

# **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](mailto: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,<sup>1</sup> 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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<sup>1</sup> Students who completed high school on time graduated in June 1998.

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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;<sup>2</sup>
- (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).<sup>3</sup> 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](http://www.heros-inc.org/data.htm)
- For additional information, contact [STARDATA@heros-inc.org](mailto:STARDATA@heros-inc.org)
- Phone for HEROS, Inc: (615)-449-7904

## Planning and Execution of Project STAR<sup>4</sup>

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 (K-3)?

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<sup>2</sup> A maximum of 79 schools participated in STAR in any one year.

<sup>3</sup> A set of files in STATA format is planned for the near future.

<sup>4</sup> 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](http://www.heros-inc.org)

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- (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.<sup>5</sup> 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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<sup>5</sup> 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.

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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.<sup>6</sup> 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

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<sup>6</sup> Approximately 6,300 students from the 79 schools participated in STAR in the kindergarten year.



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 (RA) 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).<sup>7</sup> 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-

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<sup>7</sup> 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.

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

		K (n classes)			1 (n classes)			2 (n classes)			3 (n classes)		
		S	R	RA	S	R	RA	S	R	RA	S	R	RA
<b>B</b>	11										2		
	12	8			2			3			2		
<b>A</b>	13	19			14			16			15		
	14	22			18			27			17		
	15	23		1	31			32			31		
	16	31	4		16	1		29	1		31		1
	17	24	4	1	33	1		19			27		
<b>B</b>	18		1	2	6	2		6			10	1	
	19		7	6	3	4	3	1	3	3	5		4
	20		6	6	1	10	6		2	1		9	13
	21		14	12		18	18		7	11		11	12
<b>C</b>	22		20	20		27	15		23	21		13	16
	23		16	21		19	20		20	21		10	14
	24		19	14		16	11		22	25		15	14
	25		6	6		7	9		9	15		116	15
<b>B</b>	26		4	3		5	9		6	7		5	12
	27		1	6		2	4		4	1		5	8
	28			1		1	2		1	0		2	6
	29					1	2		2	2		2	2
	30					1	1						
<b>TOTAL</b>		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 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<sup>8</sup> 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 pre-kindergarten 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,<sup>9</sup> 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

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<sup>8</sup> 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-objectives-mastered variable.

<sup>9</sup> Financial support was provided by the Tennessee State Department of Education, the Smith-Richardson Foundation, the Spencer Foundation, and the William T. Grant Foundation.

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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).<sup>10</sup> 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**

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

BSF: Basic Skills First

CTBS: Comprehensive Tests of Basic Skills

<sup>10</sup> 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.

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.<sup>11</sup> Approximately 1,000 of these cases were the same students in both grades.<sup>12</sup>

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<sup>11</sup> Most grade-8 students were rated by two teachers; both ratings are contained in the data file.

<sup>12</sup> See Tables 4 and 5.

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### Identification With School

When STAR students were in eighth grade (1993-1994), a subsample completed a self-report questionnaire measuring “identification with school” (Voelkl, 1996, 1997). Identification was comprised of two dimensions: the student’s feeling of ‘belongingness’ in school (e.g., “I 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.<sup>13</sup> 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.

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<sup>13</sup> 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.



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,<sup>14</sup> 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.<sup>15</sup> 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.<sup>16</sup> 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).

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<sup>14</sup> 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.

<sup>15</sup> Almost two years of work were dedicated to the task, to provide the best data possible.

<sup>16</sup> 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.

## 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;<sup>17</sup>
- 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.**<sup>18</sup> 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

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<sup>17</sup> Several advanced language courses were classified as level 5.

<sup>18</sup> 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.

## BACKGROUND AND DATA COLLECTION 1.15

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.<sup>19</sup>

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.

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<sup>19</sup> The numbers of schools for these grades have been checked carefully and are correct.



## 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 (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;

## 2.2 DATA FILES AND VARIABLES

- 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,<sup>20</sup> 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).

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<sup>20</sup> All students are coded to indicate whether or not they had taken a college entrance examination by 1998.

## 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.<sup>21</sup>

### 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 GKCLASS, G1CLASS, 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

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<sup>21</sup> 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.



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 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.<sup>22</sup> Variable HSYRSCOR indicates the number of years of data available for the particular student. Approximately 13% of the

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<sup>22</sup> Students with two years of data in other grades (e.g., 9 and 10) were coded ‘missing’ on the course-taking indicators.

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 HSLVFLA).

**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).<sup>23</sup>

- 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.

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<sup>23</sup> A list of all course titles in each category is available from the authors.

## 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).<sup>24</sup>

**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	D+	67	F	59
A	95	B	85	C	75	D	65		
A-	92	B-	82	C-	72	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 HSACTION is recommended for secondary analysis. Its value is equal to the original ACT total score for students who took the ACT, and an SAT → ACT converted score for those who took the SATs (see Krueger & Whitmore, 2001a).<sup>25</sup>

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.

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<sup>24</sup> 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.

<sup>25</sup> We have not looked in depth at the distribution of converted scores – a step that should be taken prior to data analysis.

## 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/he 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 s/he had graduated, and/or State Education Department records indicate that s/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.<sup>26</sup> 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.

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<sup>26</sup> 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.



## CHAPTER 3

### STUDENT DATA FILE

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## 3.2 STUDENT DATA

### TYPES OF VARIABLES IN STUDENT FILE

1. FLAG VARIABLES
  2. DEMOGRAPHICS (STUDENT, CLASS, TEACHER, SCHOOL)
  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
  8. COLLEGE ENTRANCE EXAMS
  9. HIGH SCHOOL GRADUATION
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### 3.4 STUDENT DATA

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### 3.6 STUDENT DATA

## CODEBOOK

### Student Demographic Variables

**STDNTID Student ID\***  
Format: F5.0  
Range: 10000 to 21600

**GENDER Student gender\***  
Format: F1.0

Value	Label	N	Percent	Valid 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\***  
Format: F1.0

Value	Label	N	Percent	Valid Percent
1	White	7200	62.1	62.8
2	Black	4180	36.0	36.5
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

\*Variable also in comparison student data file

**BIRTHYEA Student year of birth\***  
Format: F4.0

Value	Label	N	Percent	Valid Percent
1977		58	0.5	0.5
1978		645	5.6	5.6
1979		3917	33.8	34.0
1980		6889	59.4	59.7
1981		24	0.2	0.2
Total of valid cases		11533	99.4	100.0
System missing		68	0.6	

**Flag Variables**

**FLAGSGK In STAR in kindergarten**  
Format: F1.0

Value	Label	N	Percent	Valid 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

Value	Label	N	Percent	Valid 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	N	Percent	Valid Percent
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	

\*Variable also in comparison student data file

### 3.8 STUDENT DATA

#### **FLAGSG3 In STAR in grade 3**

Format: F1.0

Value	Label	N	Percent	Valid Percent
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

Value	Label	N	Percent	Valid 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

Value	Label	N	Percent	Valid 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	N	Percent	Valid Percent
0	No	5042	43.5	43.5
1	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

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

**FLAGG6 Achievement data available grade 6**

Format: F1.0

Value	Label	N	Percent	Valid Percent
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	N	Percent	Valid Percent
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	N	Percent	Valid Percent
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

#### **FLAGPRT4 In participation study grade 4**

Format: F1.0

Value	Label	N	Percent	Valid Percent
0	No	9384	80.9	80.9
1	Yes	2217	19.1	19.1
Total of valid cases		11601	100.0	
System missing		0	0.0	

#### **FLAGIDN8 In identification study grade 8**

Format: F1.0

Value	Label	N	Percent	Valid 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

Value	Label	N	Percent	Valid 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	N	Percent	Valid Percent
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	N	Percent	Valid Percent
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	



**FLAGHSGR Data on high school graduation status available**  
 Format: F1.0

Value	Label	N	Percent	Valid Percent
0	No	6609	57.0	57.0
1	Yes	4992	43.0	43.0
Total of valid cases		11601	100.0	
System missing		0	0.0	

**Class Type Variables**

**GKCLASST Class type kindergarten**  
 Format: F1.0

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

**G1CLASST Class type grade 1**  
 Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Small class	1925	16.6	28.2
2	Regular class	2584	22.3	37.8
3	Regular + aide class	2320	20.0	34.0
Total of valid cases		6829	58.9	100.0
System missing		4772	41.1	

**G2CLASST Class type grade 2**  
 Format: F1.0

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

### 3.12 STUDENT DATA

#### **G3CLASST Class type grade 3**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Small class	2174	18.7	32.0
2	Regular class	2085	18.0	30.7
3	Regular + aide class	2543	21.9	37.4
Total of valid cases		6802	58.6	100.0
System missing		4799	41.4	

#### **CMPSTYPE Class type composite**

Format: F1.0

Value	Label	N	Percent	Valid Percent
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	N	Percent	Valid Percent
1		5562	47.9	50.6
2		2061	17.8	18.8
3		1699	14.6	15.5
4		1666	14.4	15.2
Total of valid cases		10988	94.7	100.0
System missing		613	5.3	

#### **YEARSSTA Number of years in STAR**

Format: F5.0

Value	Label	N	Percent	Valid Percent
1		4318	37.2	37.2
2		2454	21.2	21.2
3		1746	15.1	15.1
4		3083	26.6	26.6
Total of valid cases		11601	100.0	100.0
System missing		0	0.0	

**YEARSSMA** Number of years in small classes  
Format: F5.0

Value	Label	N	Percent	Valid Percent
0		7920	68.3	68.3
1		1585	13.7	13.7
2		715	6.2	6.2
3		524	4.5	4.5
4		857	7.4	7.4
Total of valid cases		11601	100.0	100.0
System missing		0	0.0	

**Kindergarten School Variables**

**GKSCHID** Kindergarten School ID  
Format: F6.0  
Range: 112038 to 264945  
System missing: N = 5276

**GKSURBAN** School urbanicity kindergarten  
Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Inner city	1428	12.3	22.6
2	Suburban	1412	12.2	22.3
3	Rural	2917	25.1	46.1
4	Urban	568	4.9	9.0
Total of valid cases		6325	54.5	100.0
System missing		5276	45.5	

**Kindergarten Teacher Variables**

**GKTCHID** Kindergarten teacher ID  
Format: F8.0  
Range: 11203801 to 26494505  
System missing: N = 5276

**GKTGEN** Teacher gender kindergarten  
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 missing		5276	45.5	

### 3.14 STUDENT DATA

#### **GKTRACE Teacher race/ethnicity kindergarten**

Format: F1.0

Value	Label	N	Percent	Valid Percent
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	N	Percent	Valid Percent
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**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Chose not to be on career ladder	0	0.0	0.0
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	

**GKTYEARS** Years of total teaching experience kindergarten  
 Format: F2.0

Value	Label	N	Percent	Valid Percent
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 of valid cases		6304	54.3	100.0
System missing		5297	45.7	

### 3.16 STUDENT DATA

#### GKCLASSS Class size kindergarten

Format: F5.0

Value	Label	N	Percent	Valid 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 missing		5276	45.5	

#### Kindergarten Student Variables

#### GKFREELU Free/reduced lunch status kindergarten

Format: F1.0

Value	Label	N	Percent	Valid 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

Value	Label	N	Percent	Valid 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	

**GKSPECED Special education status kindergarten**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Yes	202	1.7	3.2
2	No	6122	52.8	96.8
Total of valid cases		6324	54.5	100.0
System missing		5277	45.5	

**GKSPECIN Pulled out for special instruction kindergarten**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Yes	290	2.5	4.6
2	No	6034	52.0	95.4
Total of valid cases		6324	54.5	100.0
System missing		5277	45.5	

**GKPRESEN Days present at school kindergarten**

Format: F5.0

Range: 6 to 180

System missing: N = 5350

**GKABSENT Days absent from school kindergarten**

Format: F5.0

Range: 0 to 99

System missing: N = 5350

**GKTREADS Total reading scaled score SAT kindergarten**

Format: F5.0

Range: 315 to 627

System missing: N = 5812

**GKTMATHS Total math scaled score SAT kindergarten**

Format: F5.0

Range: 288 to 626

System missing: N = 5730

**GKTLISTS Total listening scale score SAT kindergarten**

Format: F5.0

Range: 397 to 671

System missing: N = 5764

**GKWORDSK Word study skills scale score SAT kindergarten**

Format: F5.0

Range: 315 to 593

System missing: N = 5750

### 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

**G1SCHID Grade 1 School ID\***

Format: F6.0  
Range: 112038 to 264945  
System missing: N = 4772

**G1SURBAN School urbanicity grade 1**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Inner city	1380	11.9	20.2
2	Suburban	1586	13.7	23.2
3	Rural	3237	27.9	47.4
4	Urban	626	5.4	9.2
Total of valid cases		6829	58.9	100.0
System missing		4772	41.1	

#### 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	N	Percent	Valid Percent
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 1**

Format: F1.0

Value	Label	N	Percent	Valid Percent
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	N	Percent	Valid Percent
1	Associates	0	0.0	0.0
2	Bachelors	4456	38.4	65.4
3	Masters	2294	19.8	33.7
4	Masters +	0	0.0	0.0
5	Specialist	38	0.3	0.6
6	Doctoral	22	0.2	0.3
Total of valid cases		6810	58.7	100.0
System missing		4791	41.3	

**G1TCAREE Teacher career ladder level grade 1**

Format: F1.0

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 missing		4814	41.5	

### 3.20 STUDENT DATA

#### G1YEARS 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\***

Format: F5.0

Value	Label	N	Percent	Valid 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 missing		4772	41.1	

## Grade 1 Student Variables

**G1FREELU Free/reduced lunch status grade 1**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Free lunch	3429	29.6	51.6
2	Non-free lunch	3221	27.8	48.4
Total of valid cases		6650	57.3	100.0
System missing		4951	42.7	

\*Variable also in comparison student data file

### 3.22 STUDENT DATA

**G1PROMOT Recommended for promotion from grade 1 to grade 2**  
Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Yes, recommended	5945	51.2	89.4
2	No, not recommended	708	6.1	10.6
Total of valid cases		6653	57.3	100.0
System missing		4948	42.7	

**G1SPECED Special education status grade 1**  
Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Yes	84	0.7	1.2
2	No	6742	58.1	98.8
Total of valid cases		6826	58.8	100.0
System missing		4775	41.2	

**G1SPECIN Pulled out for special instruction grade 1**  
Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Yes	1164	10.0	17.1
2	No	5662	48.8	82.9
Total of valid cases		6826	58.8	100.0
System missing		4775	41.2	

**G1PRESEN Days present at school grade 1**  
Format: F5.0  
Range: 1 to 180  
System missing: N = 4942

**G1ABSENT Days absent from school grade 1**  
Format: F5.0  
Range: 0 to 84  
System missing: N = 4939

**G1TREADS Total reading scale scores SAT Grade 1\***  
Format: F5.0  
Range: 404 to 651  
System missing: N = 5206

**G1TMATHS Total math scale score SAT grade 1\***  
Format: F5.0  
Range: 404 to 676  
System missing: N = 5003

\* Variable also in comparison student data file

**G1TLISTS Total listening scale score SAT grade 1\***  
Format: F5.0  
Range: 477 to 708  
System missing: N = 5045

**G1WORDSK Word study skills scale score SAT grade 1\***  
Format: F5.0  
Range: 317 to 601  
System missing: N = 5629

**G1READBS Reading raw score BSF grade 1\***  
Format: F5.0  
Range: 2 to 32  
System missing: N = 5065

**G1MATHBS Math raw score BSF grade 1\***  
Format: F5.0  
Range: 3 to 44  
System missing: N = 5088

**G1READ\_B Reading number objectives mastered BSF grade 1\***  
Format: F5.0  
Range: 0 to 8  
System missing: N = 5888

**G1MATH\_B Math number objectives mastered BSF grade 1\***  
Format: F5.0  
Range: 0 to 11  
System missing: N = 5916

**G1READ\_C Reading percent objectives mastered BSF grade 1\***  
Format: F5.0  
Range: 0 to 100  
System missing: N = 5888

**G1MATH\_C Math percent objectives mastered BSF grade 1\***  
Format: F5.0  
Range: 0 to 100  
System missing: N = 5916

**G1MOTIVR Motivation raw score SCAMIN grade 1**  
Format: F5.0  
Range: 27 to 60  
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 missing: N = 4761

**G2SURBAN School urbanicity grade 2**

Format: F1.0

Value	Label	N	Percent	Valid 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 valid cases		6840	59.0	100.0
System missing		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	N	Percent	Valid Percent
1	Male	71	0.6	1.0
2	Female	6709	57.8	99.0
Total of valid cases		6780	58.4	100.0
System missing		4821	41.6	

\* Variable also in comparison student data file

**G2TRACE Teacher race/ethnicity grade 2**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	White	5398	46.5	79.6
2	Black	1382	11.9	20.4
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		6780	58.4	100.0
System missing		4821	41.6	

**G2THIGHD Teacher highest degree grade 2**

Format: F1.0

Value	Label	N	Percent	Valid 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	N	Percent	Valid Percent
1	Chose not to be on career ladder	755	6.5	11.2
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

#### G2YEARS Years of total teaching experience grade 2

Format: F2.0

Value	Label	N	Percent	Valid Percent
0		156	1.3	2.3
1		333	2.9	4.9
2		340	2.9	5.0
3		113	1.0	1.7
4		340	2.9	5.0
5		175	1.5	2.6
6		188	1.6	2.8
7		161	1.4	2.4
8		343	3.0	5.1
9		343	3.0	5.1
10		309	2.7	4.6
11		242	2.1	3.6
12		449	3.9	6.7
13		329	2.8	4.9
14		311	2.7	4.6
15		405	3.5	6.0
16		140	1.2	2.1
17		161	1.4	2.4
18		288	2.5	4.3
19		279	2.4	4.1
20		142	1.2	2.1
21		77	0.7	1.1
22		148	1.3	2.2
23		144	1.2	2.1
24		26	0.2	0.4
25		95	0.8	1.4
26		60	0.5	0.9
27		41	0.4	0.6
28		105	0.9	1.6
29		42	0.4	0.6
30		85	0.7	1.3
31		123	1.1	1.8
32		65	0.6	1.0
33		86	0.7	1.3
34		24	0.2	0.4
35		34	0.3	0.5
39		16	0.1	0.2
40		21	0.2	0.3
Total of valid cases		6739	58.1	100.0
System missing		4862	41.9	



**G2TTRAIN Attend STAR teacher training grade 2**

Format: F2.0

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 missing		4761	41.0	

**Grade 2 Class Variables**

**G2CLASSS Class size grade 2\***

Format: F5.0

Value	Label	N	Percent	Valid 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	

\*Variable also in comparison student data file

### 3.28 STUDENT DATA

#### Grade 2 Student Variables

**G2FREELU Free/reduced lunch status grade 2**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Free lunch	3336	28.8	51.4
2	Non-free lunch	3160	27.2	48.6
Total of valid cases		6496	56.0	100.0
System missing		5105	44.0	

**G2PROMOT Recommended for promotion from grade 2 to grade 3**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Yes, recommended	6022	51.9	95.3
2	No, not recommended	299	2.6	4.7
Total of valid cases		6321	54.5	100.0
System missing		5280	45.5	

**G2TREADS Total reading scale scores SAT Grade 2\***

Format: F5.0

Range: 468 to 732

System missing: N = 5524

**G2TMATHS Total math scale score SAT grade 2\***

Format: F5.0

Range: 441 to 721

System missing: N = 5536

**G2TLISTS Total listening scale score SAT grade 2\***

Format: F5.0

Range: 510 to 740

System missing: N = 5558

**G2WORDSK Word study skills scale score SAT grade 2\***

Format: F5.0

Range: 420 to 672

System missing: N = 5254

**G2READBS Reading raw score BSF grade 2\***

Format: F5.0

Range: 7 to 48

System missing: N = 5232

\*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 grade 3

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Inner city	1335	11.5	19.6
2	Suburban	1720	14.8	25.3
3	Rural	3240	27.9	47.6
4	Urban	507	4.4	7.5
Total of valid cases		6802	58.6	100.0
System missing		4799	41.4	

#### Grade 3 Teacher Variables

#### G3TCHID Grade 3 teacher ID\*

Format: F8.0

Range: 11203810 to 26494522

System missing: N = 4800

#### G3TGEN Teacher gender grade 3

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Male	228	2.0	3.4
2	Female	6523	56.2	96.6
Total of valid cases		6751	58.2	100.0
System missing		4850	41.8	

#### G3TRACE Teacher race/ethnicity grade 3

Format: F1.0

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 valid cases		6751	58.2	100.0
System missing		4850	41.8	

\*Variable also in comparison student data file

**G3THIGHD Teacher highest degree grade 3**

Format: F1.0

Value	Label	N	Percent	Valid Percent
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 Percent
1	Chose not to be on career ladder	497	4.3	7.4
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	

**G3YEARS Years of total teaching experience grade 3**

Format: F2.0

Value	Label	N	Percent	Valid 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

### 3.32 STUDENT DATA

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 of valid cases		6802	58.6	100.0
System missing		4799	41.4	

## Grade 3 Class Variables

**G3CLASSS Class size grade 3\***

Format: F5.0

Value	Label	N	Percent	Valid Percent
11		22	0.2	0.3
12		24	0.2	0.4
13		195	1.7	2.9
14		238	2.1	3.5
15		465	4.0	6.8
16		512	4.4	7.5
17		459	4.0	6.7
18		198	1.7	2.9
19		171	1.5	2.5
20		240	2.1	3.5
21		483	4.2	7.1
22		638	5.5	9.4
23		552	4.8	8.1
24		696	6.0	10.2
25		775	6.7	11.4
26		442	3.8	6.5
27		351	3.0	5.2
28		224	1.9	3.3
29		116	1.0	1.7
Total of valid cases		6801	58.6	100.0
System missing		4800	41.4	

## Grade 3 Student Variables

**G3FREELU Free/reduced lunch status grade 3**

Format: F1.0

Value	Label	N	Percent	Valid 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 missing		5081	43.8	

**G3PROMOT Recommended for promotion from grade 3 to grade 4**

Format: F1.0

Value	Label	N	Percent	Valid 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 missing		5199	44.8	

\*Variable also in comparison student data file

### 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

**G3TLANGS** 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

\*Variable also in comparison student data file



**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

\*Variable also in comparison student data file

### 3.36 STUDENT DATA

**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: N = 6895

**G4SURBAN School urbanicity grade 4**

Format: F1.0

Value	Label	N	Percent	Valid Percent
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	

\*Variable also in comparison student data file

## Grade 4 Teacher Variables

**G4TCHID**    **Grade 4 teacher ID**  
 Format: F8.0  
 Range: 11203813 to 26494528  
 System missing: N = 9384

**G4TGEN**    **Teacher gender grade 4**  
 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 valid cases		2217	19.1	100.0
System missing		9384	80.9	

**G4TRACE**    **Teacher race/ethnicity grade 4**  
 Format: F1.0

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 valid cases		2193	18.9	100.0
System missing		9408	81.1	

## Grade 4 Class Variables

**G4NCLASS**    **Number students class roster grade 4**  
 Format: F5.0

Value	Label	N	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

### 3.38 STUDENT DATA

26	343	3.0	15.5
27	341	2.9	15.4
28	287	2.5	12.9
29	167	1.4	7.5
30	146	1.3	6.6
31	50	0.4	2.3
32	10	0.1	0.5
Total of valid cases	2217	19.1	100.0
System missing	9384	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 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	600	5.2	27.1
Total of valid cases		2217	19.1	100.0
System missing		9384	80.9	

**G4PTHWRK Grade 4 Participation: Completes homework on time**  
 Format: F1.0

Value	Label	N	Percent	Valid 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 missing		9384	80.9	

**G4PTOTH Grade 4 Participation: Works well with others**  
 Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Never	40	0.3	1.8
2		170	1.5	7.7
3	Sometimes	405	3.5	18.3
4		761	6.6	34.4
5	Always	841	7.2	37.9
Total of valid cases		2217	19.1	100.0
System missing		9384	80.9	

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

Value	Label	N	Percent	Valid 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	93	0.8	4.2
Total of valid cases		2216	19.1	100.0
System missing		9385	80.9	

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

Value	Label	N	Percent	Valid 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**

Format: F1.0

Value	Label	N	Percent	Valid Percent
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	762	6.6	34.4
Total of valid cases		2217	19.1	100.0
System missing		9384	80.9	

#### **G4PTRSTL Grade 4 Participation: Acts restless**

Format: F1.0

Value	Label	N	Percent	Valid 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		2217	19.1	100.0
System missing		9384	80.9	

#### **G4PTDISC Grade 4 Participation: Participates in discussions**

Format: F1.0

Value	Label	N	Percent	Valid 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	N	Percent	Valid Percent
1	Never	50	0.4	2.3
2		141	1.2	6.4
3	Sometimes	334	2.9	15.1
4		657	5.7	29.6
5	Always	1035	8.9	46.7
Total of valid cases		2217	19.1	100.0
System missing		9384	80.9	



**G4PTIMPT Grade 4 Participation: Thinks school is important**  
Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Never	68	0.6	3.1
2		190	1.6	8.6
3	Sometimes	360	3.1	16.2
4		644	5.6	29.0
5	Always	955	8.2	43.1
Total of valid cases		2217	19.1	100.0
System missing		9384	80.9	

**G4PTREPR Grade 4 Participation: Needs reprimanding**  
Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Never	707	6.1	31.9
2		553	4.8	24.9
3	Sometimes	640	5.5	28.9
4		235	2.0	10.6
5	Always	82	0.7	3.7
Total of valid cases		2217	19.1	100.0
System missing		9384	80.9	

**G4PTANOY Grade 4 Participation: Annoys others**  
Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Never	978	8.4	44.1
2		489	4.2	22.1
3	Sometimes	475	4.1	21.4
4		195	1.7	8.8
5	Always	80	0.7	3.6
Total of valid cases		2214	19.1	100.0
System missing		9387	80.9	

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

Value	Label	N	Percent	Valid 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	432	3.7	19.5
Total of valid cases		2216	19.1	100.0
System missing		9385	80.9	

### 3.44 STUDENT DATA

**G4PTKNOW Grade 4 Participation: Doesn't know what's going on**  
Format: F1.0

Value	Label	N	Percent	Valid 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 of valid cases		2216	19.0	100.0
System missing		9385	80.9	

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

Value	Label	N	Percent	Valid Percent
1	Never	543	4.7	24.5
2		444	3.8	20.0
3	Sometimes	667	5.7	30.1
4		350	3.0	15.8
5	Always	212	1.8	9.6
Total of valid cases		2216	19.1	100.0
System missing		9385	80.9	

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

Value	Label	N	Percent	Valid 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	N	Percent	Valid Percent
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**  
Format: F1.0

Value	Label	N	Percent	Valid Percent
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	Always	12	0.1	0.5
Total of valid cases		2216	19.1	100.0
System missing		9385	80.9	

**G4PTASKS Grade 4 Participation: Asks questions**  
Format: F1.0

Value	Label	N	Percent	Valid 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 of valid cases		2214	19.1	100.0
System missing		9387	80.9	

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

Value	Label	N	Percent	Valid 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		2214	19.1	100.0
System missing		9387	80.9	

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

Value	Label	N	Percent	Valid 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**

Format: F1.0

Value	Label	N	Percent	Valid Percent
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	Always	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**

Format: F1.0

Value	Label	N	Percent	Valid Percent
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	Always	17	0.1	0.8
Total of valid cases		2213	19.1	100.0
System missing		9388	80.9	

#### **G4PTFNESH Grade 4 Participation: Tries to finish difficult work**

Format: F1.0

Value	Label	N	Percent	Valid 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		2213	19.1	100.0
System missing		9388	80.9	

**G4PTRAIS Grade 4 Participation: Raises hand to talk**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Never	90	0.8	4.1
2		180	1.6	8.1
3	Sometimes	610	5.3	27.6
4		570	4.9	25.8
5	Always	763	6.6	34.5
Total of valid cases		2213	19.1	100.0
System missing		9388	80.9	

**G4PTSEEK Grade 4 Participation: Seeks reference material**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Never	345	3.0	15.6
2		385	3.3	17.4
3	Sometimes	739	6.4	33.4
4		432	3.7	19.5
5	Always	312	2.7	14.1
Total of valid cases		2213	19.1	100.0
System missing		9388	80.9	

**G4PTDSRG Grade 4 Participation: Is easily discouraged**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Never	761	6.6	34.4
2		626	5.4	28.3
3	Sometimes	519	4.5	23.5
4		222	1.9	10.0
5	Always	85	0.7	3.8
Total of valid cases		2213	19.1	100.0
System missing		9389	80.9	

### 3.48 STUDENT DATA

**G4PTDISS Grade 4 Participation: Discusses subject matter outside of class**

Format: F1.0

Value	Label	N	Percent	Valid Percent
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	Always	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	N	Percent	Valid Percent
1	Never	105	0.9	4.8
2		215	1.9	9.8
3	Sometimes	937	8.1	42.7
4		528	4.6	24.1
5	Always	409	3.5	18.6
Total of valid cases		2194	18.9	100.0
System missing		9407	81.1	

**G4PTPERF Grade 4 Participation: Overall academic performance**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Above average	851	7.3	38.7
2	Average	928	8.0	42.2
3	Below average	421	3.6	19.1
Total of valid cases		2200	19.0	100.0
System missing		9401	81.0	

**G4PTSPED Grade 4 Participation: Attends special education**

Format: F1.0

Value	Label	N	Percent	Valid 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

### 3.50 STUDENT DATA

**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

### 3.52 STUDENT DATA

**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

### 3.54 STUDENT DATA

**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

Value	Label	N	Percent	Valid Percent
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	

#### 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

**G8TLANGS 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

### 3.56 STUDENT DATA

**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

Value	Label	N	Percent	Valid Percent
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	

**G8IDRSPT Grade 8 Identification: I am treated with respect**  
Format: F1.0

Value	Label	N	Percent	Valid Percent
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 missing		7953	68.6	

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

Value	Label	N	Percent	Valid Percent
1	Strongly agree	138	1.2	3.8
2	Agree	704	6.1	19.3
3	Disagree	1900	16.4	52.1
4	Strongly disagree	906	7.8	24.8
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	N	Percent	Valid Percent
1	Strongly agree	87	0.7	2.4
2	Agree	233	2.0	6.4
3	Disagree	1793	15.5	49.2
4	Strongly disagree	1535	13.2	42.1
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	N	Percent	Valid Percent
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 life**

Format: F1.0

Value	Label	N	Percent	Valid Percent
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	N	Percent	Valid Percent
1	Strongly agree	95	0.8	2.6
2	Agree	261	2.2	7.2
3	Disagree	1978	17.1	54.3
4	Strongly disagree	1306	11.3	35.9
Total of valid cases		3640	31.4	100.0
System missing		7961	68.6	

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

Format: F1.0

Value	Label	N	Percent	Valid 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	N	Percent	Valid Percent
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	N	Percent	Valid 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

Value	Label	N	Percent	Valid 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	N	Percent	Valid Percent
1	Strongly agree	1145	9.9	31.6
2	Agree	1975	17.0	54.5
3	Disagree	359	3.1	9.9
4	Strongly disagree	143	1.2	3.9
Total of valid cases		3622	31.2	100.0
System missing		7979	68.8	

**G8IDUSEF Grade 8 Identification: What we learn in school will be useful on job**

Format: F1.0

Value	Label	N	Percent	Valid 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	

### 3.60 STUDENT DATA

**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 of valid cases		3616	31.2	100.0
System missing		7985	68.8	

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

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Strongly agree	42	0.4	1.2
2	Agree	164	1.4	4.5
3	Disagree	1962	16.9	54.3
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 Identification: School is favorite place to be**

Format: F1.0

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 missing		7980	68.8	

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

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Strongly agree	235	2.0	6.5
2	Agree	2215	19.1	61.2
3	Disagree	982	8.5	27.1
4	Strongly disagree	189	1.6	5.2
Total of valid cases		3621	31.2	100.0
System missing		7980	68.8	

**G8IDWAST Grade 8 Identification: School is waste of time**  
Format: F1.0

Value	Label	N	Percent	Valid 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 missing		7980	68.8	

**G8IDDROP Grade 8 Identification: Dropping out is a huge mistake**  
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 missing		7980	68.8	

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

Value	Label	N	Percent	Valid Percent
1	Strongly agree	74	0.6	2.0
2	Agree	289	2.5	8.0
3	Disagree	2075	17.9	57.4
4	Strongly disagree	1176	10.1	32.5
Total of valid cases		3614	31.2	100.0
System missing		7987	68.8	

**G8IDMIMP Grade 8 Identification: School is more important than people think**  
Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Strongly agree	1807	15.6	49.9
2	Agree	1619	14.0	44.7
3	Disagree	156	1.3	4.3
4	Strongly disagree	39	0.3	1.1
Total of valid cases		3621	31.2	100.0
System missing		7980	68.8	

### 3.62 STUDENT DATA

**G8IDFRNW Grade 8 Identification: My friends think school is waste of time**

Format: F1.0

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 missing		7984	68.8	

**G8IDFRNS Grade 8 Identification: Most of my friends go to school**

Format: F1.0

Value	Label	N	Percent	Valid 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 missing		7985	68.8	

**G8IDBLNG Grade 8 Identification subscore: Belonging**

Format: F5.0

Range: 8 to 39

System missing: N = 7953

**G8IDVALU Grade 8 Identification subscore: Valuing**

Format: F5.0

Range: 5 to 31

System missing: N = 7953

**G8IDTOTL Grade 8 Identification total score**

Format: F5.0

Range: 13 to 67

System missing: N = 7953

## Grade 8 Student Participation Questionnaire

**G8PEABSN Grade 8 Participation, English: Absenteeism**

Format: F1.0

Value	Label	N	Percent	Valid 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, English: Spoken to parents**

Format: F1.0

Value	Label	N	Percent	Valid Percent
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 Grade 8 Participation, English: Pays attention in class**

Format: F1.0

Value	Label	N	Percent	Valid 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 missing		8623	74.3	

**G8PEMTRL Grade 8 Participation, English: Loses materials**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Never	860	7.4	28.9
2		875	7.5	29.4
3	Sometimes	818	7.1	27.5
4		349	3.0	11.7
5	Always	76	0.7	2.6
Total of valid cases		2978	25.7	100.0
System missing		8623	74.3	

### 3.64 STUDENT DATA

#### **G8PEASGN Grade 8 Participation, English: Completes assignments**

Format: F1.0

Value	Label	N	Percent	Valid 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 valid cases		2978	25.7	100.0
System missing		8623	74.3	

#### **G8PELATE Grade 8 Participation, English: Comes late to class**

Format: F1.0

Value	Label	N	Percent	Valid 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 valid cases		2978	25.7	100.0
System missing		8623	74.3	

#### **G8PEPERS Grade 8 Participation, English: Is persistent**

Format: F1.0

Value	Label	N	Percent	Valid 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 valid cases		2978	25.7	100.0
System missing		8623	74.3	

**G8PECRTS Grade 8 Participation, English: Criticizes subject matter**

Format: F1.0

Value	Label	N	Percent	Valid Percent
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 work**

Format: F1.0

Value	Label	N	Percent	Valid 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		2978	25.7	100.0
System missing		8623	74.3	

**G8PEANOY Grade 8 Participation, English: Annoys others**

Format: F1.0

Value	Label	N	Percent	Valid 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	Always	76	0.7	2.6
Total of valid cases		2978	25.7	100.0
System missing		8623	74.3	

### 3.66 STUDENT DATA

**G8PEVALU Grade 8 Participation, English: Thinks course is valuable**

Format: F1.0

Value	Label	N	Percent	Valid 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	Always	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 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	Always	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 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	Always	522	4.5	17.5
Total of valid cases		2978	25.7	100.0
System missing		8623	74.3	



**G8PEREPR Grade 8 Participation, English: Needs reprimanding**  
Format: F1.0

Value	Label	N	Percent	Valid 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 of valid cases		2978	25.7	100.0
System missing		8623	74.3	

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

Value	Label	N	Percent	Valid 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  
matter outside of class**  
Format: F1.0

Value	Label	N	Percent	Valid Percent
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	Always	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

### 3.68 STUDENT DATA

**G8PENONP Grade 8 Participation, English subscore:  
Nonparticipatory behavior**

Format: F5.0

Range: 3 to 15

System missing: N = 8623

**G8PMABSN Grade 8 Participation, Mathematics: Absenteeism**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	1-2 absences	639	5.5	24.4
2	3-6 absences	1007	8.7	38.4
3	7 or more absences	974	8.4	37.2
Total of valid cases		2620	22.6	100.0
System missing		8981	77.4	

**G8PMPRNT Grade 8 Participation, Mathematics: Spoken to  
parents**

Format: F1.0

Value	Label	N	Percent	Valid Percent
0	No contacts	2235	19.3	79.0
1	1-2 contacts	457	3.9	16.1
2	3 or more contacts	138	1.2	4.9
Total of valid cases		2830	24.4	100.0
System missing		8771	75.6	

**G8PMATTN Grade 8 Participation, Mathematics: Pays attention  
in class**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Never	33	0.3	1.1
2		192	1.7	6.4
3	Sometimes	805	6.9	27.0
4		1078	9.3	36.2
5	Always	870	7.5	29.2
Total of valid cases		2978	25.7	100.0
System missing		8623	74.3	

**G8PMMTRL Grade 8 Participation, Mathematics: Loses materials**  
 Format: F1.0

Value	Label	N	Percent	Valid 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	Always	54	.5	1.8
Total of valid cases		2978	25.7	100.0
System missing		8623	74.3	

**G8PMASGN Grade 8 Participation, Mathematics: Completes assignments**  
 Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Never	36	0.3	1.2
2		235	2.0	7.9
3	Sometimes	696	6.0	23.4
4		1078	9.3	36.2
5	Always	933	8.0	31.3
Total of valid cases		2978	25.7	100.0
System missing		8623	74.3	

**G8PMLATE Grade 8 Participation, Mathematics: Comes late to class**  
 Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Never	1995	17.2	67.0
2		510	4.4	17.1
3	Sometimes	336	2.9	11.3
4		106	0.9	3.6
5	Always	31	0.3	1.0
Total of valid cases		2978	25.7	100.0
System missing		8623	74.3	

### 3.70 STUDENT DATA

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

Value	Label	N	Percent	Valid 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 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	34	0.3	1.1
Total of valid cases		2978	25.7	100.0
System missing		8623	74.3	

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

Value	Label	N	Percent	Valid 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	Always	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**  
 Format: F1.0

Value	Label	N	Percent	Valid 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	Always	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 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	770	6.6	25.9
Total of valid cases		2978	25.7	100.0
System missing		8623	74.3	

**G8PMCRIT Grade 8 Participation, Mathematics: Is critical of achievers**  
 Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Never	2200	19.0	73.9
2		458	3.9	15.4
3	Sometimes	231	2.0	7.8
4		75	0.6	2.5
5	Always	14	0.1	0.5
Total of valid cases		2978	25.7	100.0
System missing		8623	74.3	

### 3.72 STUDENT DATA

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

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Never	241	2.1	8.1
2		420	3.6	14.1
3	Sometimes	1012	8.7	34.0
4		745	6.4	25.0
5	Always	560	4.8	18.8
Total of valid cases		2978	25.7	100.0
System missing		8623	74.3	

#### **G8PMREPR Grade 8 Participation, Mathematics: Needs reprimanding**

Format: F1.0

Value	Label	N	Percent	Valid 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 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	Always	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

Value	Label	N	Percent	Valid Percent
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	

**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: N = 7679

### 3.74 STUDENT DATA

**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  
Format: F5.0  
Range: 0 to 2  
System missing: N = 7679

**HSLATIN4** Number of semesters Latin 4 high school  
Format: F5.0  
Range: 0 to 2  
System missing: N = 7679

**HSSPANI1** Number of semesters Spanish 1 high school  
Format: F5.0  
Range: 0 to 6  
System missing: N = 7679

**HSSPANI2** Number of semesters Spanish 2 high school  
Format: F5.0  
Range: 0 to 4  
System missing: N = 7679

**HSSPANI3** Number of semesters Spanish 3 high school  
Format: F5.0  
Range: 0 to 2  
System missing: N = 7679

**HSSPANI4** Number of semesters Spanish 4 high school  
Format: F5.0  
Range: 0 to 2  
System missing: N = 7679

**HSSPANI5** Number of semesters Spanish 5 high school  
Format: F5.0  
Range: 0 to 1  
System missing: N = 7679

**HSFLANG1** Number of semesters foreign language level 1 high school  
Format: F5.0  
Range: 0 to 4  
System missing: N = 7679

**HSFLANG2** Number of semesters foreign language level 2 high school  
Format: F5.0  
Range: 0 to 4  
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

**HSMATHTO Total number of semesters math high school**  
 Format: F5.0  
 Range: 0 to 14  
 System missing: N = 8090

**HSCIEN TO Total number of semesters science high school**  
 Format: F5.0  
 Range: 0 to 13  
 System missing: N = 8090

**HSGPAFLA GPA foreign language high school**  
 Format: F5.2  
 Range: 24.00 to 100.00  
 System missing: N = 8881

**HSGPAMAT GPA math high school**  
 Format: F5.2  
 Range: 34.00 to 100.00  
 System missing: N = 7830

**HSGPASCI GPA science high school**  
 Format: F5.2  
 Range: 40.00 to 100.00  
 System missing: N = 8245

**HSGPAOVE GPA overall high school**  
 Format: F5.2  
 Range: 58.52 to 99.78  
 System missing: N = 7947

**HSLVLFLA Highest foreign language level high school**  
 Format: F1.0

Value	Label	N	Percent	Valid Percent
0		589	5.1	20.5
1		360	3.1	12.5
2		1789	15.4	62.3
3		114	1.0	4.0
4		17	0.1	0.6
5		3	0.0	0.1
Total of valid cases		2872	24.8	100.0
System missing		8729	75.2	

### 3.78 STUDENT DATA

#### HSLVLMTH Highest math level high school

Format: F1.0

Value	Label	N	Percent	Valid Percent
1		235	2.0	6.0
2		785	6.8	20.1
3		2005	17.3	51.4
4		647	5.6	16.6
5		230	2.0	5.9
Total of valid cases		3902	33.6	100.0
System missing		7699	66.4	

#### HSYRSCOR Number of years of high school course taking data

Format: F1.0

Value	Label	N	Percent	Valid Percent
2		512	4.4	13.1
3		538	4.6	13.7
4		2872	24.8	73.2
Total of valid cases		3922	33.8	100.0
System missing		7679	66.2	

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

Format: F1.0

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

**HSACT Took ACT test high school**  
Format: F1.0

Value	Label	N	Percent	Valid Percent
0	No	7844	67.6	67.6
1	Yes	3755	32.4	32.4
Total of valid cases		11599	100.0	100.0
System missing		2	0.0	

**HSTEST Took either SAT or ACT test high school**  
Format: F1.0

Value	Label	N	Percent	Valid Percent
0	No	7706	66.4	66.4
1	Yes	3893	33.6	33.6
Total of valid cases		11599	100.0	100.0
System missing		2	0.0	

**HSSATMAT SAT math score high school**  
Format: F5.2  
Range: 200 to 800  
System missing: N = 11112

**HSSATVER SAT verbal score high school**  
Format: F5.0  
Range: 200 to 800  
System missing: N = 11112

**HSSATTOT SAT total verbal and math score high school**  
Format: F5.0  
Range: 400 to 1560  
System missing: N = 11112

**HSACTCOM ACT composite score high school**  
Format: F5.0  
Range: 9 to 34  
System missing: N = 7847

**HSACTTOT ACT total of English, reading, mathematics, science scores high school**  
Format: F5.0  
Range: 35 to 136  
System missing: N = 7847

### 3.80 STUDENT DATA

**HSACTENG ACT English score high school**

Format: F5.0  
 Range: 5 to 36  
 System missing: N = 7846

**HSACTMAT ACT math score high school**

Format: F5.0  
 Range: 8 to 36  
 System missing: N = 7846

**HSACTREA ACT reading score high school**

Format: F5.0  
 Range: 3 to 36  
 System missing: N = 7847

**HSACTSCI ACT science score high school**

Format: F5.0  
 Range: 7 to 36  
 System missing: N = 7847

**HSSATCON ACT --> SAT (test score reported in SAT sum metric) high school**

Format: F5.0  
 Range: 400 to 1560  
 System missing: N = 7722

**HSACTCON SAT --> ACT (test score reported in ACT composite metric) high school**

Format: F5.0  
 Range: 9 to 34  
 System missing: N = 7722

**HSGRDADD High school graduation status (with additional codes)**

Format: F1.0

Value	Label	N	Percent	Valid Percent
0	Dropped out	733	6.3	14.7
1	Graduated	3711	32.0	74.3
2	GED	170	1.5	3.4
3	Probably dropped out	217	1.9	4.3
4	Probably graduated	161	1.4	3.2
Total of valid cases		4992	43.0	100.0
System missing		6609	57.0	

**HSGRDCOL High school graduation status (collapsed additional codes)**

Format: F1.0

Value	Label	N	Percent	Valid Percent
0	No	1120	9.7	22.4
1	Yes	3872	33.4	77.6
Total of valid cases		4992	43.0	100.0
System missing		6609	57.0	





## CHAPTER 4

### SCHOOL DATA FILES

<b>Types of Variables in K-3 School File</b>	<b>page 4.2</b>
<b>Types of Variables in High School File</b>	<b>page 4.2</b>
<b>K-3 School Codebook</b>	<b>page 4.3</b>
<b>High School Codebook</b>	<b>page 4.11</b>

## 4.2 SCHOOL DATA

### TYPES OF VARIABLES IN K-3 SCHOOL FILE

Beginning Page

#### 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**

**SCHID School ID**  
 Format: F6.0  
 Range: 112038 to 264945

**SCHLURBN School urbanicity**  
 Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Inner city	16	20.0	20.0
2	Suburban	18	22.5	22.5
3	Rural	39	48.8	48.8
4	Urban	7	8.8	8.8
Total of valid cases		80	100.0	100.0
System missing		0	0.0	

**GRDRANGE School grade range**  
 Format: F2.0

Value	Label	N	Percent	Valid Percent
3	K-3	4	5.0	5.2
4	K-4	5	6.3	6.5
5	K-5	15	18.8	19.5
6	K-6	39	48.8	50.6
7	K-7	1	1.3	1.3
8	K-8	12	15.0	15.6
9	K-9	1	1.3	1.3
Total of valid cases		77	96.3	100.0
System missing		3	3.8	

**Flag Variables**

**FLAGGK School in STAR in kindergarten**  
 Format: F1.0

Value	Label	N	Percent	Valid Percent
0	No	1	1.3	1.3
1	Yes	79	98.9	98.8
Total of valid cases		80	100.0	
System missing		0	0.0	

## 4.4 SCHOOL DATA

### **FLAGG1 School in STAR in grade 1**

Format: F1.0

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

### **FLAGG2 School in STAR in grade 2**

Format: F1.0

Value	Label	N	Percent	Valid 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	

### **FLAGG3 School in STAR in grade 3**

Format: F1.0

Value	Label	N	Percent	Valid 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: N = 1

### **GKCHAPT1 Chapter 1 school kindergarten**

Format: F1.0

Value	Label	N	Percent	Valid Percent
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

Value	Label	N	Percent	Valid Percent
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	

**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

**Grade 2 School Variables**

**G2ENRMNT School enrollment grade 2**

Format: F4.0  
 Range: 293 to 1793  
 System missing: N = 5

**G2AVGDAT Average daily attendance grade 2**

Format: F4.0  
 Range: 95 to 999  
 System missing: N = 6

**G2AVGDMB Average daily membership grade 2**

Format: F4.0  
 Range: 293 to 999  
 System missing: N = 5

**G2CHAPT1 Chapter 1 school grade 2**

Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Yes	66	82.5	88.0
2	No	9	11.3	12.0
Total of valid cases		75	93.8	100.0
System missing		5	6.3	

**G2FRLNCH Percent students receiving free/reduced price lunch 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

Value	Label	N	Percent	Valid Percent
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	

**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

**HSID High School ID**  
 Format: F6.0  
 Range: 106017 to 267958

**SCHLURBN School urbanicity**  
 Format: F1.0

Value	Label	N	Percent	Valid Percent
1	Inner city	54	33.5	33.5
2	Urban	16	9.9	9.9
3	Suburban	35	21.7	21.7
4	Rural	56	34.8	34.8
Total of valid cases		161	100.0	100.0
System missing		0	0.0	

**ENRLMENT Student enrollment**  
 Format: F4.0  
 Range: 100 to 2425  
 System missing: N = 0

**SENIORS Estimated number of students in senior year**  
 Format: F4.0  
 Range: 21 to 606  
 System missing: N = 3

**LOWGRADE Lowest academic grade level of school**  
 Format: F2.0

Value	Label	N	Percent	Valid Percent
1		4	2.5	2.5
5		2	1.2	1.3
6		5	3.1	3.2
7		21	13.0	13.3
9		121	75.2	76.6
10		5	3.1	3.2
Total of valid cases		158	98.1	100.0
System missing		3	1.9	

## 4.12 SCHOOL DATA

### HGHGRADE Highest academic grade level of school

Format: F2.0

Value	Label	N	Percent	Valid Percent
12		158	98.1	100.0
Total of valid cases		158	98.1	100.0
System missing		3	1.9	

### NUMGRADE Number of grades in school

Format: F2.0

Value	Label	N	Percent	Valid Percent
3		5	3.1	3.2
4		121	75.2	76.6
6		21	13.0	13.3
7		5	3.1	3.2
8		2	1.2	1.3
12		4	2.5	2.5
Total of valid cases		158	98.1	100.0
System missing		3	1.9	

### 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**

**MINRQMNT** Were minimum graduation requirements the same as state core requirements?

Format: F1.0

Value	Label	N	Percent	Valid Percent
0	No	3	1.9	2.0
1	Yes	147	91.3	98.0
Total of valid cases		150	93.2	100.0
System missing		11	6.8	

**MINMATH** Minimum math credits for graduation

Format: F2.0

Value	Label	N	Percent	Valid Percent
3		141	87.6	95.3
4		4	2.5	2.7
6		3	1.9	2.0
Total of valid cases		148	91.9	100.0
System missing		13	8.1	

**MINSCIEN** Minimum science credits for graduation

Format: F2.0

Value	Label	N	Percent	Valid 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 missing		13	8.1	

**MINFORLG** Minimum foreign language credits for graduation

Format: F2.0

Value	Label	N	Percent	Valid Percent
0		1	0.6	0.7
2		142	88.2	95.9
3		1	0.6	0.7
4		4	2.5	2.7
Total of valid cases		148	91.9	100.0
System missing		13	8.1	

#### 4.14 SCHOOL DATA

##### **MINSOCST Minimum social studies credits for graduation**

Format: F2.0

Value	Label	N	Percent	Valid 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 missing		13	8.1	

##### **MINCOMP Minimum computers credits for graduation**

Format: F2.1

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

#### **Course Offerings**

##### **ALGEBRA3 Algebra III offered**

Format: F1.0

Value	Label	N	Percent	Valid 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	

**MATH4 Math IV offered**

Format: F1.0

Value	Label	N	Percent	Valid Percent
0	No	113	70.2	70.2
1	Yes	48	29.8	29.8
Total of valid cases		161	100.0	100.0
System missing		0	0.0	

**PRECALCU Precalculus offered**

Format: F1.0

Value	Label	N	Percent	Valid Percent
0	No	21	13.0	13.0
1	Yes	140	87.0	87.0
Total of valid cases		161	100.0	100.0
System missing		0	0.0	

**CALCULUS Calculus offered**

Format: F1.0

Value	Label	N	Percent	Valid 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	N	Percent	Valid Percent
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

Value	Label	N	Percent	Valid 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**

Format: F1.0

Value	Label	N	Percent	Valid 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	N	Percent	Valid Percent
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

Value	Label	N	Percent	Valid 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	N	Percent	Valid Percent
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

Value	Label	N	Percent	Valid 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	



**SCHOOL DATA 4.17**

**SPANISH Spanish offered**

Format: F1.0

Value	Label	N	Percent	Valid Percent
0	No	11	6.8	6.8
1	Yes	150	93.2	93.2
Total of valid cases		161	100.0	100.0
System missing		0	0.0	

**SPNHILVL Highest level of Spanish**

Format: F1.0

Value	Label	N	Percent	Valid 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 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	N	Percent	Valid Percent
2		24	14.9	38.7
3		9	5.6	14.5
4		24	14.9	38.7
5		5	3.1	8.1
Total of valid cases		62	38.5	100.0
System missing		99	61.5	

## 4.18 SCHOOL DATA

### LNGHILVL Highest level foreign language

Format: F1.0

Value	Label	N	Percent	Valid Percent
2		77	47.8	51.0
3		21	13.0	13.9
4		44	27.3	29.1
5		9	5.6	6.0
Total of valid cases		151	93.8	100.0
System missing		10	6.2	

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## APPENDICES

<b>Appendix A</b>	<b>Fourth-Grade Student Participation Questionnaire Eighth-Grade Student Participation Questionnaire</b>	<b>A1 A5</b>
<b>Appendix B</b>	<b>Identification With School Questionnaire</b>	<b>B1</b>
<b>Appendix C</b>	<b>Coding of Duration Composite Variables</b>	<b>C1</b>

## A2 APPENDICES

### APPENDIX A FOURTH GRADE STUDENT PARTICIPATION QUESTIONNAIRE

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

	<u>Subscale Reliability</u>
E = Effort	.94
I = Initiative	.89
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).

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FOURTH GRADE  
STUDENT PARTICIPATION QUESTIONNAIRE

Student's Name: \_\_\_\_\_

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 --	<u>Never</u>	2	<u>Some- times</u>	4	<u>Always</u>
(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
(I+) 6. attempts to do his/her work thoroughly and well, rather than just trying to get by.	1	2	3	4	5
(N+) 7. acts restless, is often unable to sit still.	1	2	3	4	5
(I+) 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
(N+) 11. needs to be reprimanded.	1	2	3	4	5
(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

[CONTINUED]

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This Student --		<u>Never</u>		<u>Some-</u> <u>times</u>		<u>Always</u>
(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
(I+)	19. asks questions to get more information.	1	2	3	4	5
(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
(I+)	25. raises his/her hand to answer a question or volunteer information.	1	2	3	4	5
(I+)	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
(I+)	28. engages teacher in conversation about subject matter before or after school, or outside of class.	1	2	3	4	5

[CONTINUED]



## A6 APPENDICES

### 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 –

	<u>Never</u>		<u>Sometimes</u>		<u>Always</u>
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 is 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.	1	2	3	4	5

**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.)

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(1) I feel proud of being part of my school.

\_\_\_\_\_ Strongly Agree    \_\_\_\_\_ Agree    \_\_\_\_\_ Disagree    \_\_\_\_\_ Strongly Disagree

(2) I am treated with as much respect as other students in my class.

\_\_\_\_\_ Strongly Agree    \_\_\_\_\_ Agree    \_\_\_\_\_ Disagree    \_\_\_\_\_ 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.

\_\_\_\_\_ Strongly Agree    \_\_\_\_\_ Agree    \_\_\_\_\_ Disagree    \_\_\_\_\_ Strongly Disagree

(5) I like to participate in a lot of school activities (for example, sports, clubs, plays).

\_\_\_\_\_ Strongly Agree    \_\_\_\_\_ Agree    \_\_\_\_\_ Disagree    \_\_\_\_\_ Strongly Disagree

(6) School is one of the most important things in my life.

\_\_\_\_\_ Strongly Agree    \_\_\_\_\_ Agree    \_\_\_\_\_ Disagree    \_\_\_\_\_ Strongly Disagree

(7) Many of the things we learn in class are useless.

\_\_\_\_\_ Strongly Agree    \_\_\_\_\_ Agree    \_\_\_\_\_ Disagree    \_\_\_\_\_ Strongly Disagree

(8) Most of my teachers *don't* really care about me.

\_\_\_\_\_ Strongly Agree    \_\_\_\_\_ Agree    \_\_\_\_\_ Disagree    \_\_\_\_\_ Strongly Disagree

(9) Most of the time I would like to be any place other than in school.

\_\_\_\_\_ Strongly Agree    \_\_\_\_\_ Agree    \_\_\_\_\_ Disagree    \_\_\_\_\_ Strongly Disagree

## B2 APPENDICES

(10) There are teachers or other adults in my school that I can talk to if I have a problem.

\_\_\_\_\_ Strongly Agree    \_\_\_\_\_ Agree    \_\_\_\_\_ Disagree    \_\_\_\_\_ Strongly Disagree

(11) Most of what I learn in school will be useful when I get a job.

\_\_\_\_\_ Strongly Agree    \_\_\_\_\_ Agree    \_\_\_\_\_ Disagree    \_\_\_\_\_ Strongly Disagree

(12) School is one of my favorite places to be.

\_\_\_\_\_ Strongly Agree    \_\_\_\_\_ Agree    \_\_\_\_\_ Disagree    \_\_\_\_\_ Strongly Disagree

(13) People at school are interested in what I have to say.

\_\_\_\_\_ Strongly Agree    \_\_\_\_\_ Agree    \_\_\_\_\_ Disagree    \_\_\_\_\_ Strongly Disagree

(14) School is often a waste of time.

\_\_\_\_\_ Strongly Agree    \_\_\_\_\_ Agree    \_\_\_\_\_ Disagree    \_\_\_\_\_ Strongly Disagree

(15) Dropping out of school would be a huge mistake for me.

\_\_\_\_\_ Strongly Agree    \_\_\_\_\_ Agree    \_\_\_\_\_ Disagree    \_\_\_\_\_ Strongly Disagree

(16) School is more important than most people think.

\_\_\_\_\_ Strongly Agree    \_\_\_\_\_ Agree    \_\_\_\_\_ Disagree    \_\_\_\_\_ Strongly Disagree



## Appendix C

## Coding of Duration Composite Variables

Grade				Duration		Explanation
K	G1	G2	G3	CMPSTYPE	CMPSDURA	
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	

## C2 APPENDICES

### Coding of Duration Composite Variables (continued)

Grade				Duration		Explanation
K	G1	G2	G3	CMPSTYPE	CMPSDURA	
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	

m = missing

r = regular

s = small