CHAPTER III

METHODOLOGY

This chapter contains a description of the methodology that was used in collecting and analyzing data for this study. Information on the setting and populations is included. Data collection, instruments, and data analysis are described. Data analysis was also reviewed in this chapter.

Setting

L. Douglas Wilder Middle School is a part of the Henrico County (Virginia) Public School Division. Educating approximately 40,000 students, Henrico is among the six largest county public school divisions with 59 schools (see Table 3). Henrico borders Richmond, Virginia, on the east, west, and north.

In 1999, the student population in Henrico was composed of 62.3% Caucasian, 32.8% Black, 3.3% Asian, and 1.6% other. In 1999, Henrico County had an economic deprivation level of 22.5% and spent $6,007 per pupil. The operating budget for 1999-2000 was $261.5 million.

Table 3

Breakdown of Henrico County Schools by Level in 1999

School level	Number of schools
Elementary	39
Middle	9
High	8
Technical/adult	3
Total	59

L. Douglas Wilder Middle School opened in the middle of the 1997-1998 academic year. The school was designed and built for 900 students. It opened with 550 students and served 670 students during the 1998-1999 academic year. L. Douglas Wilder Middle School consisted of 44 classrooms, a media center, 4 computer labs, a gymnasium, an auditorium, and a student commons area.

The design of the school supported the middle school concept of dividing students into small groups. Separate locations existed for sixth graders, seventh graders, and

eighth graders. Each section housed a teacher resource room, computer lab, student lockers, restrooms, and conference rooms. Each classroom had the capability of networking ten computers. All sixth grade classrooms had five computers. All other classrooms had between one and ten computers.

L. Douglas Wilder Middle School was one of three middle schools that had been designated a "challenged school" by the superintendent of the school division. "A school was considered challenged if it had a large percentage of lower socioeconomic students, if it had a wide range of academic needs, and if student performance had historically not been commensurate with expectations" (Edwards, p. 1, 1998). Once a school is assigned a challenged designation, the school is eligible for additional resources. The resources may come from the Virginia State Department of Education for remedial purposes or from county funds. The resources are used to reduce student-teacher ratios, provide more support services, provide additional materials, or support more staff training (Edwards, 1998).

Populations

There were three populations from which data were collected: students, teachers, and parents. Each population is described in the following sections.

Students

Students participating in the Extended School Year Program were one of the populations in this study. There were 124 students served by the Extended School Year Program in the summer of 1999 (see Table 4). A little less than half of the students had been retained at least once, and about two thirds of the students scored in the lowest quartile on the Iowa Test of Basic Skills (ITBS) in reading or math or the lowest quartile on the Stanford Nine Achievement Test in reading or math. African American students made up the largest percentage (94.4%) of the student population enrolled in the Extended School Year Program. Caucasian and other students made up the remaining 5.6% of the students enrolled.

Table 4

Extended School Year Student Characteristics, Summer 1999

Grade [a]	Retained at least at least once	Lower quartile on ITBS[b] or Stanford[c] in reading or math	Black	White	Other
	N	N	N	N	N
Fifth	17	28	38	3	0
Sixth	20	40	57	2	1
Seventh	20	18	23	0	1
Total	57	86	117	5	2

[a] The grade level was the grade during the school term prior to participating in the Extended School Year Program. [b]ITBS = Iowa Test of Basic Skills. [b]Stanford = Stanford Nine Achievement Test.

Measures of math, science, and English-social studies achievement, attendance, and student satisfaction with the program were taken for all students attending the summer 1999 Extended School Year Program. Based on data obtained for the 1999 program, 67 students completed the math pretest and posttest, and 81 students completed the science pretest and posttest. Twenty-six students completed the 6th grade English-social studies pretest and posttest, and 58 students completed the 7th and 8th grade English-social studies pretest and posttest.

Teachers

Teachers were employed to provide a 15-1 student-teacher ratio. Teacher selection was based on endorsement area and ability to work effectively with at-risk students. The majority of teachers working in the Extended School Year Program taught at L. Douglas Wilder Middle School during the regular school year. Teachers not working at Wilder during the regular year had to apply and proceed through the summer school application process. They were screened by the school division's department of human resources and then interviewed by the program administrator. Once selected, they completed a one-day training session. Eight teachers were employed in the Extended

School Year Program. The teaching experience of the teachers ranged from zero to 26 years. All eight teachers participated in the focus group interview for this study.

Parents

Parents or guardians of students participating in the Extended School Year Program were randomly asked to participate in a focus group discussion about the Extended School Year Program. For each focus group, 12 parents were asked to participate. One group consisted of seven parents while the other had eight parents in attendance. Additionally, every parent or guardian was asked to complete a survey designed to measure parent satisfaction with the Extended School Year Program. Surveys were mailed with stamped-return envelopes to the homes of all 124 students participating.

Data Collection

Achievement data were reported as the differences between pretest and posttest scores in the areas of math, science, and English-social studies. The Extended School Year Program administrator arranged for teachers to administer math, science, and English-social studies pretests on the first day of the respective courses. Any student entering after the first day was administered the pretest by the program administrator. Teachers repeated the administration of the same tests at the conclusion of the courses to determine gains.

Teachers recorded daily attendance for each student in their morning session. Teachers forwarded their daily attendance to the nurse who maintained an attendance record for participating students. Attendance data were calculated using the total number of students enrolled in the program and calculating the percentage of the students who attended each day.

Student satisfaction data were collected with surveys administered to all students. Teacher satisfaction data were collected using a focus group interview. Parent satisfaction data were collected with a survey instrument. A focus group was conducted for the teachers on the final day of the program. Eight teachers participated in the focus group. Parent surveys were mailed to the homes of all students who participated in the program. After three weeks from the initial mailing, survey recipients who did not respond were contacted via telephone as follow-up to the mailing.

Instruments

This section contains descriptions of the instruments used for evaluating the Extended School Year Program. Construction, validity, test-retest reliability, and scoring are described for achievement instruments. This section also contains a description of the formula used to calculate student attendance during the Extended School Year Program. This section concludes with descriptions of the construction, validity, reliability, and scoring of the instruments used to measure student, parent, and teacher satisfaction.

Math Test

Construction. Designed by the math curriculum specialist for the county, the math pretest and posttest (see Appendix A) consisted of 20 multiple-choice items. The test was designed to assess concepts taught during the Extended School Year Program. The math items were selected because the curriculum specialist targeted concepts on which the school had the low performance on previous tests.

Validity. Content validity was assessed for the math test by matching questions to the appropriate Standards of Learning grade-level objectives. The researcher received the test from the math curriculum specialist for the county and matched questions to the Standards of Learning objective (see Table 5).

Table 5

Items and Standards of Learning objectives on the Math Test

Item	Standards of Learning objectives [a]
1. Assuming the pattern continues, what are the next 3 terms?	6.21. The student will recognize, describe, and extend a variety of numerical and geometric patterns.
2. Assuming the pattern continues, how many small triangles are in the fourth design?	6.21. The student will recognize, describe, and extend a variety of numerical and geometric patterns.
3. There are 8 people at a business meeting. Everyone shakes hands with everyone else once. How many hand shakes would there be?	7.18. The student will identify and describe the number of possible arrangements of several objects, using a tree diagram or the Basic Counting Principle.
4. Assuming the pattern continues, what are the next 3 terms?	6.21. The student will recognize, describe, and extend a variety of numerical and geometric patterns.
5. Use the pattern of designs below. What is the total number of rectangles at each step in the pattern?	6.21. The student will recognize, describe, and extend a variety of numerical and geometric patterns.
6. Which of the following rules describes the number pattern?	6.21. The student will recognize, describe, and extend a variety of numerical and geometric patterns.
7. A pattern is created by starting with 2 and adding 3.5 repeatedly. Which is the first 5 terms of this pattern?	6.21. The student will recognize, describe, and extend a variety of numerical and geometric patterns.
8. Which of the following rules describes the number pattern?	7.22. The student will investigate and describe functional relationships.
9. Based on the chart, what will be the height of the bamboo at 16 days?	7.22. The student will investigate and describe functional relationships.
10. Five bacteria are placed in a petri dish….how many hours later will there be 446 bacteria?	6.21. The student will recognize, describe, and extend a variety of numerical and geometric patterns.
11. Assuming that the design continues, how many triangles are there on the 6^{th} row?	6.21. The student will recognize, describe, and extend a variety of numerical and geometric patterns.
12. Using the table below, what is the total number of squares for a 5 x 5 grid?	8.18. The student will describe and represent relations using tables, graphs, and rules.
13. Which example below models the variable expression 5x + 3?	7.23. The student will write verbal expressions/sentences as algebraic expressions/equations.

(table continues)

Table 5 (continued)

Item	Standards of Learning objectives [a]
14. Which of the following variable expressions represents the model below?	7.23. The student will write verbal expressions/sentences as algebraic expressions/equations.
15. The total weight of the balance is 16. What is the value of each shape in the figure below?	8.18. The student will describe and represent relations using tables, graphs, and rules.
16. Multiply each entry in the figure below by 3 and then add 5.	8.18. The student will describe and represent relations using tables, graphs, and rules.
17. Which numerical expression below has a value closest to 60?	7.23. The student will write verbal expressions/sentences as algebraic expressions/equations.
18. Which best describes the function?	8.18. The student will describe and represent relations using tables, graphs, and rules.
19. Which is the coordinate of the fourth vertex?	7.26. The student will identify and graph ordered pairs in the four quadrants of a coordinate plane.
20. Which graph below represents the company that will be the most economical for the club to hire?	8.18. The student will describe and represent relations using tables, graphs, and rules.

[a] Identifies the grade level and objective number as defined in the Virginia Standards of Learning.

Reliability. A test-retest reliability measure was taken on the math test by testing 12 students from the same school who did not participate in the program. The students were seventh graders who had similar characteristics to students who participated in the Extended School Year Program. Homeroom teachers administered the tests during an activity period. Each student was administered the test and after three weeks took the test again. Students answered test questions using a scoring sheet. The researcher, using a Scantron scoring system, scored all tests (see Table 6). Based on the test-retest measure for math, the test was reasonably reliable.

Table 6

Math Test-Retest Reliability

Math	N	M	SD	Min	Max
Pretest	12	7.83	3.33	4	13
Posttest	12	10.17	2.59	7	15
Difference	12	2.33	2.19	3	2
r = .75					

Scoring. The program administrator using a Scantron scoring system, scored all answer sheets. Students received one point for each question answered correctly. The potential range of scores was 0 to 20 on the pretest and posttest.

Science Test

Construction. Designed by the science curriculum specialist for the county, the science pretest and posttest consisted of 20 items (see Appendix B). Six of the items were matching, ten of the items were multiple-choice, and four items were fill-in-the-blank identification. The test was designed to assess curriculum objectives taught during the Extended School Year Program. The science items were selected because the curriculum specialist targeted concepts on which the school had the lowest performance on previous tests.

Validity. Content validity was assessed for the science test by matching questions to the appropriate Standards of Learning grade-level objectives. The researcher received the test from the science curriculum specialist for the county and matched questions to the Standards of Learning objectives (see Table 7).

Reliability. A test-retest reliability measure was taken on the science test by testing 11 students from the same school who did not participate in the program. The students were seventh graders who had similar characteristics to the students who participated in the Extended School Year Program. Homeroom teachers administered the tests during an activity period during the 1999-2000 school year. Each student was administered the test and after three weeks, took the test again. Students answered test questions using a scoring sheet. The researcher, using a Scantron scoring system, scored all tests (see Table 8). The range of scores was from 5 to 17 on the pretest. The range of

scores was from 8 to 16 on the posttest. The range of scores was from –3 to 6 on the difference between the pretest and posttest. Based on the test-retest measure for science, the test was reasonably reliable.

Table 7

Items and Standards of Learning Objectives on the Science Test

Item	Standards of Learning objective [a]
1. Decide whether the measurement should be measured in meters, liters, or kilograms.	LS[b].1. The student will plan and conduct investigations in which metric units are used.
2. Decide whether the measurement should be measured in meters, liters, or kilograms.	LS.1. The student will plan and conduct investigations in which metric units are used.
3. Decide whether the measurement should be measured in meters, liters, or kilograms.	LS.1. The student will plan and conduct investigations in which metric units are used.
4. Decide whether the measurement should be measured in meters, liters, or kilograms.	LS.1. The student will plan and conduct investigations in which metric units are used.
5. Decide whether the measurement should be measured in meters, liters, or kilograms.	LS.1. The student will plan and conduct investigations in which metric units are used.
6. Decide whether the measurement should be measured in meters, liters, or kilograms.	LS.1. The student will plan and conduct investigations in which metric units are used.
7. The diagram of the grasshopper is drawn to a scale of 1 block = 2 centimeters (cm). What is the total length of the grasshopper?	LS.1. The student will plan and conduct investigations in which metric units are used.
8. How much CO_2 gas is produced by each antacid tablet?	PS[c].5. The student will investigate and understand changes in matter and the relationship of these changes to the Law of Conservation of Matter and Energy.
9. Using the graph, what was the pH level on day 3?	LS.1. The student will plan and conduct investigations in which continuous line graphs are constructed, interpreted, and used to make predictions.

(table continues)

Table 7 (continued)

Item	Standards of Learning objective [a]
10. Using the diagram, what is the volume of object D?	PS.1. The student will plan and conduct investigations in which length, mass, volume, density, temperature, weight, and force are accurately measured and reported using the International System of Units
11. What is the length in centimeters of the leaf from the tip to the end of the stem?	LS.1. The student will plan and conduct investigations in which metric units are used.
12. Identify the independent variable and the dependent variable.	LS.1. The student will plan and conduct investigations in which dependent variables, independent variables, and constants are identified.
13. Identify the independent variable, dependent variable, and constants.	LS.1. The student will plan and conduct investigations in which dependent variables, independent variables, and constants are identified.
14. Identify the independent variable and dependent variable in this hypothesis.	LS.1. The student will plan and conduct investigations in which dependent variables, independent variables, and constants are identified.
15. Identify the independent variable and dependent variable in this hypothesis.	LS.1. The student will plan and conduct investigations in which dependent variables, independent variables, and constants are identified.
16. Four sixth graders want to find out what height of a ramp causes a marble to roll the farthest. How should they set up the science experiment?	6.3. The student will investigate and understand sources of energy and their transformations.
17. To conduct the marble and ramp experiment described in question number 16, which one of the following would provide the most useful data?	6.3. The student will investigate and understand sources of energy and their transformations.
18. Lamont is trying to make a decision about which of two skateboards to buy…Which of the following would give the best data to help him make his decision?	6.2. The student will plan and conduct investigations in which multiple tests of ideas are performed before accepting or rejecting them.

(table continues)

Table 7 (continued)

Item	Standards of Learning objective [a]
19. What is the best way for Susan to find out how much of each kind of food Felix ate?	6.2. The student will plan and conduct investigations in which multiple tests of ideas are performed before accepting or rejecting them.
20. Which of these is most important for Susan to keep the same during her experiment?	6.2. The student will plan and conduct investigations in which multiple tests of ideas are performed before accepting or rejecting them.

[a] Identifies the grade level and objective number as defined in the Virginia Standards of Learning.
[b] LS = Life Science
[c] PS = Physical Science

Scoring. The program administrator, using a Scantron scoring system, scored all answer sheets. Students received one point for each question answered correctly. For items 12, 14, and 15, all parts of the question needed to be answered correctly. If any portion was answered incorrectly, the question was scored incorrect. The potential range of scores for the pretest and posttest were 0 to 20.

Table 8

Science Test - Retest Reliability

Science	N	M	SD	Min	Max
Pretest	11	11.00	3.92	5	17
Posttest	11	11.68	2.80	8	16
Difference	11	.68	2.76	-3	6
r = .71					

English-social studies

Construction. Two separate tests were created by the language arts and social studies curriculum specialists (see Appendices C and D). Each test consisted of 30 questions. Because sixth graders were exposed the material for the first time, one test was created for sixth graders and one for seventh graders. This process eliminated the possibility of students being tested on material on which they had not been exposed. Both tests were designed to resemble the Virginia Standards of Learning test. In

designing the test, the language arts and social studies curriculum specialists focused on specific areas that were identified as weaknesses from previous Standards of Learning tests (see Tables 9 & 10). Reading was emphasized in the English-social studies test because a large part of the Extended School Year Program required the reading of historical fiction and common-study novels generally used in middle school English classes.

Validity. Content validity was assessed for both English-social studies tests by matching questions to the appropriate Standards of Learning grade level objectives. The researcher received both tests from the language arts and social studies curriculum specialists and matched questions to the Standards of Learning objectives (see Tables 9 & 10). The researcher was able to match all questions to the grade-appropriate Standard of Learning objective. Therefore, all questions on the 6th grade and 7th grade English-social studies tests were valid.

Table 9

Standards of Learning Concepts, Standards of Learning Objectives, and Items on the 6th Grade English-social studies Test

Concept	Number of items	Item numbers [a]	Standards of Learning Objectives [b]
Colonial America	11	1, 2, 4, 8, 9, 10, 11, 12, 13, 14, 15,	History 5.3, The student will describe colonial America.
Geography	1	3	History 4.2, The student will use the concepts of absolute location (e.g., using grid systems) and relative location (e.g., direction, reference to neighboring states, and water features).
United States Constitution and the Bill of Rights	2	5, 6	History 5. 4, The student will analyze the United States Constitution and the Bill of Rights.
Reading	2	7, 27,	English 6.4, The student will read a variety of fiction and nonfiction.

(table continues)

Table 9 (continued)

Concept	Number of items	Item numbers [a]	Standards of Learning Objectives [b]
Reading	12	16, 17, 18, 19, 20, 21, 22, 23,24, 25, 26, 28	English 6.5, The student will demonstrate comprehension of a variety of selections
Writing	1	29	English 6.7, The student will write narratives, descriptions, and explanations
Research	1	30	English 6.9, The student will select the best sources for a given purpose, including atlases, dictionaries, globes, interviews, telephone directories, encyclopedias, electronic databases, and the Reader's Guide

[a] The items are on the test in Appendix C.

[b] Identifies the grade level and objective number as defined by the Virginia Standards of Learning.

Table 10

Standards of Learning Concepts, Standards of Learning Objectives, and Items on the 7th Grade English-social studies Test

Concept	Number of items	Item numbers [a]	Standards of Learning Objectives [b]
Civil War	13	1, 2, 3, 4, 6, 7, 8, 9, 10, 12, 13, 14, 15,	History 5.7, The student will identify causes, key events, and effects of the Civil War and Reconstruction. History 5.9, The student will develop skills for historical analysis.
Reading	15	5, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, 29, 30	English 6.4, The student will read a variety of fiction and nonfiction. English 7.4, The student will use analogies, idioms, similes, and metaphors to extend understanding of word meanings. English 7.5, The student will read a variety of fiction, nonfiction, and poetry. English 7.6, The student will read and understand information from varied sources.
Research	1	25	English 7.10, The student will apply knowledge of resources in preparing written and oral presentations.
Secession	1	11	History 4.4, The student will describe the social and political life of Virginians between the Revolutionary War and the end of the Civil War.

[a] The items are on the test in Appendix C.
[b] Identifies the grade level and objective number as defined by the Virginia Standards of Learning.

Reliability. A test-retest reliability measure was taken on the sixth grade test by testing 25 students from the same school who did not participate in the program (see Table 11). The students were sixth graders who had similar characteristics to students

who participated in the Extended School Year Program. Homeroom teachers administered the tests during an activity period during the 1999-2000 school year. Each student was administered the test and after three weeks took the test again. The researcher, using a Scantron scoring system, scored all tests. A test-retest reliability measure was also conducted on the seventh grade English-social studies test by testing 10 students from the same school who did not participate in the program (see Table 12). Homeroom teachers administered the tests during an activity period during the 1999-2000 school year. Each student was administered the test and after three weeks took the test again. The researcher, using a Scantron scoring system, scored all tests. Based on the test-retest measures used for English-social studies 6 and English-social studies 7, both were not reliable over time.

Table 11

Grade 6 English-social studies Test-Retest Reliability

English-SS	N	M	SD	Min	Max
Pretest	25	8.12	2.30	5	14
Posttest	25	8.12	2.07	3	11
Difference	25	.00	2.78	-5	5
r = .18					

Table 12

Grade 7 English-social studies 7 Test-Retest Reliability

English/SS	N	M	SD	Min	Max
Pretest	10	6.50	3.14	3	10
Posttest	10	6.00	2.58	3	10
Difference	10	-.50	2.76	-5	3
r = .55					

Scoring. The program administrator using a Scantron scoring system, scored all answer sheets. Students received one point for each question answered correctly. For the sixth and seventh grade tests, the potential range of scores for the pretest and posttest was 1 to 30.

Student Attendance

Attendance rates were calculated using the Average Daily Attendance (ADA) formula (aggregate daily membership/number of days in session). Using the ADA formula, attendance during the Extended School Year Program was compared to the attendance rate of L. Douglas Wilder Middle School during the previous school year.

Student Satisfaction

Student satisfaction was measured using a 42-item survey that was completed by all students participating in the Extended School Year Program.

Construction. The researcher developed a closed form student satisfaction survey (Gall, Borg, & Gall, 1996). The survey was designed to measure student satisfaction with the Extended School Year program. The survey has 42 questions in seven satisfaction domains. The domains contained questions that measured satisfaction with components of the program that were not addressed by the achievement or attendance data. The domains were created to measure other outcomes of the Extended School Year program. The domains were satisfaction with the schedule, satisfaction with instruction, satisfaction with transportation, satisfaction with discipline, satisfaction with teachers, satisfaction with the program, and satisfaction with technology (see Table 13).

Table 13

Questions on the Student Satisfaction Survey by Domain

Domain	Survey questions
Schedule	3. I would like more time for English. (R)[a]
	4. I would like more time for math. (R)
	5. I would like more time for science. (R)
	9. I think the program should be longer than six weeks. (R)
	29. I would rather attend classes in the afternoon. (R)
	30. I would rather attend classes in the evening. (R)

(table continues)

Table 13 (continued)

Domain	Survey questions
Instruction	10. I enjoyed the math activities. 11. My parents were happy with what I learned in summer school. 12. I think I learned a lot in English. 13. I think I learned a lot in science. 14. I think I learned a lot in math. 24. I now have more interest in science than I had before the summer program. 25. I now have more interest in math than I had before the summer program. 31. I enjoyed the English activities. 32. I enjoyed the social studies activities. 34. I enjoyed the science activities.
Transportation	2. The transportation to and from school made it easy for me to attend. 6. It was easier for my parents to take me to school during the summer than to ride the bus. (R) 7. I liked riding the bus during the summer. 8. The bus ride gave me a chance to talk with my friends. 36. The bus stops were close enough to my house. 42. The bus transportation provided during the summer program was better than during the regular school year.
Discipline	15. There were few classroom disruptions during the summer. 16. We seldom had to stop class for someone acting up. 17. I felt safe being in school during the summer. 39. During the summer program students behaved in class. 40. Students who misbehaved during the summer program were disciplined. 41. Student behavior during the summer program was better than the regular school year.
Teachers	18. Teachers seemed to like working with us during the summer. 19. The English teacher knew the subject well. 20. The science teacher knew the subject well. 21. The math teacher knew the subject well. 22. I liked how the teachers taught during the summer program. 33. The teachers during the summer program were better than my teachers during the school year.
General Satisfaction	37. I would sign-up for the program next year. 38. The program was more fun than regular school.

(table continues)

Table 13 (continued)

Domain	Survey questions
Technology	1. Technology was available to use during the program. 23. I became more familiar with the computer during the summer program. 26. I improved my computer skills during the summer program. 27. I had to do class work on the computer during the summer program. 28. The school computer helped me with my work during the summer program. 35. The program allowed me to use more technology.

[a] R = Reverse scored item

Validity. The content validity of the survey questions was tested with a group of 10 public school administrators prior to the administration of the survey. Using a Student Survey Clarity and Domain Placement Instrument (see Appendix F) the administrators were asked to rate each item for clarity and place the question in one domain. The rating instrument was returned to and scored by the researcher. This procedure was used to determine if item defects existed, whether questions were associated with their respective domains, and whether questions were clear (Dillman, 1978). The results are in Table 14.

The researcher established expected domains and set a figure of 60 percent to determine if items were to be placed in a domain. Most items fell where expected or were split between two or more domains. Three items from domain one were placed into domain two and four items expected in domain two were placed into other categories. Only two items were expected in the domain six but six items (expected for other domains) were placed into domain six. Because eight items were placed into unexpected domains with five items being placed into the domain six, a second analysis was conducted.

For the second analysis, the general satisfaction domain was removed thus requiring participants to put items into the other categories. However, if less then 60% of the participants placed an item into a domain then that item was placed into the general satisfaction category. For the second analysis, all items fell within the expected domains A second classification of items by domain is in Table 15.

Table 14

Classification of Student Satisfaction Survey Items by Domain

Item	Expected Domain [a]	Domains													
		Schedule (1)		Instruc-tion (2)		Transport-ation (3)		Disci-pline(4)		Teachers (5)		Satisfac-tion (6)		Technology (7)	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%
1	7													10	100
2	3					10	100								
3	1	3	30	7	70										
4	1	3	30	7	70										
5	1	3	30	7	70										
6	3					10	100								
7	3					8	80					2	20		
8	3					8	80					2	20		
9	1	10	100												
10	2			6	60							4	40		
11	2											10	100		
12	2			7	70							3	30		
13	2			7	70							3	30		
14	2			8	80							2	20		
15	4							9	90			1	10		
16	4							10	100						
17	4							6	60			4	40		
18	5									10	100				
19	5			1	10					9	90				
20	5			1	10					9	90				
21	5			1	10					9	90				
22	5									5	50	5	50		
23	7													10	100
24	2			6	60							4	40		
25	2			6	60							4	40		
26	7			2	20									8	80
27	7			1	10									9	90
28	7			1	10									9	90
29	1	10	100												
30	1	9	90									1	10		
31	2			4	40					1	10	5	50		
32	2			4	40					1	10	5	50		
33	5									10	100				
34	2			4	40					1	10	5	50		
35	7													10	100
36	3					10	100								
37	6											10	100		

(table continues)

Table 14 (continued)

Item	Expected Domain [a]	Domains													
		Schedule (1)		Instruc-tion (2)		Transport-ation (3)		Disci-pline(4)		Teachers (5)		Satisfac-tion (6)		Technology (7)	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%
38	6											10	100		
39	4							10	100						
40	4							10	100						
41	4							9	90			1	10		
42	3					8	80					2	20		

Note. Survey items are in Appendix E. [a] Expected domains were Satisfaction with: 1 = Schedule, 2 = Instruction, 3 = Transportation, 4 = Discipline, 5 = Teachers, 6 = Program, 7 = Technology

Table 15

Second Classification of Student Satisfaction Survey Items by Domain

Item	Expected Domain [a]	Domains											
		Schedule (1)		Instruct-ion (2)		Transportation (3)		Discipline (4)		Teachers (5)		Technology (6)	
		N	%	N	%	N	%	N	%	N	%	N	%
1	6											10	100
2	3					10	100						
3	1	6	60	4	40								
4	1	6	60	4	40								
5	1	6	60	4	40								
6	3					10	100						
7	3					10	100						
8	3					10	100						
9	1	10	100										
10	2			10	100								
11	2			10	100								
12	2			10	100								
13	2			10	100								
14	2			10	100								
15	4							10	100				
16	4							10	100				
17	4							10	100				
18	5									10	100		
19	5									10	100		
20	5									10	100		

(table continues

Table 15 (continued)

Item	Expected Domain [a]	Domains											
		Schedule (1)		Instruct-ion (2)		Transportation (3)		Discipline (4)		Teachers (5)		Technology (6)	
		N	%	N	%	N	%	N	%	N	%	N	%
21	5									10	100		
22	5			2	20					8	80		
23	6											10	100
24	2			10	100								
25	2			10	100								
26	6											10	100
27	6											10	100
28	6											10	100
29	1	10	100										
30	1	10	100										
31	2			8	80								
32	2	2	20	8	80								
33	5									10	100		
34	2			10	100								
35	6											10	100
36	3					10	100						
37	7[b]	2	20	2	20								
38	7[b]									2	20		
39	4							10	100				
40	4							10	100				
41	4							10	100				
42	3					10	100						

Note. Survey items are in Appendix F. [a] Expected domains are where the researcher placed the item and were satisfaction with: 1 = Schedule, 2 = Instruction, 3 = Transportation, 4 = Discipline, 5 = Teachers, 6 = Technology. [b] 7 = General Satisfaction was removed for the purpose of domain placement however, it still contained two items.

Each item was rated on a clarity scale of one to four with one equaling the lowest and four equaling the highest rating for that item. A score of 3.0 was selected to determine whether any modification was needed for the item. An analysis of mean ratings for each student survey question revealed a low mean score of 3.50 and a high mean score of 4.00. The student satisfaction survey clarity and domain rating instrument is located in Appendix F. Results of the clarity ratings are in Table 16. Because all items received clarity ratings above three, no changes were made. All questions were worded clearly.

Reliability. Crombach's alpha was calculated for each scale on the student survey. The general satisfaction scale had the lowest alpha coefficient and the instruction scale had the highest alpha coefficient. As shown in Table 17, the student satisfaction with the schedule and the student general satisfaction domains had low reliability. All other reliability coefficients were acceptable for the purpose of this study.

Table 16

Clarity Ratings for the Student Satisfaction Survey

Question	Clarity		
	N	M	SD
1	10	3.80	.42
2	10	4.00	.00
3	10	3.80	.42
4	10	3.80	.42
5	10	3.80	.42
6	10	3.60	.97
7	10	3.70	.95
8	10	3.70	.95
9	10	3.70	.95
10	10	3.70	.95
11	10	3.50	.97
12	10	3.60	.97
13	10	3.60	.97
14	10	3.60	.97
15	10	3.90	.32
16	10	4.00	.00
17	10	4.00	.00
18	10	4.00	.00
19	10	4.00	.00
20	10	4.00	.00
21	10	4.00	.00
22	10	3.90	.32
23	10	3.80	.63
24	10	3.70	.95
25	10	3.70	.95
26	10	3.70	.95
27	10	3.70	.95
28	10	3.70	.95
29	10	3.60	.97
30	10	3.80	.42
31	10	3.70	.95

(table continues)

Table 16 (continued)

Question	Clarity		
	N	M	SD
32	10	3.70	.95
33	10	3.90	.32
34	10	3.70	.95
35	10	3.60	.97
36	10	4.00	.00
37	10	3.70	.95
38	10	3.90	.32
39	10	3.80	.42
40	10	3.90	.32
41	10	3.80	.63
42	10	3.80	.42

Note. The questions are in Appendix E.

Table 17

Crombach's Alpha Coefficients for Scales on the Student Satisfaction Survey, N = 10

Scale	Number of items	Alpha
Schedule	6	.52
Instruction	10	.71
Transportation	6	.61
Discipline	6	.61
Teachers	6	.71
General Satisfaction	2	.45
Technology	6	.80

Scoring. Each item was rated on a scale of one to four (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree). A student's score is the average of the items in a scale. Items 3, 4, 5, 6, 9, 29, and 30 were reverse scored: A response of one became the highest rating (1 = strongly agree) and a response of four became the lowest rating (4 = strongly disagree). The potential range of scores for students was 1 to 4.

Teacher Satisfaction

Teacher satisfaction was measured using a focus group interview. The focus group interview was designed to encourage discussion related to teacher's satisfaction with the components of the Extended School Year Program.

Construction. The researcher developed interview questions to address teacher satisfaction with different aspects of the Extended School Year Program. There were 14 questions divided into six domains. To measure teacher satisfaction, the researcher identified teacher-related domains that addressed all aspects of the Extended School Year Program. The domains were satisfaction with the schedule, satisfaction with training, satisfaction with student attendance, satisfaction with material availability, satisfaction with working conditions, and satisfaction with relationships (see Table 18).

Table 18

Teacher Focus Group Questions by Domain

Domain	Focus group questions
Schedule	1. What do you think of the length of the day of the program? 5. What do you think of the beginning and ending dates of the program?
Training	2. What do you think about the staff development you received prior to the beginning of the program? 8. What type of staff development do you feel was needed after beginning the program? 14. What type of staff development would you have liked to receive?
Student attendance	6. What do you think of your students' attendance during the program? 9. What do you think could be done to improve your students' attendance during the program?
Material availability	12. What do you think of the instructional materials available to you for the program? 10. What do you think of the technology available to your students during the program?
Working conditions	3. What do you think of the pay for teaching in the program? 7. What do you think of the class size during the program?
Relationships	11. What do you think of your relationship with parents? 13. What do you think of your relationship with students? 4. What do you think of your relationship with administration?

A focus group was held with the 8 teachers (in the program) during the week before the 1999 program ended. Participating teachers were asked to remain after school once their students were dismissed. After a brief overview of the focus group process, the discussion lasted approximately 50 minutes.

Validity. The content validity of the focus group questions was tested with a group of 14 public school administrators prior to the focus group interview. The administrators were asked to rate each item for clarity and place the question in one domain using a teacher focus group rating instrument (see Appendix G). The rating instrument was returned to and scored by the researcher.

A predetermined percentage of 70 or higher was selected to determine domain placement. A classification of items by domain is in Table 19. All items fell within their expected domains above the criterion set.

Table 19

Classification of Teacher Focus Group Questions by Domain

		Domains											
Questions	Expected domain [a]	Schedule (1)		Training (2)		Student Attendance (3)		Material Availability (4)		Working Condition(5)		Relation-ships (6)	
		N	%	N	%	N	%	N	%	N	%	N	%
1	1	12	86							2	14		
2	2			14	100								
3	5									14	100		
4	6											14	100
5	1	14	100										
6	3					14	100						
7	5			2	14					12	86		
8	2			14	100								
9	3					14	100						
10	4							14	100				
11	6											14	100
12	5									14	100		
13	6							14	100				
14	2											14	100

Note. Questions are located in Appendix G.

[a] 1 = Schedule, 2 = Training, 3 = Student attendance, 4 = Material availability, 5 = Working conditions, 6 = Relationships

An analysis of mean ratings for question clarity revealed a low mean score of 3.29 and a high mean score of 3.93. All were within an acceptable range. The teacher focus group rating instrument is located in Appendix G. Results of the clarity ratings are in Table 20.

Reliability. No reliability measures were conducted on the teacher focus group questions.

Scoring. After reviewing responses, the researcher divided each domain into categories and identified themes. The categories and themes are discussed in chapter four.

Table 20

Clarity Ratings for Questions Used in the Teacher Focus Group Question Validity Study

Question	Clarity		
	N	M	SD
1	14	3.57	.51
2	14	3.86	.36
3	14	3.29	.73
4	14	3.79	.43
5	14	3.43	.51
6	14	3.64	.50
7	14	3.86	.36
8	14	3.93	.27
9	14	3.86	.36
10	14	3.57	.51
11	14	3.71	.47
12	14	3.73	.73
13	14	3.71	.47
14	14	3.71	.47

Note. Questions are in Appendix G.

Parent Satisfaction

Parent satisfaction was measured using a 36-item survey that was completed by a sample of parents or guardians of students participating in the program. The survey had three sections: Section A was Student Information, Section B contained the survey questions, and Section C included a space for additional comments.

Construction. The researcher developed the parent satisfaction survey after conducting focus groups. Focus group interviews were used to elicit parent responses to

questions about different Extended School Year Program components. Focus group questions were divided into six domains. The domains were satisfaction with the schedule, satisfaction with transportation, satisfaction with cost, satisfaction with communication, satisfaction with instruction, and satisfaction with the program.

The clarity of the focus group questions was tested with a group of middle and high school parents prior to the focus group interview. Using a Parent Focus Group Rating Instrument (see Appendix L) parents were asked to rate each item for clarity. The rating instrument was returned to and scored by the researcher. A predetermined mean score of three was selected to determine item clarity.

An analysis of mean clarity ratings for each parent focus group question revealed a low mean score of 3.43 and a high mean score of 4.00. All parent focus group questions were determined to be clear based upon the predetermined mean score and the parent focus group clarity ratings. No items were changed. Results of the clarity ratings are in Table 21.

Table 21

Clarity Ratings for Parent Focus Group Questions

	Clarity		
Question	N	M	SD
1	14	3.57	.51
2	14	4.00	.00
3	14	3.00	1.36
4	14	3.57	.51
5	14	3.57	.51
6	14	3.57	.51
7	14	3.57	.76
8	14	3.57	.51
9	14	4.00	.00
10	14	3.43	.51
11	14	3.57	.76
12	14	3.79	.73
13	14	3.57	1.09
14	14	4.00	.00
15	14	3.79	.73

Note. Questions are in Appendix H.

A classification of items by domain is in Table 22. All items fell within their expected domains above the criterion set.

Table 22

Parent Focus Group Questions by Domain

		Domains											
Questions	Expected domain [a]	Schedule (1)		Transport-ation (2)		Cost (3)		Communi-cation (4)		Instruction (5)		Satisfaction (6)	
		N	%	N	%	N	%	N	%	N	%	N	%
1	1	14	100										
2	2			14	100								
3	3					14	100						
4	5									14	100		
5	1	14	100										
6	4							14	100				
7	6											14	100
8	4							14	100				
9	3					14	100						
10	5									14	100		
11	5									14	100		
12	6											14	100
13	2			14	100								
14	5									14	100		
15	4							14	100				

Note. Questions are located in Appendix H. [a] 1 = Schedule, 2 = Transportation, 3 = Cost, 4 = Communication, 5 = Instruction, 6 = Satisfaction

Two focus groups were held with parents near the completion of the 1999 Extended School Year Program. Parents were contacted via a letter from the researcher (see Appendix I). Parents who chose to participate in the group responded in accordance to the instructions in the letter. The first focus group lasted 60 minutes, and the second group lasted 55 minutes. The domains, categories, and themes are reported in Table 23. A full transcript of the parent responses is located in Appendix J.

Table 23

Parent Focus Group Responses: Categories and Themes by Domain

Domain	Categories	Themes
Schedule	Span of time	Liked the daily schedule (5)[a]
		The program could have been longer
		Child has more energy because of the schedule
		The length gives an opportunity to see progress
		Five hours and four weeks are long enough
		Length could be longer by two weeks
Transportation	Bus stop location	Did not like the location of the stops (2)[a]
		Stops were hard to get to
	Bus schedule	Did not like the morning schedule (2)[a]
	Convenience	Liked the transportation provided (2)[a]
		Transportation was reason child was able to attend
		Time and distance prohibited my child from attending everyday
Communication	Program details	Send more program information home(6)[a]
		Invite parents in to see program
	Progress reports	Send more student information home(2)[a]
		Want to know more about student progress
		Some information was sent home
	Diagnosis	Inform parents as to why students were recommended
Cost	Affordability	Prefer no cost (2)[a]
Instruction	Instructional strategies	Enjoyed classroom activities (3)[a]
		Reinforce school-year activities
		Make experience fun
	Classroom activities	Involve elective teachers
		Liked the common-study novels
	Field trips	Reinstate field trips (3)[a]
Satisfaction	Program enjoyment	My child enjoyed the program (4)[a]
		My child liked the program
	Teacher commitment	Teacher gave prizes for activities

[a] Number of times repeated.

A review of the focus group responses revealed that parents were satisfied with the schedule domain. Within the schedule domain, parents were most satisfied with the daily schedule. Parents indicated that their children enjoyed the instructional activities and the overall program. Parents were least satisfied with the transportation and communication domains. In the transportation domain, parents were least satisfied with the bus stop locations. In the communication domain, parents were least satisfied with the communication provided before and during the program. Cost and satisfaction were discussed but did not attract the type of interest as the other domains.

Based on focus group responses, the researcher developed a closed-form parent satisfaction survey (Gall, Borg, & Gall, 1996). The survey was designed to measure parents' satisfaction with the Extended School Year Program. The 36 survey questions were in six domains. The researcher developed the domains after reviewing the domain classification results. The domains were satisfaction with the schedule, satisfaction with communication, satisfaction with instruction, satisfaction with transportation, satisfaction with the program, and satisfaction with cost (see Table 24).

Table 24

Questions on the Parent Satisfaction Survey by Domain

Domain	Survey Question
Schedule	4. I prefer my child have the afternoons off during the summer. (R)
	5. The length of the program allowed my child to feel like they still had a summer.
	8. I would prefer fewer days in the week. (R)
	9. I think the program should be longer. (R)
	10. I think classes should be all day. (R)
	11. I would rather the program start in the afternoon. (R)
Communication	16. I would like more information about what my child is doing in his/her classes. (R)
	18. I would like to know more about the types of activities done by my child during the summer. (R)
	19. A weekly schedule of activities should be sent home each week. (R)
	20. I received enough information about my child's progress.
	22. I would like to receive information at the end of each session letting me know my child's progress. (R)
	23. I would like more contact with my child's teachers during the summer. (R)

(table continues)

Table 24 (continued)

Domain	Survey Question
Instruction	17. My child seemed to enjoy the summer program more than the regular school year.
	21. My child enjoyed the math activities.
	24. My child enjoyed the English activities.
	25. My child enjoyed the science activities.
	26. My child enjoyed the social studies activities.
	31. The teacher helped my child to have a better understanding of science than before the summer program.
	32. The teacher helped my child to have a better understanding of social studies then before the summer program.
	33. The teacher helped my child to have a better understanding of reading than before the summer program.
	34. The teacher helped my child to have a better understanding of math than before the summer program.
	35. My child better understands what he reads than before the summer program.
	36. My child better understands math than before the summer program.
Transportation	1. The bus stops were convenient for me.
	2. The transportation to and from school made it easy for my child to attend.
	12. The bus stops were too far from my house. (R)
	13. I felt safe dropping my child off at the bus stop.
	14. It was easier for me to take my child to school then to get them to the bus stop. (R)
	15. The bus transportation made it easy for my child to attend the summer program.
Satisfaction	7. I would encourage my child to participate in the program next year.
Cost	3. One reason my child attended was because the program was free.
	21. My child would have participated regardless of the cost.
	27. I would be willing to pay for my child's reading material.
	28. I would be willing to pay for field trips related to what my child was doing in class during the summer program.
	29. I would be willing to pay for materials needed for science.
	30. I would be willing to pay for my child's lunch during the summer program.

(R) Reversed scoring items.

Validity. The content validity of the survey questions was tested with a group of nine public school administrators prior to survey administration. Using a Parent Survey Content Validation Instrument (see Appendix M) administrators were asked to rate each

item for clarity and place the item into one domain. The rating instrument was returned to and scored by the researcher.

The researcher established an 80% criterion for placement into the expected domain. The classification of parent satisfaction survey items by domain revealed that several survey items received less then 80%. Question 13 was placed equally into the transportation and satisfaction domains. Questions 24, 25, and 26 were placed equally into the instruction and satisfaction domains. A classification of items by domain is in Table 25.

Table 25

Classification of Parent Satisfaction Survey Questions by Domain

		Domains											
Questions	Expected Domain [a]	Schedule (1)		Communi-cation (2)		Instruction (3)		Transport-ation (4)		Satisfac-tion (5)		Cost (6)	
		N	%	N	%	N	%	N	%	N	%	N	%
1	4							9	100	2	22		
2	4							8	88	1	11		
3	6											9	100
4	1	7	77							2	22		
5	1	8	88							1	11		
6	6									1	11	8	88
7	5			1	11					8	88		
8	1	7	77			1	11			1	11		
9	1	7	77			2	22						
10	1	8	88			1	11						
11	1	9	100										
12	4							9	100				
13	4							4	44	5	55		
14	4							7	77	2	22		
15	4							9	100				
16	2			8	88	1	11						
17	5					1	11	1	11	7	77		
18	2			9	100								
19	2	1	11	8	88								
20	2			7	77					2	22		
21	5					6	66			3	33		
22	2			9	100								
23	2			8	88					1	11		

(table continues)

Table 25 (continued)

		Domains											
Questions	Expected Domain [a]	Schedule (1)		Communi-cation (2)		Instruction (3)		Transport-ation (4)		Satisfac-tion (5)		Cost (6)	
		N	%	N	%	N	%	N	%	N	%	N	%
24	5					5	55			4	44		
25	5					5	55			4	44		
26	5					5	55			4	44		
27	6											9	100
28	6											9	100
29	6											9	100
30	6											9	100
31	3					7	77			2	22		
32	3					7	77			2	22		
33	3					7	77			2	22		
34	3					7	77			2	22		
35	3					6	66			3	33		
36	3					6	66			3	33		

Note. Questions are in Appendix K.

[a] Expected domains were 1 = Schedule, 2 = Communication, 3 = Instruction, 4 = Transportation, 5 = Satisfaction, 6 = Cost

Because 17 questions received less then 80%, the researcher conducted a second domain analysis on the parent satisfaction survey. Ten parents of middle school aged children were used to conduct the second domain analysis. For the second analysis, the general satisfaction domain was removed thus requiring participants to put items into the other categories. If less then 80% of the participants placed an item into a domain then that item was placed into the general satisfaction category.

Only one item did not meet the criterion for placement into the expected domain. Therefore, no general satisfaction domain was used in the analysis of data. A classification of items by domain is in Table 26.

Table 26

Second Classification of Parent Satisfaction Survey Items by Domain

		Domains											
Item	Expected Domain [a]	Schedule (1)		Communication (2)		Instruction (3)		Transportation (4)		Cost (5)		Blank (6)	
		N	%	N	%	N	%	N	%	N	%	N	%
1	4							10	100				
2	4							10	88				
3	5									10	100		
4	1	10	100										
5	1	10	100										
6	5									10	100		
7	6			2	20	4	40					4	40
8	1	10	100										
9	1	10	100										
10	1	8	80			2	20						
11	1	10	100										
12	4							10	100				
13	4							10	100				
14	4							10	100				
15	4							10	100				
16	2			10	100								
17	5					8	80					2	20
18	2			10	100								
19	2			10	100								
20	2			10	100								
21	3					10	100						
22	2			10	100								
23	2			10	100								
24	5					10	100						
25	5					10	100						
26	5					10	100						
27	5									10	100		
28	5									10	100		
29	5									10	100		
30	5									10	100		
31	3					10	100						
32	3					10	100						
33	3					10	100						
34	3					10	100						
35	3					10	100						
36	3					10	100						

Note. Questions are in Appendix K.

[a] Expected domains were 1 = Schedule, 2 = Communication, 3 = Instruction, 4 = Transportation, 5 = Cost, 6 = Blank

Each item was rated on a clarity scale of one to four with one equaling the lowest and four equaling the highest rating for that item. An analysis of mean clarity ratings for each parent survey question revealed a low mean score of 3.33 and a high mean score of 4.00. A score of 3.0 was selected to determine whether any modification was needed for the item. The parent satisfaction survey clarity and domain rating instrument is located in Appendix M. Results of the clarity ratings are in Table 27. In reviewing the clarity ratings, all questions were worded clearly. Because all items received clarity ratings above 3 no changes were made.

Table 27

Clarity Ratings for Items Used in the Parent Satisfaction Survey Question Validity Study

Items	Clarity		
	N	M	SD
1	9	4.00	.00
2	9	3.89	.33
3	9	4.00	.00
4	9	3.67	1.00
5	9	3.78	.44
6	9	3.89	.33
7	9	4.00	.00
8	9	3.33	1.12
9	9	3.67	.71
10	9	3.67	1.00
11	9	3.56	1.01
12	9	3.78	.67
13	9	3.78	.44
14	9	3.78	.67
15	9	3.78	.44
16	9	3.89	.33
17	9	4.00	.00
18	9	3.89	.33
19	9	4.00	.00
20	9	3.89	.33
21	9	4.00	.00
22	9	3.89	.33
23	9	3.89	.33
24	9	4.00	.00
25	9	4.00	.00
26	9	4.00	.00

(table continues)

Table 27 (continued)

Items	Clarity		
	N	M	SD
27	9	3.78	.44
28	9	3.89	.33
29	9	3.78	.44
30	9	3.89	.33
31	9	3.67	.50
32	9	3.67	.50
33	9	3.67	.50
34	9	3.67	.50
35	9	3.89	.33
36	9	3.89	.33

Note. Items are in Appendix K.

Reliability. Crombach's alpha was calculated for each scale on the parent satisfaction survey following the collection of the data. The schedule scale had the lowest alpha coefficient and the instruction scale had the highest alpha coefficient. After calculating alpha scores for each scale and reviewing correlation scores, several questions were recoded. Because of this new assignment, a response of one was now the highest rating (strongly agree) and a response of four was the lowest (strongly disagree). Alpha coefficients were run a second time after adjusting the response scale of some of the survey questions. Results are reported in Table 28.

Table 28

Crombach's Alpha Coefficients for Scales on the Parent Satisfaction Questionnaire

Scale	N	Number of items	Alpha
Schedule	21	6	-2.03[a]
Instruction	21	11	.91
Transportation	21	6	.80
Communication	21	6	.83
Cost	21	6	.73
General satisfaction	21	1	- -

Note. (- -) indicates not enough items to run a coefficient.
[a] This is not a meaningful alpha coefficient due to negative correlation among the items. With item 11 eliminated and items 4 and 8 recoded to their original values, the alpha coefficient was calculated to be .54.

Scoring. Each item was rated on a scale of one to four (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree). A parent's score is the average of the items in a scale. Several questions (4, 8, 9, 10, 11, 12, 14, 16, 18, 19, 22, and 23) were reverse scored. Because of this, a response of one was now the highest rating (1 = strongly agree) and a score of four was now the lowest (4 = strongly disagree).

Data Analysis

Research questions for this study provided the guide by which the Extended School Year Program was evaluated. For the first four research questions, differences between pretests and posttests scores were analyzed. Scores are reported in Chapter IV using descriptive statistics.

For the fifth research question, attendance records during the Extended School Year Program was compared to the previous years' attendance of the school division and the host school. The Average Daily Attendance (ADA) of the 1999 Extended School Year Program is reported in Chapter IV. The 1998-1999 ADA of the school division and host school are also reported.

For the sixth research question, a student satisfaction survey was administered. Each response was scored based on a four-point Likert scale with one being strongly disagree, two being disagree, three being agree, and four being strongly agree. Results are reported in Chapter IV using descriptive statistics.

For the seventh research question, a parent satisfaction survey was administered. Each response was scored based on a four-point Likert scale with one being strongly disagree, two being disagree, three being agree, and four being strongly agree. Results are reported in Chapter IV using descriptive statistics.

For the eighth research question, a focus group interview was conducted. Teacher responses were assigned domains and placed into categories, and themes. Results are reported in Chapter IV.

Summary

A description of the methodology used to collect and analyze data for this study was reviewed in chapter three. Chapter III also included information on the setting and populations. Finally, descriptions of data collection procedures and instruments were reviewed. Chapter IV includes quantitative and qualitative results drawn from data gathered for the purpose for evaluating the Extended School Year Program.