduationFormat: F2.0 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Valid |
| Value | Label | N | Percent | Percent |
| 3 |  | 138 | 85.7 | 93.2 |
| 4 |  | 7 | 4.3 | 4.7 |
| 6 |  | 3 | 1.9 | 2.0 |
| Total of | valid cases | 148 | 91.9 | 100.0 |
| System mi | ssing | 13 | 8.1 |  |

MINCOMP Minimum computers credits for graduation Format: F2.1

|  |  |  | Valid |
| :--- | ---: | ---: | ---: |
| Value | Label | Percent | Percent |
| 0.0 | 95 | 59.0 | 64.2 |
| 0.5 | 9 | 5.6 | 6.1 |
| 1.0 | 42 | 26.1 | 28.4 |
| 2.0 | 2 | 1.2 | 1.4 |
| Total of valid cases | 148 | 91.9 | 100.0 |
| System missing | 13 | 8.1 |  |

## MINENGLS Minimum English credits for graduation

Format: F2.0

| Value Label |  |  | Valid |
| :--- | ---: | ---: | ---: |
| N | 143 | 88.8 | 97.3 |
| 4 | 1 | 0.6 | 0.7 |
| 5 | 3 | 1.9 | 2.0 |
| 8 | 147 | 91.3 | 100.0 |
| Total of valid cases | 14 | 8.7 |  |

Course Offerings

## ALGEBRA3 Algebra III offered

Format: F1.0

|  |  |  |  | Valid |
| :--- | :--- | ---: | :---: | :---: |
| Value | Label | N | Percent | Percent |
| 0 | No | 142 | 88.2 | 88.2 |
| 1 | Yes | 19 | 11.8 | 11.8 |
| Total of | valid cases | 161 | 100.0 | 100.0 |
| System missing | 0 | 0.0 |  |  |



CALCULUS Calculus offered
Format: F1.0

|  |  |  |  | Valid |
| :--- | :--- | ---: | :---: | :---: |
| Value | Label | N | Percent | Percent |
| 0 | No | 40 | 24.8 | 24.8 |
| 1 | Yes | 121 | 75.2 | 75.2 |
| Total of valid cases | 161 | 100.0 | 100.0 |  |
| System missing | 0 | 0.0 |  |  |

PROBABIL Probability offered
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | ---: |
| 0 | No | 120 | 74.5 | 74.5 |
| 1 | Yes | 41 | 25.5 | 25.5 |
| Total of valid cases | 161 | 100.0 | 100.0 |  |
| System missing | 0 | 0.0 |  |  |

TRIGONOM Trigonometry offered
Format: F1.0

|  |  |  |  | Valid |
| :--- | :--- | ---: | ---: | ---: |
| Value | Label | N | Percent | Percent |
| 0 | No | 97 | 60.2 | 60.2 |
| 1 | Yes | 64 | 39.8 | 39.8 |
| Total of valid cases | 161 | 100.0 | 100.0 |  |
| System missing | 0 | 0.0 |  |  |

### 4.16 SCHOOL DATA

| ANALYTIC | Analytical offered <br> Format: F1.0 |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  |  |  |  |  |
| Value | Label | N | Percent | Percent |
| 0 | No | 141 | 87.6 | 87.6 |
| 1 | Yes | 20 | 12.4 | 12.4 |
| Total of valid cases | 161 | 100.0 | 100.0 |  |
| System missing | 0 | 0.0 |  |  |

## SOLIDGEO Solid geometry offered

Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | ---: |
| 0 | No | 139 | 86.3 | 86.3 |
| 1 | Yes | 22 | 13.7 | 13.7 |
| Total of | valid cases | 161 | 100.0 | 100.0 |
| System missing | 0 | 0.0 |  |  |

LINALGBR Linear algebra offered
Format: F1.0

|  |  |  |  | Valid |
| :--- | :--- | :---: | :---: | :---: |
| Value | Label | N | Percent | Percent |
| 0 | No | 136 | 84.5 | 84.5 |
| 1 | Yes | 25 | 15.5 | 15.5 |
| Total of | valid cases | 161 | 100.0 | 100.0 |
| System missing | 0 | 0.0 |  |  |

FRENCH French offered
Format: F1.0

| Value | Label |  |  | Valid |
| :--- | :--- | ---: | ---: | ---: |
| 0 | No | 45 | 28.0 | 28.0 |
| 1 | Yes | 116 | 72.0 | 72.0 |
| Total of | valid cases | 161 | 100.0 | 100.0 |
| System missing | 0 | 0.0 |  |  |

FREHILVL Highest level of French
Format: F1.0

|  |  |  | Valid |
| :--- | ---: | :---: | :---: |
| Value | Label | Percent | Percent |
| 2 | 61 | 37.9 | 53.0 |
| 3 | 12 | 7.5 | 10.4 |
| 4 | 34 | 21.1 | 29.6 |
| 5 | 8 | 5.0 | 7.0 |
| Total of valid cases | 115 | 71.4 | 100.0 |
| System missing | 46 | 28.6 |  |


| SPANISH | Spanish offered <br> Format: F1.0 |  |  |  |
| :--- | :--- | ---: | ---: | ---: |
|  |  | N | Percent | Valid |
| Value | Label | 11 | 6.8 | 6.8 |
| 0 | No | 150 | 93.2 | 93.2 |
| 1 | Yes | 161 | 100.0 | 100.0 |
| Total of valid cases | 0 | 0.0 |  |  |
| System missing |  |  |  |  |

SPNHILVL Highest level of Spanish
Format: F1.0

| Value Label | N | Percent | Valid <br> Percent |
| :--- | ---: | ---: | :---: |
| 2 | 79 | 49.1 | 53.0 |
| 3 | 20 | 12.4 | 13.4 |
| 4 | 41 | 25.5 | 27.5 |
| 5 | 9 | 5.6 | 6.0 |
| Total of valid cases | 149 | 92.5 | 100.0 |
| System missing | 12 | 7.5 |  |

LATIN Latin offered
Format: F1.0

| Value | Label | N | Percent | Valid <br> Percent |
| :--- | :--- | ---: | ---: | ---: |
| 0 | No | 98 | 60.9 | 60.9 |
| 1 | Yes | 63 | 39.1 | 39.1 |
| Total of valid cases | 161 | 100.0 | 100.0 |  |
| System missing | 0 | 0.0 |  |  |

LTNHILVL Highest level of Latin
Format: F1.0

| Value Label |  |  | Valid |
| :--- | ---: | ---: | ---: |
| Vercent |  |  |  |

### 4.18 SCHOOL DATA

## LNGHILVL Highest level foreign language

Format: F1.0

| Value Label |  |  | Valid <br> Percent |
| :--- | ---: | :---: | :---: |
| 2 | N | Percent | 77 |
| 3 | 21 | 47.8 | 51.0 |
| 4 | 44 | 13.0 | 13.9 |
| 5 | 9 | 27.3 | 29.1 |
| Total of valid cases | 151 | 5.6 | 6.0 |
| System missing | 10 | 93.8 | 100.0 |

## SELECTED REFERENCES

## Articles and Books about Class Size for All Audiences

## Books:

Achilles, C. M. (1999). Let's put kids first finally: Getting class size right. Thousand Oaks, CA: Corwin Press.

Egelson, P., Harman, P., Hood, A., \& Achilles, C. M. (2002).How class size makes a difference. Greensboro, NC: South East Regional Vision for Education (SERVE).

Finn, J. D. \& Wang, M. C. (Eds.). (2002). Taking small classes one step further. Philadelphia, PA: Temple University Center for Research in Human Development and Education. Greenwich, CT: Information Age Publishing.

Wang, M. C. \& Finn, J. D. (Eds.). (2000). How small classes help teachers do their best. Philadelphia, PA: Temple University Center for Research in Human Development and Education.

## Articles:

Biddle, B. J., \& Berliner, D. C. (2002). Small class size and its effects. Educational Leadership, 59(5), 12-23.

Finn, J. D. (2002). Small classes in American schools: Research, practice and politics. Phi Delta Kappan, 83, 551-560.

Mosteller, F. (1995). The Tennessee study of class size in the early school grades. The Future of Children, 5, 113-127.

## Policy Brief:

American Educational Research Association. (2003, Fall). Class Size: Counting Students Can Count. Research Points, 1(2). Retrieved March 16, 2004 from: http://www.aera.net/pubs/rp/RPFall03ClassSize-PDF2.pdf

## Theory and Research about the Mechanisms:

Finn, J. D., Pannozzo, G. M. \& Achilles, C. M. (2003). The "whys" of class size: Student behavior in small classes. Review of Educational Research, 73, 321-368.

### 5.2 REFERENCES

## Design of Project STAR

Boyd-Zaharias, J., Achilles, C. M., Nye, B. A., Bain, H. P., \& Fulton, B. D. (1995). Quality schools build on a quality start. In E. W. Chance (Ed.), Creating the quality school (pp. 116-123). Madison, WI: Magna (Atwood) Publications.

Boyd-Zaharias, J., Achilles, C. M. \& Cain, V. A. (1995). The effect of Random class assignment on elementary students' reading and mathematics achievement. Research in the Schools, 2(2), 7-14.

CTBS/McGraw Hill (1989). CTBS: Comprehensive Tests of Basic Skills. Monterey, CA: Author.

Milchus, N., Farrah, G., \& Reitz, W. (1968). The self-concept and motivation inventory: What face do we wear? Dearborn Heights, MI: Person-OMetrics.

Psychological Corporation, Harcourt Brace Jovanovich (1983). Stanford Achievement Test ( $7^{\text {th }}$ ed.). Sandiego, CA: Author.

Ritter, G. W., \& Boruch, R. F. (1999). The political and institutional origins of a randomized controlled trial on elementary school class size: Tennessee's Project STAR. Educational Evaluation and Policy Analysis, 21, 111-126.

Rock, D. A., \& Pollack, J. M. (1995). Mathematics course taking and gains in mathematics achievement. (NCES 95-714). Washington, DC: National Center for Education Statistics.

Tennessee Department of Education. (1987). STAR criterion referenced test. Manual for test administration. Grade 1. Nashville, TN: Author.

Word, E., Johnston, J., Bain, H., Fulton, B., Zaharias, J., Lintz, N., Achilles, C. M., Folger, J., \& Breda, C. (1990). Final report. Student/teacher achievement ratio (STAR): Tennessee's K-3 class size study. Nashville, TN: Tennessee State Department of Education. [Available at www.herosinc.org]

## Statistical Analyses of Project STAR Achievement Data (K—3)

Finn, J. D., \& Achilles, C. M. (1990). Answers and questions about class size: A statewide experiment. American Educational Research Journal, 27, 557577.

Goldstein, H., \& Blatchford, P. (1998). Class size and educational achievement: A review of methodology with particular reference to study design. British Educational Research Journal, 24, 255-268.

Hedges, L.V., Nye, B., \& Konstantopoulos, S. (2000). The effects of small classes on academic achievement: The results of the Tennessee class size experiment. American Educational Research Journal, 37, 123-151.

Krueger, A. B. (1999). Experimental estimates of education production functions. Quarterly Journal of Economics, 114, 497-532.

## Other Outcomes:

Dee, T. S., \& Keys, B. J. (2004). Does merit pay reward good teachers? Evidence from a randomized experiment. Journal of Policy Analysis and Management, 23, 471-488.

## Statistical Analyses of Continuing Effects (Grade 4+)

Finn, J. D., Fox, J. D., McClellan, M., Achilles, C. M., \& Boyd-Zaharias, J. (2006). Small class in the early grades and course taking in high school. International Journal of Education Policy and Leadership, 1(1), 1-13. Retrieved [DATE] from http://www.ijepl.org/

Finn, J. D., Fulton, B. D., Zaharias, J., \& Nye, B. (1989). Carryover effects of small classes. Peabody Journal of Education, 67(1), 75-84.

Finn, J. D., Gerber, S. B., \& Achilles, C. M., Boyd-Zaharias, J. (2001). The enduring effects of small classes. Teachers College Record, 103, 145183.

Finn, J. D., Gerber, S. B., \& Boyd-Zaharias, J. (2005). Small classes in the early grades, academic achievement, and graduating from high school. Journal of Educational Psychology, 97, 214-223.

Hedges, L. V., Nye, B., \& Konstantopoulos, S. (1999). The long-term effects of small classes: A five-year follow-up of the Tennessee class size experiment. Educational Evaluation and Policy Analysis, 21, 127-142.

Krueger, A. B., \& Whitmore, D. M. (2001a). The effect of attending a small class in the early grades on college-test taking and middle school tests results: Evidence from Project STAR. The Economic Journal, 11, 1-28.

### 5.4 REFERENCES

Krueger, A. B., \& Whitmore, D. M. (2001b). Would smaller classes help close the Black-White achievement gap? Working paper No. 451. Princeton, NJ: Princeton University. Retrieved March 16, 2004 from: http://www.irs.princeton.edu/pubs/pdfs/451.pdf.

## Effects of Teacher Aides

Boyd-Zaharias, J., \& Pate-Bain, H. (1998). Teacher aides and student learning: Lessons from Project STAR. Arlington, VA: Educational Research Service.

Finn, J. D., Gerber, S. B., \& Achilles, C. M. (2000). Teacher aides: An alternative to small classes? In M. C. Wang \& J. D. Finn (Eds.) How small classes help teachers do their best. (pp. 131-173). Philadelphia, PA: Temple University Center for Research in Human Development and Education.

Gerber, S. B., Finn, J. D., Achilles, C. M., \& Boyd-Zaharias, J. (2001). Teacher aides and students' academic achievement. Educational Evaluation and Policy Analysis, 23, 123-143.

## Other Large-scale Class Size Initiatives

Achilles, C. M., Harman, P., \& Egelson, P. (1995). Using research results on class size to improve pupil achievement outcomes. Research in the Schools, 2, 23-30.

Bohrnstedt, G. W. \& Stecher, B. M. (Eds.). (2002). Capstone report: What we have learned about class size reduction in California Palo Alto, CA: CSR Research Consortium. American Institutes for Research.

Molnar, A., Smith, P. \& Zahorik, J. (2000). 1999-2000 evaluation results of the Student Achievement Guarantee in Education (SAGE) program. Milwaukee, WI: University of Wisconsin, School of Education.

## Participation in School/Identification With School

## Studies Using STAR Data:

Finn, J. D., Folger, J., \& Cox, D. (1991). Measuring participation among elementary grade students. Educational and Psychological Measurement, 51, 393-402.

Finn, J. D., Pannozzo, G. M., \& Voelkl, K. E. (1995). Disruptive and inattentivewithdrawn behavior and achievement among fourth graders. The Elementary School Journal , 95, 421434.

Pannozzo, G. M., Finn, J. D., \& Boyd-Zaharias, J. (April 2004). Behavioral and affective engagement in school and dropping out. Presented at the annual meeting of the American Educational Research Association, San Diego.

Radziwon, C. D. (2003). The effects of peers' beliefs on $8^{\text {th }}$-grade students' identification with school. Journal of Research in Childhood Education, 17, 236-249.

Voelkl, K. E. (1996). Measuring students' identification with school. Educational and Psychological Measurement, 56, 760-770.

Voelkl, K. E. (1997). Identification with school. American Journal of Education, 105, 294-317.

## Background and Related Studies:

Finn, J. D. (1993). School engagement and students at risk. Washington, DC: U.S. Department of Education, National Center for Education Statistics. (NCES 93 470).

Finn, K. V., \& Frone, M. R. (2004). Academic performance and cheating: Moderating role of school identification and self-efficacy. The Journal of Educational Research, 97, 115-122.

Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships to motivation and achievement. Journal of Early Adolescence, 13, 21-43.

Hawkins, J. D., Guo, J., Hill, K. G., Battin-Pearson, S., \& Abbott, R. D. (2001). Long-term effects of the Seattle Social Development Intervention on school bonding trajectories. Applied Developmental Science, 5, 225-236.

Resnick, M., et al. (1997). Protecting adolescents from harm: Findings from the national longitudinal study on adolescent health. Journal of the American Medical Association, 278, 823-832.

Rumberger, R. W. \& Larson, K. A. (1998). Student mobility and the increased risk of high school dropout. American Journal of Education, 107, 1-35.

Voelkl, K E., \& Frone, M. R. (2000). Predictors of substance use at school among high school students. Journal of Educational Psychology, 92, 583592.

## APPENDICES

Appendix A Fourth-Grade Student Participation Questionnaire ..... A1Eighth-Grade Student Participation Questionnaire A5
Appendix B Identification With School Questionnaire ..... B1
Appendix C Coding of Duration Composite Variables ..... C1

## APPENDIX A

FOURTH GRADE STUDENT PARTICIPATION QUESTIONNAIRE

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The codes in parentheses indicate the subscale to which the item belongs:

Subscale Reliability
$\mathrm{E}=$ Effort 94
I = Initiative . 89
$\mathrm{N}=$ Nonparticipatory Behavior . 89
V = Value . 68
The sign $(+,-)$ indicates the direction of scoring. Items marked "-" should be reverse-scored before summing the items in the subscale. (Items 29-31 are not part of these subscales).

## FOURTH GRADE <br> STUDENT PARTICIPATION QUESTIONNAIRE

Student's Name: $\qquad$

Below are items that describe children's behavior in school. Please consider the behavior of the student named above over the last 2-3 months. Circle the number that indicates how often the child exhibits the behavior. Please answer every item.

|  | This Student -- | Never |  | Sometimes |  | Always |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (E+) | 1. pays attention in class. | 1 | 2 | 3 | 4 | 5 |
| (E+) | 2. completes homework on time. | 1 | 2 | 3 | 4 | 5 |
| (E+) | 3. works well with other children. | 1 | 2 | 3 | 4 | 5 |
| (E-) | 4. loses, forgets, or misplaces materials. | 1 | 2 | 3 | 4 | 5 |
| (E-) | 5. comes late to class. | 1 | 2 | 3 | 4 | 5 |
| ( $\mathrm{I}+$ ) | 6. attempts to do his/her work thoroughly and well, rather than just trying to get by. | y. 1 | 2 | 3 | 4 | 5 |
| $(\mathrm{N}+)$ | 7. acts restless, is often unable to sit still. | 1 | 2 | 3 | 4 | 5 |
| ( + + | 8. participates actively in discussions. | 1 | 2 | 3 | 4 | 5 |
| (E+) | 9. completes assigned seat work. | 1 | 2 | 3 | 4 | 5 |
| (V+) | 10. thinks that school is important. | 1 | 2 | 3 | 4 | 5 |
| $(\mathrm{N}+)$ | 11. needs to be reprimanded. | 1 | 2 | 3 | 4 | 5 |
| ( $\mathrm{N}+$ ) | 12. annoys or interferes with peers' work. | 1 | 2 | 3 | 4 | 5 |
| (E+) | 13. is persistent when confronted with difficult problems. | 1 | 2 | 3 | 4 | 5 |
| (E-) | 14. doesn't seem to know what is going on in class. | 1 | 2 | 3 | 4 | 5 |


|  | This Student -- | Never |  | Sometimes |  | Always |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ( $\mathrm{I}+$ ) | 15. does more than just the assigned work. | 1 | 2 | 3 | 4 | 5 |
| (I-) | 16. is withdrawn, uncommunicative. | 1 | 2 | 3 | 4 | 5 |
| (E+) | 17. approaches new assignments with sincere effort. | 1 | 2 | 3 | 4 | 5 |
| (V-) | 18. is critical of peers who do well in school. | 1 | 2 | 3 | 4 | 5 |
| ( $\mathrm{I}+$ ) | 19. asks questions to get more information. | 1 | 2 | 3 | 4 | 5 |
| ( $\mathrm{N}+$ ) | 20. talks with classmates too much. | 1 | 2 | 3 | 4 | 5 |
| (E-) | 21. doesn't take independent initiative, must be helped to get started and kept going on work. | 1 | 2 | 3 | 4 | 5 |
| (E-) | 22. prefers to do easy problems rather than hard ones. | 1 | 2 | 3 | 4 | 5 |
| (V-) | 23. criticizes the importance of the subject matter. | 1 | 2 | 3 | 4 | 5 |
| (E+) | 24. tries to finish assignments even when they are difficult. | 1 | 2 | 3 | 4 | 5 |
| ( $\mathrm{I}+$ ) | 25. raises his/her hand to answer a question or volunteer information. | 1 | 2 | 3 | 4 | 5 |
| ( + + | 26. goes to dictionary, encyclopedia, or other reference on his/her own to seek information. | 1 | 2 | 3 | 4 | 5 |
| (E-) | 27. gets discouraged and stops trying when encounters an obstacle in schoolwork, is easily frustrated. | 1 | 2 | 3 | 4 | 5 |
| ( + + | 28. engages teacher in conversation about subject matter before or after school, or outside of class. <br> [CONTINU |  | 2 | 3 | 4 | 5 |

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29. attends other school activities such as athletic contests, carnivals, and fundraising events.

|  | Above <br> Average | Average | Below <br> Average |
| :--- | :--- | :---: | :---: |
| 30. The student's overall academic performance is | 1 | 2 | 3 |
|  |  | $\underline{\text { No }}$ | $\underline{\text { Yes }}$ |
| 31. Does this student attend special education |  |  |  |
| classes outside of your classroom? |  |  |  |

Thank you for your time. Please enclose the teacher/class information sheet and all the questionnaires - those completed and not complete - - in the envelope provided and return it to your principal.

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## Eighth-Grade Student Participation Questionnaire

School ID:
Student ID:
Sex: Race: Birthday:
This questionnaire describes the student's behavior in my
ENGLISH
MATHEMATICS class (Please circle the appropriate response)

Since the beginning of the school year, approximately how many times has this student been absent from this class (for any reason)? NONE 1-2 TIMES 3-6 TIMES MORE THAN 6 TIMES (Please circle the appropriate response)

Since the beginning of the school year, how many times have you spoken with this student's parent(s) about behavior problems? NONE 1-2 TIMES 3-6 TIMES MORE THAN 2 TIMES (Please circle the appropriate response)

Below are items that describe students' behavior in your class. Please consider the behavior of the student named above over the last 2-3 months. Circle the number that indicates how often the student exhibits the behavior in your class. Please answer every item.

This Student -

|  | $\underline{\text { Never }}$ |  | Sometimes |  | Always |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. pays attention in class. | 1 | 2 | 3 | 4 | 5 |
| 2. loses, forgets, or misplaces materials. | 1 | 2 | 3 | 4 | 5 |
| 3. completes assignments and seatwork. | 1 | 2 | 3 | 4 | 5 |
| 4. comes late to class. | 1 | 2 | 3 | 4 | 5 |
| 5. is persistent when confronted with difficult problems. | 1 | 2 | 3 | 4 | 5 |
| 6. criticizes the importance of the subject matter. | 1 | 2 | 3 | 4 | 5 |
| 7. does more than just the assigned work. | 1 | 2 | 3 | 4 | 5 |
| 8. annoys or interferes with peers' work. | 1 | 2 | 3 | 4 | 5 |
| 9. seems to think that this course if valuable. | 1 | 2 | 3 | 4 | 5 |
| 10. is critical of peers who do well in school. | 1 | 2 | 3 | 4 | 5 |
| 11. participates actively in class discussions. | 1 | 2 | 3 | 4 | 5 |
| 12. needs to be reprimanded/sent to the office. | 1 | 2 | 3 | 4 | 5 |
| 13. is verbally or physically abusive to the teacher. | 1 | 2 | 3 | 4 | 5 |

14. engages teacher in conversation about subject matter before or after school, or outside of class.

$$
\begin{array}{lllll}
1 & 2 & 3 & 4 & 5
\end{array}
$$

Thank you for your time. Please enclose the teacher/class information sheet and all the questionnaires - - those completed and uncompleted - - in the envelope provided and return it to your principal.

## APPENDIX B

## IDENTIFICATION WITH SCHOOL QUESTIONNAIRE

(Scale development information can be found in: Voelkl, K.E. (1996). Measuring students= identification with school. Educational and Psychological Measurement, 56, 760-770.)
(1) I feel proud of being part of my school.
$\qquad$ Strongly Agree $\qquad$ Agree $\qquad$ Disagree $\qquad$ Strongly Disagree
(2) I am treated with as much respect as other students in my class.
$\qquad$ Strongly Agree $\qquad$ Agree $\qquad$ Disagree $\qquad$ Strongly Disagree
(3) I can get a good job even if my grades are bad.
__ Strongly Agree ___ Agree ___ Disagree Strongly Disagree
(4) The only time I get attention in school is when I cause trouble.
$\qquad$ Strongly Agree $\qquad$ Agree $\qquad$ Disagree $\qquad$ Strongly Disagree
(5) I like to participate in a lot of school activities (for example, sports, clubs, plays).
$\qquad$ Strongly Agree $\qquad$ Agree $\qquad$ Disagree $\qquad$ Strongly Disagree
(6) School is one of the most important things in my life.
$\qquad$ Strongly Agree $\qquad$ Agree $\qquad$ Disagree $\qquad$ Strongly Disagree
(7) Many of the things we learn in class are useless.
$\qquad$ Strongly Agree $\qquad$ Agree $\qquad$ Disagree $\qquad$ Strongly Disagree
(8) Most of my teachers don't really care about me.
$\qquad$ Strongly Agree $\qquad$ Agree $\qquad$ Disagree $\qquad$ Strongly Disagree
(9) Most of the time I would like to be any place other than in school.
$\qquad$ Strongly Agree $\qquad$ Agree $\qquad$ Disagree $\qquad$ Strongly Disagree

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(10) There are teachers or other adults in my school that I can talk to if I have a problem.
___ Strongly Agree $\qquad$ Agree

Disagree $\qquad$ Strongly Disagree
(11) Most of what I learn in school will be useful when I get a job.
$\qquad$ Strongly Agree
Agree
Disagree
Strongly Disagree
(12) School is one of my favorite places to be.
$\qquad$ Strongly Agree $\qquad$ Agree $\qquad$ Disagree $\qquad$ Strongly Disagree
(13) People at school are interested in what I have to say.
$\qquad$ Strongly Agree $\qquad$ Agree $\qquad$ Disagree $\qquad$ Strongly Disagree
(14) School is often a waste of time.
$\qquad$ Strongly Agree $\qquad$ Agree $\qquad$ Disagree $\qquad$ Strongly Disagree
(15) Dropping out of school would be a huge mistake for me.
$\qquad$ Strongly Agree $\qquad$ Agree $\qquad$ Disagree $\qquad$ Strongly Disagree
(16) School is more important than most people think.
$\qquad$ Strongly Agree $\qquad$ Agree $\qquad$ Disagree $\qquad$ Strongly Disagree

## Appendix C

Coding of Duration Composite Variables

| Grade |  |  |  | Duration |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K | G1 | G2 | G3 | CMPSTYPE | CMPSDURA | Explanation |
| m | r | m | S | missing | missing | not eligible; small after G1 |
| m | $r$ | r | S | missing | missing | not eligible; small after G1 |
| m | $r$ | S | m | missing | missing | not eligible; small after G1 |
| m | $r$ | S | r | missing | missing | not eligible; small after G1 |
| m | $r$ | s | S | missing | missing | not eligible; small after G1 |
| m | S | m | S | missing | missing | moves in and out of S |
| $r$ | m | m | S | missing | missing | not eligible; small after G1 |
| $r$ | m | S | m | missing | missing | not eligible; small after G1 |
| $r$ | m | s | S | missing | missing | not eligible; small after G1 |
| $r$ | $r$ | m | S | missing | missing | not eligible; small after G1 |
| $r$ | $r$ | r | S | missing | missing | not eligible; small after G1 |
| $r$ | $r$ | S | S | missing | missing | not eligible; small after G1 |
| $r$ | $r$ | S | r | missing | missing | not eligible; small after G1 |
| $r$ | $r$ | S | m | missing | missing | not eligible; small after G1 |
| $r$ | S | m | S | missing | missing | moves in and out of S |
| S | m | m | S | missing | missing | moves in and out of S |
| S | m | r | s | missing | missing | moves in and out of S |
| S | m | S | m | missing | missing | moves in and out of S |
| S | m | S | s | missing | missing | moves in and out of S |
| S | $r$ | r | S | missing | missing | moves in and out of S |
| S | $r$ | S | s | missing | missing | moves in and out of S |
| S | $r$ | S | m | missing | missing | moves in and out of S |
| S | S | r | S | missing | missing | moves in and out of S |
| s | S | m | s | missing | missing | moves in and out of S |
| m | r | m | m | r | 1 |  |
| r | m | m | m | $r$ | 1 |  |
| m | r | r | m | $r$ | 2 |  |
| $r$ | m | r | m | $r$ | 2 |  |
| $r$ | r | m | m | $r$ | 2 |  |
| $r$ | m | m | r | $r$ | 2 |  |
| m | $r$ | m | $r$ | $r$ | 2 |  |
| m | $r$ | r | $r$ | $r$ | 3 |  |
| r | m | $r$ | $r$ | $r$ | 3 |  |
| $r$ | r | r | m | $r$ | 3 |  |
| $r$ | $r$ | m | $r$ | $r$ | 3 |  |
| $r$ | $r$ | r | $r$ | $r$ | 4 |  |

Coding of Duration Composite Variables (continued)

| Grade |  |  |  | Duration |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K | G1 | G2 | G3 | CMPSTYPE | CMPSDURA | Explanation |
| m | S | m | m | S | 1 |  |
| m | S | $r$ | m | S | 1 |  |
| m | S | r | r | S | 1 |  |
| r | S | m | m | S | 1 |  |
| $r$ | S | $r$ | r | S | 1 |  |
| $r$ | s | $r$ | m | s | 1 |  |
| s | m | m | m | S | 1 |  |
| S | m | r | r | S | 1 |  |
| S | m | r | m | S | 1 |  |
| S | r | m | m | S | 1 |  |
| S | $r$ | $r$ | r | S | 1 |  |
| S | $r$ | $r$ | m | S | 1 |  |
| S | m | m | r | S | 1 |  |
| m | S | m | $r$ | S | 1 |  |
| m | S | s | m | S | 2 |  |
| m | S | S | r | S | 2 |  |
| $r$ | S | S | $r$ | S | 2 |  |
| $r$ | S | s | m | S | 2 |  |
| S | S | m | r | S | 2 |  |
| S | S | m | m | s | 2 |  |
| S | s | r | r | S | 2 |  |
| s | S | $r$ | m | S | 2 |  |
| m | S | S | s | S | 3 |  |
| r | S | S | S | S | 3 |  |
| S | S | S | r | S | 3 |  |
| S | S | S | m | S | 3 |  |
| S | S | S | S | S | 4 |  |

$\mathrm{m}=$ missing
$r=$ regular
$s=$ small


[^0]:    ${ }^{1}$ Students who completed high school on time graduated in June 1998.

[^1]:    ${ }^{2}$ A maximum of 79 schools participated in STAR in any one year.
    ${ }^{3} \mathrm{~A}$ set of files in STATA format is planned for the near future.
    ${ }^{4}$ More complete histories are given in the STAR Final Report (Word et al., 1990), from which most of this section was taken, and in Ritter and Boruch (1999). The Final Report is available on the HEROS website, www.heros-Inc.org

[^2]:    ${ }^{5}$ The Project was directed by Elizabeth Word of the Tennessee State Department of Education. University members of the Consortium were C. M. Achilles (University of Tennessee), Helen Pate Bain (Tennessee State University), John Folger (Vanderbilt University), and Fred Bellott (year 1) and John Johnston (years 2-4; University of Memphis). Jayne Boyd-Zaharias and DeWayne Fulton were data managers for Project STAR. Jeremy Finn was external evaluator for the project.

[^3]:    ${ }^{6}$ Approximately 6,300 students from the 79 schools participated in STAR in the kindergarten year.

[^4]:    ${ }^{7}$ Mosteller (1995) described the program as 'modest' given that $30 \%$ of the teachers already had 20 years of teaching experience and only four had fewer than years of experience.

[^5]:    ${ }^{8}$ Each subject had a different number of objectives in each grade, ranging from 8 to 15 . For each subject-grade combination, the number of objectives is the maximum value of the number-of-objectivesmastered variable.
    ${ }^{9}$ Financial support was provided by the Tennessee State Department of Education, the Smith-Richardson Foundation, the Spencer Foundation, and the William T. Grant Foundation.

[^6]:    ${ }^{10}$ The State records did not contain any class or teacher identifiers. Thus students in grades 4-8 are identified only by student and school IDs.

[^7]:    ${ }_{11}^{11}$ Most grade-8 students were rated by two teachers; both ratings are contained in the data file.
    ${ }^{12}$ See Tables 4 and 5.

[^8]:    ${ }^{13}$ Krueger and Whitmore (2001b) re-examined the ACT records for students who took the exams in 1997, 1999, or 2000. This resulted in matches for approximately 10.7 percent of students who had not been matched originally. The additional cases are not included in the current STAR-and-Beyond database.

[^9]:    ${ }^{14}$ Those with one year of data were judged to be too incomplete to include in the course taking file. Those with two years were included only if they pertained to grades 11 and 12.
    ${ }^{15}$ Almost two years of work were dedicated to the task, to provide the best data possible.
    ${ }^{16}$ Those with one year of data were judged to be too incomplete to be included in the course taking file. Those with data in grades 11 and 12 provided information on the highest levels of course work taken.

[^10]:    ${ }^{17}$ Several advanced language courses were classified as level 5.
    ${ }^{18}$ The transcript data, including graduation information, were collected in 1999 and 2000. The data file includes approximately 150 students who were late graduates. Other students, who may have graduated more than one year late, would be coded as dropouts.

[^11]:    ${ }^{19}$ The numbers of schools for these grades have been checked carefully and are correct.

[^12]:    ${ }^{20}$ All students are coded to indicate whether or not they had taken a college entrance examination by 1998.

[^13]:    ${ }^{21}$ As part of the participation study, fourth-grade teachers completed a form with the racial/ethnic and free-lunch composition of the class. This information is included on the file.

[^14]:    ${ }^{22}$ Students with two years of data in other grades (e.g., 9 and 10) were coded 'missing' on the coursetaking indicators.

[^15]:    ${ }^{23} \mathrm{~A}$ list of all course titles in each category is available from the authors.

[^16]:    ${ }^{24}$ We discovered that the highest level of mathematics reached by students with 3 years of data was out of the range of highest levels reached by students with 2 or 4 years of data. This suggests that cases with 3 years of data should be excluded when analyzing this variable.
    ${ }^{25}$ We have not looked in depth at the distribution of converted scores - a step that should be taken prior to data analysis.

[^17]:    ${ }^{26}$ The research team was very conservative in making this judgment, to avoid classifying students as probable dropouts who gave any indication of high school completion.

