CHILDREN'S ATTITUDES TOWARD

GEOGRAPHY: A COMPARATIVE

STUDY IN SAN MARCOS, TEXAS

THESIS

Presented to the Graduate Council of Texas State University-San Marcos in Partial Fulfillment of the Requirements

for the Degree

Master of SCIENCE

by

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DEDICATION

This thesis is dedicated to the people who have been my greatest support and inspiration.

To my very best friend Darla van Gorp for always being there for me.

To my oldest friend, Marcia Gehm, who has put up with me more years than I can count, and loves me always.

To Lee and Susie Friend for helping me find my path, and helping me get moving on it.

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CHAPTER I

INTRODUCTION

The attitudes of children toward different school subjects are important to consider in the development of curricula and also in the development of national, state and local guidelines for specific disciplines. The purpose of this research was to examine attitudes of children in San Marcos, Texas toward different school subjects. The study was modeled after an original research project conducted on this subject in 1983 by Dorothy Sack (1998) and followed up in 1993 by Sack and Petersen (1998).

In the previous studies, fourth, fifth and sixth grade school children were asked to rank six school subjects - art and music, geography, mathematics, physical education, reading and science - in order of their personal preference. In both the 1983 and 1993 studies, the students ranked geography last in total School Subject preference. The students were also asked to rank six Social Studies Subjects - anthropology, economics, geography, government, history and sociology. In 1983, geography was ranked fourth out of six, and in 1993 third out of six.

The dates of the original studies coincided with two important developments in geographic education: the publication of guidelines for establishing geographic curricula in 1983 (Joint Committee) and the institution of national standards in 1993 (National Geographic Society). This study attempted to determine whether there were any changes

in attitude and preference during the time since the standards were put in place. The research objective was to determine if children's attitudes have changed overtime, and if so, what possible factors may have contributed to the change. In addition, this study expanded the previous research to examine the attitudes of students in public schools versus private schools.

Why do students prefer some school subjects as opposed to others? Why have students tended to rate geography low relative to other subjects? Bramwell (1987) suggested that student attitudes toward geography might improve with the increased use of teaching methods that involve active student participation. *Gardner's Multiple Intelligences Theory* (Gardner 1983) involves the use of eight intelligences (intrapersonal, interpersonal, logical/mathematical, visual/spatial, verbal/linguistic, bodily/kinesthetic, naturalist, and musical/rhythmic) and suggests that instructors who employ teaching practices that address all of these intelligences in the classroom will help students to learn more readily (Thompson and Thornton 2002). Theoretically, if students are actively participating in a subject, they will be more interested in that subject; thus their attitudes toward the subject would improve. While the use of active teaching methods should improve learning in any subject, geography relates itself well to this style of teaching because of its vast scope and interdisciplinary approach.

Cirrincione and Farrell (1988) suggested that helping elementary school teachers prepare for teaching responsibilities in geography would be best addressed before they begin to teach in the schools, through the use of geography content and methods requirements in pre-service teacher certification programs. *Shulman's Knowledge Base Theory* (Shulman 1987) is based on a cognitivist framework in which behaviorists believe

that the study of learning should be objective and that learning theories should be developed from the results of empirical research. The teacher's experience is contained in structured mental representations and is viewed as an active problem-solving agent (Warren and Ogonowski 1998).

Cirrincione and Farrell (1988) reported that almost 25% of social studies teachers had no undergraduate academic course work on geography and 40% had only one course. It would be difficult for teachers to teach geography effectively if they do not have some type of background and training for the subject.

Previous research shows that early interest of students in a subject often leads to what they will study in high school and college (Klein 1995, Downs 1994). The media regularly report that students in the United States are "illiterate" when it comes to place names and map location (National Geographic 2002). While a study by the Educational Testing Service in 1980 is now outdated, it reflected a failing grade of global place name recognition/identification by over 3,000 undergraduates at 185 institutions of higher education (Hill 1981). The study of geography is important to enable students to actively participate in our global community (Commission on International Education 1984), and creating interest in earlier years is important to achieve this goal (Klein 1995, Downs 1994).

This research project represents original research in actual classrooms. This approach is rarely taken because of difficulties with classroom access by researchers (Sack and Petersen 1998). It is a comparative study, the third survey completed in ten-year increments in the San Marcos Consolidated Independent School District. Private schools in San Marcos were also studied for the first time. Efforts to locate other

published studies of classroom research about children's attitudes toward school subjects resulted in very few such reports (Sack and Petersen 1998, Bramwell 1987, Haladyna and Thomas 1979, McTeer 1979). Several of the recently published studies were in countries other than the United States (Colley and Comber 2003, Lannes et al. 2002, Francis 2000).

This research was conducted using students in the fourth through sixth grades - the same grades used in the previous studies - with the addition of the same grades in private schools. This age group was originally chosen because geography is introduced in the fourth grade with the subject focused on Texas Geography, continued in fifth grade as United States Geography and the cycle completed in sixth grade with World Geography. This sequence of regional emphasis is repeated in 7th, 8th and 9th or 10th grades. Private schools have more curricular latitude in introducing and scheduling course work, but they tend to follow a similar format in the introduction of geography courses.

CHAPTER II

LITERATURE REVIEW

Geographic Literacy/Illiteracy

In 1965, the Association of American Geographers reported that in order to combat global geographic illiteracy, major changes needed to be made in pre-college programs. Wise (1975) helped to instigate discussions concerning the quality and quantity of geographic education in elementary and secondary schools. In spite of this, continued reports and studies have shown that American students continue to rank below students in other industrialized nations in place name and map identification. Written before the results of the 1994 National Assessment of Education Progress in Geography (NAEP) results were tallied and supporting his contentions, Downs (1994) suggested that the levels of geographic knowledge were unsatisfactory in U.S. students. A recent National Geographic Society study (2002) ranks young Americans next to last among students in nine countries in geographic knowledge (NGS-Roper 2002).

Formal Standards

Although previously published studies indicated consistently that geography is ranked low by many students, recent changes in geography teaching and curricula may have resulted in improved attitudes. The publication in 1984 of *Guidelines for Geographic Education: Elementary and Secondary Schools* (Joint Committee)

spurred a revolution to improve geography's status in educational coursework (Boehm 2002). These guidelines have been the foundation for geographic education research over the past nineteen years. Formal geographic education standards were presented in 1994 by the Geography Education Standards Project (GESP 1994).

In 1998, the Fordham Foundation released an appraisal of state standards in 38 states plus the District of Columbia. States omitted did not have standards in place or were in the process of revising existing standards. At that time, only three states (Texas, Colorado and Indiana) received the highest rating, a grade of "A" (Munroe 1998). When revisited in 2000, 45 states plus the District of Columbia now had formal standards in place, and the number of states receiving an "A" had grown to seven, including Texas (Finn 2000).

Teacher Preparation and Teaching Methods

Nationwide, the numbers of undergraduates and graduate students declaring geography as a major are increasing, but this does not necessarily indicate a corresponding increase in the proficiency of the discipline (Downs 1994). Although geography enrollment numbers are increasing, they are still extremely low (Hill 1981). Hill and LaPrairie (1989) reported the status of geography in both K-12 and institutions of higher learning. They suggested that grade school geography over time has become submerged in the social studies and that little physical geography has survived. Thus, the need to increase student interest in geography is even more critical in order to ensure continued growth of the discipline.

Hill et al. (1992) provided an overview of the design rationale, development process, evaluation considerations and early outcomes of the Geographic Inquiry into

Global Issues (GIGI) project. This project employed an interactive learning process (Hill et al. 1992). Klein indicated in a 1995 report on the GIGI project that even though students did better in learning the cognitive and skills objectives, they showed no change in interest toward studying geography or global environmental issues. He recommended that issues discussed in the classroom be primarily local to increase the students' attention and interest.

Classroom Research

Historically there had been little original research published on children's attitudes toward school subjects and publications on recent classroom research are especially sparse. Sack and Petersen's 1983 and 1993 research is the only longitudinal study found in the literature on student's attitudes (Sack and Petersen 1998). Haladyna and Thomas (1979) discussed the subjects that elementary school children favor. In their study, art, music and physical education were the most popular subjects while social studies were ranked lowest. McTeer (1979) reported on a survey of high school students in Georgia and their attitudes toward five areas of the social studies (geography, economics, government, history, psychology/sociology). Geography was ranked by the largest number of students as the least liked of these courses. Thus all of the published studies report that students tend not to prefer geography.

Types of Attitude Scales

Sack and Petersen (1998) utilized simple questionnaires that asked students to rank their favorite subjects in an order from 1-6, with the lower numbers signifying higher interest. While relatively uncomplicated in terms of attitude surveys, it is effective in providing an ordinal ranking of interest.

The Gable-Roberts Attitude Toward School Subjects (GRASS) scale was developed in 1983 (Gable and Roberts 1983). This scale utilizes 23 item stems which are measured on a 5-point Likert scale from "strongly agree" to "strongly disagree." This scale allows an analyst to look for general interest and usefulness of a particular subject. Although overall attitude toward school may not be correlated with classroom achievement, attitudes toward specific school subjects may be related to grades in these subjects (Gable and Roberts 1983).

Nyberg and Clark developed a semantic differential type instrument, *School Subjects Attitude Scale* that utilizes 24 bipolar word pairs with three dimensions: evaluation, usefulness, and difficulty (Nyberg and Clark 1982). The students also responded on a 5-point Likert scale of "-2" to "+2" with high scores signifying a positive attitude toward the question.

While both specifically look at interest toward school subjects, both the Gable-Roberts and Nyberg-Clark scales are more complex and time-consuming. Therefore, they are both more appropriate for a study with higher grades or for focus groups in the younger ages.

CHAPTER III

STUDY AREA AND METHODS

Study Area

This research focused on 4th, 5th, and 6th grade school children in public and private schools in San Marcos, Texas. The cultural variables of the study area (such as income, race and religious preference) were not considered in that a random selection of children were chosen based on class size in the public schools. All children in those grades were studied in the private schools (3) in the San Marcos city limits. The location area was selected because of the continuation of a previous study. Figure 1 shows a map of the San Marcos city limits with the schools studied marked as public or private schools.

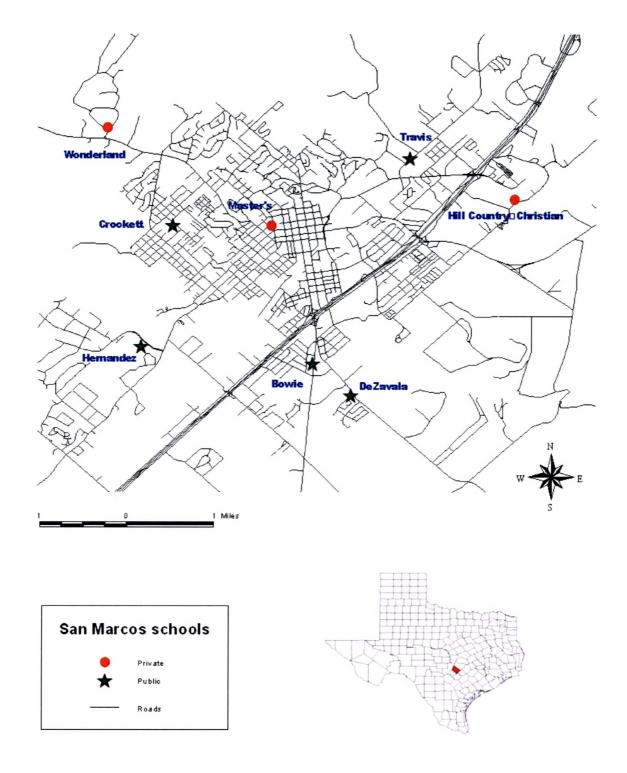


Figure 1 – Map of San Marcos with Study Schools

Methods

In order to make valid correlations between the previous surveys from 1983 and 1993 and this survey, the original questions were followed. This survey added to previous knowledge as it compared two different types of schools: public and private.

No attempt was made to collect any personal identifiable information on the students nor were issues of race or income assessed. The student's actual knowledge of geography was not assessed.

Sample

The sample size in 1983 was 100% (n=889) of fourth, fifth and sixth grade students in the San Marcos Consolidated Independent School District. Because parental permission was required for the study in 1993, and the rapid population growth in San Marcos resulted in a doubling of the number of students in these grades, only about one-third of the students were surveyed (n=539). The sample size for 2003 was 43.7% (n=722) of students in public schools and 100% (n=77) of students in private schools. This number for the public schools was chosen due to time constraints and accessibility to the students and classrooms. The classrooms surveyed were randomly selected but evenly distributed among the four elementary schools (grade 4) and again evenly within the classes at the one intermediate school. All the classrooms were surveyed in the private schools. Table 1 presents the schools surveyed.

Table 1. Schools Surveyed

| Public | Bowie Elementary 4020 Monterrey Oak San Marcos, TX 78666 | Grade 4 |
|---------|--|------------|
| Public | Crockett Elementary 1225 Hwy 123 San Marcos, TX 78666 | Grade 4 |
| Public | DeZavala Elementary 600 FM 621 San Marcos, TX 78666 | Grade 4 |
| Public | Travis Elementary 1437 Post Road San Marcos, TX 78666 | Grade 4 |
| Public | Hernandez Intermediate 333 Stagecoach Trail San Marcos, TX 78666 | Grades 5-6 |
| Private | Hill Country Christian 2001 River Road San Marcos, TX 78666 | Grades 4-6 |
| Private | Master's School of San Marcos 329 North San Marcos, TX 78666 | Grades 4-6 |
| Private | Wonderland School 302 Country Estates Drive San Marcos, TX 78666 | Grades 4-5 |

Procedures and Instruments

Permission for surveying the San Marcos Consolidated Public Schools was given by the school superintendent, Dr. Sylvester Perez. Permission for surveying the private schools was given by their principals.

The original research instrument (Appendix A) asked gender (boy/girl) and had one list of six School Subjects (art and music, geography, mathematics, physical education, reading, science) and one list of Social Studies Subjects (anthropology,

economics, geography, government, history, sociology). Both lists were in alphabetical order. The children were first asked to mark their gender and then a brief explanation of each School Subject was given and key words for each subject were listed on the overhead projector and screen. The children were asked to mark their #1 favorite subject, then #2 and on down the list. Once the entire class finished marking this section, the same procedure was completed for the list of Social Studies Subjects.

The teacher surveys (Appendix B) were self-administered concurrently with the student surveys. The teacher survey asked about teaching methods as well as attitude towards different subjects. This is a continuation of the original research.

Data Organization and Analysis

The data were entered into the Statistical Package for the Social Sciences (SPSS) for analysis. As the previous study had two samples, the Kolmogorov-Smirnov test was performed. Although with this survey there are three samples, only the totals were included in the original article publication and so only the totals could be compared with this survey.

Comparisons were made between the 1983, 1993 and corresponding 2003 components of the boys, girls, fourth graders, fifth graders, sixth graders and teachers.

Comparisons were also made between boys and girls, and public versus private schools.

Sack and Petersen (1998) used tables and histograms to illustrate their findings; therefore the same approach was used to present correlations among the data in this research. The original data were unavailable, so comparison data from the published article (Sack and Petersen 1998) were utilized. The use of the published data for

comparison purposes was not a hindrance to the analysis, results or conclusions to the research.

CHAPTER IV

ANALYSIS AND RESULTS

Table 2 lists the variables by type used in this research. This includes the three study years, the two types of schools - public and private - with private being new to this study, the forty different classes surveyed in the 4th - 6th grades, the gender and the school subjects surveyed, both total School Subjects and Social Studies Subjects. The table is color coded to mark the new areas studied in 2003, the areas used all three survey years and the classrooms surveyed, which are assumed to be new for 2003 as the information on the particular classrooms surveyed previously is not available.

Table 3 shows the number of students each year that ranked Geography in each position (1-6) relative to preference for other subjects. The rank for Geography as a School Subject - Total showed an increase of one rank from the 1993 survey to 5th in 2003. Geography as a Social Studies Subject - Total shows an increase in one complete rank in 2003 after tying for 2nd in 1993. The increase was only 1.9%, but it was an increase. Geography as a School Subject – Boys, Geography as a Social Study – Boys and Geography as a School Subject – Girls rose one rank, while Geography as a Social Study – Girls dropped one rank in 2003.

Table 4 and Figure 2 show the ordinal ranking of Geography as a School Subject
- Total. The number of students ranking Geography number one, or their favorite, rose by

Table 2. Variables by Type

| Year | Type | School | Class | Grade | Gender | Classes |
|------|-------------|--------|-------|-------|--------|----------------|
| 2003 | 1 = Public | 1 | 1 | 4 | 1 = M | Art & Music |
| 1993 | 2 = Private | 2 | 2 | 5 | 2 = F | Geography (SS) |
| 1983 | | 3 | 3 | 6 | | Mathematics |
| | | 4 | 4 | | | Physical Ed |
| | | 5 | 5 | | | Reading |
| | | 6 | 6 | | - [| Science |
| | 1 | 7 | 7 | | | Anthropology |
| | 1 | 8 | 8 | | | Economics |
| | | | 9 | | | Geography |
| | | | 10 | | | Government |
| | | | 11 | | | History |
| | | | 12 | | [| Sociology |
| | | | 13 | | | |
| | | | 14 | | | |
| | | | 15 | | | |
| | | | 16 | i | | |
| | | | 17 | | - | |
| | | | 18 | | 1 | 1983 |
| | | | 19 | | | 1993 |
| | | | 20 | | | 2003 |
| | | | 21 | | | all 3 years |
| | | | 22 | | | |
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| | | | 35 | | | |
| | | | 36 | | | |
| | | | 37 | | | |
| | | | 38 | | | |
| | | | 39 | | | |
| | | | 40 | | | |

Note: For 1983 and 1993, survey data came from the article published in 1998.

Table 3. Rank by Year by Variable

| Ge | ogra | phy as a | School S | Subject | Geography as a Social Study Geography as a School Sub | | | | | | · · | | | |
|-------|------|----------|----------|---------|---|------------|--------|--------|--------|------|------|--------|--------|--------|
| | | TOT | AL | | | TOTAL BOYS | | | | | | | | |
| Rank | Year | 1983 | 1993 | 2003 | Rank | Year | 1983 | £661 | 2003 | Rank | Year | 1983 | 8661 | 2003 |
| | n | 21 | 20 | 39 | | n | 93 | 95 | 131 | 1 | n | 9 | 14 | 18 |
| 1 | % | 2.4% | 3.7% | 5.4% | • | % | 10.5% | 17.6% | 18.1% | | % | 2.0% | 5.5% | 5.1% |
| 2 | n | 46 | 53 | 61 | 2 | n | 157 | 108 | 145 | 2 | n | 24 | 30 | 29 |
| | % | 5.2% | 9.8% | 8.4% | 4 | % | 17.7% | 20.0% | 20.1% | 4 | % | 5.3% | 11.8% | 8.2% |
| 3 | n | 91 | 71 | 100 | 3 | n | 160 | 108 | 158 | 3 | n | 55 | 34 | 46 |
| | % | 10.2% | 13.2% | 13.9% | 3 | % | 18.0% | 20.0% | 21.9% | 3 | % | 12.1% | 13.3% | 13.0% |
| 4 | n | 144 | 96 | 140 | 4 | n | 185 | 90 | 124 | 4 | n | 78 | 46 | 72 |
| | % | 16.2% | 17.8% | 19.4% | 7 | % | 20.8% | 16.7% | 17.2% | 7 | % | 17.1% | 18.0% | 20.3% |
| 5 | n | 244 | 134 | 210 | 5 | n | 150 | 63 | 98 | 5 | n | 124 | 62 | 103 |
| 3 | % | 27.4% | 24.9% | 29.1% | n | % | 16.9% | 11.7% | 13.6% | 7 | % | 27.3% | 24.3% | 29.0% |
| 6 | n | 343 | 165 | 172 | 6 | n | 144 | 75 | 66 | 6 | n | 165 | 69 | 87 |
| 0 | % | 38.6% | 30.6% | 23.8% | 0 | % | 16.2% | 13.9% | 9.1% | U | % | 36.3% | 27.1% | 24.5% |
| Total | n | 889 | 539 | 722 | tal | n | 889 | 539 | 722 | otal | n | 455 | 255 | 355 |
| To | % | 100.0% | 100.0% | 100.0% | Tol | % | 100.0% | 100.0% | 100.0% | То | % | 100.0% | 100.0% | 100.0% |

| G | eogr | aphy as BO | | Study | Geography as a School Subject Geography as a GIRLS GIR | | | | | | · I | | | |
|-------|------|---------------|--------|--------|--|------|--------|--------|--------|------|------|--------|--------|--------|
| Rank | Year | 1983 | 1993 | 2003 | Rank | Year | 1983 | 1993 | 2003 | Rank | Year | 1983 | 1993 | 2003 |
| ı | n | 58 | 41 | 58 | 1 | n | 12 | 6 | 21 | 1 | n | 35 | 54 | 73 |
| Ľ | % | 12.7% | 16.1% | 16.3% | 1 | % | 2.8% | 2.1% | 5.7% | 1 | % | 8.1% | 19.0% | 19.9% |
| 2 | n | 85 | 51 | 84 | 2 | n | 22 | 23 | 32 | 2 | n | 72 | 57 | 61 |
| | % | 18.7% | 20.0% | 23.7% | 4 | % | 5.1% | 8.1% | 8.7% | 4 | % | 16.6% | 20.1% | 16.6% |
| 3 | n | 93 | 59 | 74 | 3 | n | 36 | 37 | 54 | 3 | n | 67 | 49 | 84 |
| | % | 20.4% | 23.1% | 20.8% | , | % | 8.3% | 13.0% | 14.7% | 3 | % | 15.4% | 17.3% | 22.9% |
| 4 | n | 88 | 42 | 56 | 4 | n | 66 | 50 | 68 | 4 | n | 97 | 48 | 68 |
| | % | 19.3% | 16.5% | 15.8% | 4 | % | 15.2% | 17.6% | 18.5% | 7 | % | 22.4% | 16.9% | 18.5% |
| 5 | n | 66 | 31 | 49 | 5 | n | 120 | 72 | 107 | 5 | n | 84 | 32 | 49 |
| Ľ | % | 14.5% | 12.2% | 13.8% | 3 | % | 27.6% | 25.4% | 29.2% | 3 | % | 19.4% | 11.3% | 13.4% |
| 6 | n | 65 | 31 | 34 | 6 | n | 178 | 96 | 85 | 6 | n | 79 | 44 | 32 |
| Ľ | % | 14.3% | 12.2% | 9.6% | Ů | % | 41.0% | 33.8% | 23.2% | U | % | 18.2% | 15.5% | 8.7% |
| Total | n | 455 | 255 | 355 | otal | n | 434 | 284 | 367 | otal | n | 434 | 284 | 367 |
| To | % | 100.0% | 100.0% | 100.0% | To | % | 100.0% | 100.0% | 100.0% | To | % | 100.0% | 100.0% | 100.0% |

Note: Highlighted figures represent highest rank by percentage.

Table 4. Geography as a School Subject by Year - Total

| | | | | | Rank | | | |
|----------------|------|-----|-----|------|------|------|------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Total |
| Geography | Year | % | % | % | % | % | % | % |
| as a | 1983 | 2.4 | 5.2 | 10.2 | 16.2 | 27.4 | 38.6 | 100 |
| School Subject | 1993 | 3.7 | 9.8 | 13.2 | 17.8 | 24.9 | 30.6 | 100 |
| TOTAL | 2003 | 5.4 | 8.4 | 13.9 | 19.4 | 29.1 | 23.8 | 100 |

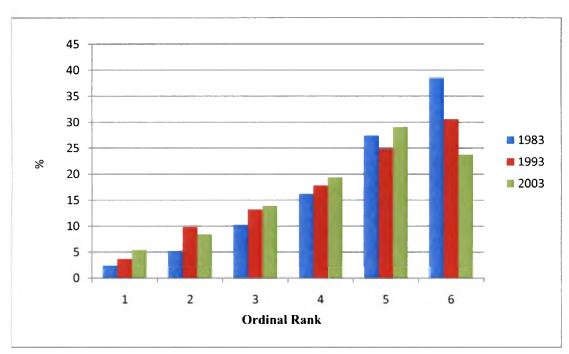


Figure 2. Geography as a School Subject by Year - Total

almost 70%. The number of students ranking Geography third through fifth also rose. The number ranking second and sixth fell. Overall for 2003, the ranking of Geography as a School Subject was highest in the fifth position, meaning that fewer students in this study year considered Geography as their least favorite school subject.

Table 5 and Figure 3 show the ordinal ranking of Geography as a Social Study - Total. The number of students ranking Geography as their favorite Social Study jumped dramatically between 1983 and 1993 at 59%. It stayed stable between 1993 and 2003. The highest rank given was #3 at 21.9% which was down one level from 1993; however in that year, rank #2 and #3 were tied at 108 respondents and 20%.

When looking at Table 6 and Figure 4, we can see that Subjects Ranking #1 in 2003 -Total were Physical Education for School Subjects, with Geography preferred only to Reading. When reviewing the Social Studies Subjects, Geography ranks behind History, as shown on Table 6 and Figure 5.

Table 7 and Figure 6 show Geography as a Subject - Total. In this, we can clearly see the upward preference of Geography overall from 6th to 5th in 2003. The number of students selecting Geography as their favorite has risen in each of the three study years, and correspondingly, the number selecting Geography as their least favorite has fallen in each of the three study years. This is encouraging for Geography as a Subject – Total.

Table 5. Geography as a Social Study Subject by Year - Total

| | | | | | Italik | | | |
|--------------|------|------|------|------|--------|------|------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Total |
| Geography | Year | % | % | % | % | % | % | % |
| as a | 1983 | 10.5 | 17.7 | 18.0 | 20.8 | 16.9 | 16.2 | 100 |
| Social Study | 1993 | 17.6 | 20.0 | 20.0 | 16.7 | 11.7 | 13.9 | 100 |
| TOTAL | 2003 | 18.1 | 20.1 | 21.9 | 17.2 | 13.6 | 9.1 | 100 |

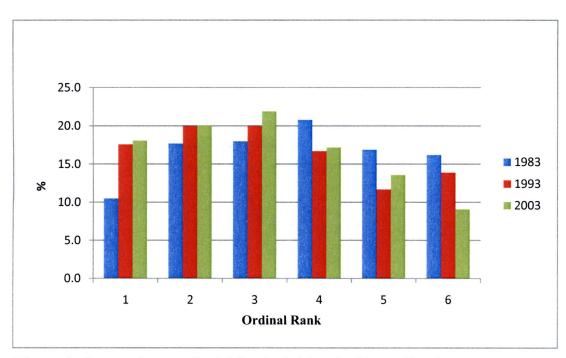


Figure 3. Geography as a Social Study Subject by Year - Total

Table 6. Subjects Ranking #1 in 2003 - Total

| | | Total | | |
|-------------------------|--------------|-------|--------|------|
| | | n | % | Rank |
| ts | PE | 258 | 35.7% | 1 |
| jec | Art & Music | 198 | 27.4% | 2 |
| Sub | Math | 111 | 15.4% | 3 |
| School Subjects | Science | 79 | 10.9% | 4 |
| ho | Geography/SS | 39 | 5.4% | 5 |
| S | Reading | 37 | 5.1% | 6 |
| | Total | 722 | 100.0% | |
| | | | | |
| ects | History | 304 | 47.1% | 1 |
| ubj | Geography | 116 | 18.0% | 2 |
| SS | Anthropology | 78 | 12.1% | 3 |
| die | Economics | 54 | 8.4% | 4 |
| Stu | Sociology | 52 | 8.1% | 5 |
| a | Government | 41 | 6.4% | 6 |
| Social Studies Subjects | Total | 645 | 100.0% | |
| | | | | |

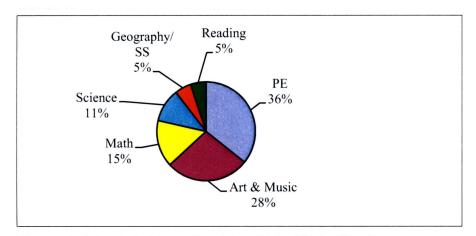


Figure 4. School Subjects Ranking #1 in 2003 - Total

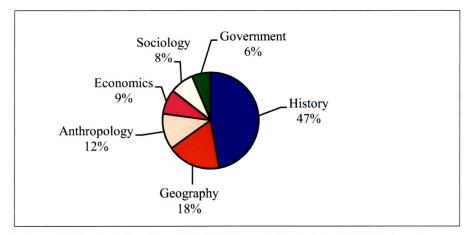


Figure 5. Social Studies Subjects Ranking #1 in 2003 - Total

Table 7. Geography as a Subject - Total

| | | Kank | | | | | | | |
|-----------|------|------|------|------|------|------|------|-------|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Total | |
| | Year | % | % | % | % | % | % | % | |
| Geography | 1983 | 6.4 | 11.4 | 14.1 | 18.5 | 22.2 | 27.4 | 100 | |
| TOTAL | 1993 | 10.7 | 14.9 | 16.6 | 17.3 | 18.3 | 22.3 | 100 | |
| | 2003 | 11.8 | 14.3 | 17.9 | 18.3 | 21.3 | 16.5 | 100 | |

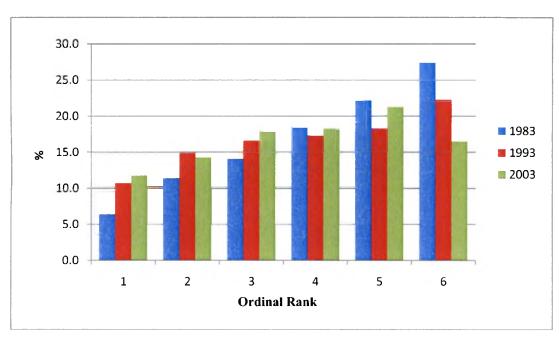


Figure 6. Geography as a Subject - Total

Gender

Table 8 - Geography as a Subject - Total Boys and Girls shows the comparison between the two genders by year. They appear to be remarkably similar except in regards to Geography as a Social Study in 2003. In this example, the rank for Boys increased one level to second, while the rank for Girls split the previous two years study periods (4th in 1983 and 2nd in 1993) to end in the third position. Overall, the rank for Geography rose one position for both boys and girls.

Boys

Geography as a School Subject - Boys rose by one rank in 2003 (6th to 5th) with the actual percentage increase of nearly two percent (Table 9, Figure 7). Geography as a Social Study - Boys rose by one rank (from third to second) even though there is only a slight increase of 0.6%, shown in Table 10 and Figure 8. Overall the preference of Geography rose one rank to fifth, again showing that Geography was considered one of the least favorite subjects by the boys surveyed in 2003 (Table 11, Figure 9).

As shown on Table 12 and Figures 10 and 11, boys ranked Physical Education number one by an overwhelming margin out of the six School Subjects in 2003. The only subject that ranked lower than Geography was Reading. However, when ranking Social Studies subjects, Geography ranked behind only History as the favorite subject and was clearly ahead of Anthropology and Economics which tied for third.

Table 8. Geography as a Subject - Total Boys and Girls

| | | phy as a | | | Geography as a Social Study | | | | | | | | | | |
|-------|------|----------|--------|--------|-----------------------------|------|--------|--------|--------|------------|------|--------|--------|--------|--|
| BOYS | | | | | BOYS | | | | | TOTAL BOYS | | | | | |
| Rank | Year | 1983 | 8661 | 2003 | Rank | Year | 1983 | 1993 | 2003 | Rank | Year | 1983 | 1993 | 2003 | |
| 1 | n | 9 | 14 | 18 | 1 | n | 58 | 41 | 58 | , | n | 67 | 55 | 76 | |
| ' | % | 2.0% | 5.5% | 5.1% | 1 | % | 12.7% | 16.1% | 16.3% | | % | 7.4% | 10.8% | 10.7% | |
| 2 | n | 24 | 30 | 29 | 2 | n | 85 | 51 | 84 | 2 | n | 109 | 81 | 113 | |
| 2 | % | 5.3% | 11.8% | 8.2% | 2 | % | 18.7% | 20.0% | 23.7% | 2 | % | 12.0% | 15.9% | 15.9% | |
| 3 | n | 55 | 34 | 46 | 3 | n | 93 | 59 | 74 | 3 | n | 148 | 93 | 120 | |
| | % | 12.1% | 13.3% | 13.0% | 3 | % | 20.4% | 23.1% | 20.8% | 3 | % | 16.3% | 18.2% | 16.9% | |
| 4 | n | 78 | 46 | 72 | 4 | n | 88 | 42 | 56 | 4 | n | 166 | 88 | 128 | |
| 4 | % | 17.1% | 18.0% | 20.3% | * | % | 19.3% | 16.5% | 15.8% | • | % | 18.2% | 17.3% | 18.0% | |
| 5 | n | 124 | 62 | 103 | 5 | n | 66 | 31 | 49 | 5 | n | 190 | 93 | 152 | |
| ٦ | % | 27.3% | 24.3% | 29.0% | 3 | % | 14.5% | 12.2% | 13.8% | , | % | 20.9% | 18.2% | 21.4% | |
| 6 | n | 165 | 69 | 87 | 6 | n | 65 | 31 | 34 | 6 | n | 230 | 100 | 121 | |
| ľ | % | 36.3% | 27.1% | 24.5% | U | % | 14.3% | 12.2% | 9.6% | U | % | 25.3% | 19.6% | 17.0% | |
| Total | n | 455 | 255 | 355 | tal | n | 455 | 255 | 355 | otal | n | 910 | 510 | 710 | |
| To | % | 100.0% | 100.0% | 100.0% | To | % | 100.0% | 100.0% | 100.0% | To | % | 100.0% | 100.0% | 100.0% | |

| Geography as a School Subject GIRLS | | | | | Geography as a Social Study GIRLS | | | | | TOTAL GIRLS | | | | |
|-------------------------------------|------|--------|--------|--------|--------------------------------------|------|--------|--------|--------|-------------|------|--------|--------|--------|
| Rank | Year | 1983 | 1993 | 2003 | Rank | Уеяг | 1983 | 1993 | 2003 | Rank | Year | 1983 | 1993 | 2003 |
| 1 | n | 12 | 6 | 21 | , | n | 35 | 54 | 73 | | n | 47 | 60 | 94 |
| ' | % | 2.8% | 2.1% | 5.7% | 1 | % | 8.1% | 19.0% | 19.9% | <u>'</u> | % | 5.4% | 10.6% | 12.8% |
| 2 | n | 22 | 23 | 32 | 2 | n | 72 | 57 | 61 | 2 | n | 94 | 80 | 93 |
| Ĺ | % | 5.1% | 8.1% | 8.7% | | % | 16.6% | 20.1% | 16.6% | | % | 10.8% | 14.1% | 12.7% |
| 3 | n | 36 | 37 | 54 | 3 | n | 67 | 49 | 84 | 3 | n | 103 | 86 | 138 |
| L | % | 8.3% | 13.0% | 14.7% | , | % | 15.4% | 17.3% | 22.9% | | % | 11.9% | 15.1% | 18.8% |
| 4 | n | 66 | 50 | 68 | 4 | n | 97 | 48 | 68 | 4 | n | 163 | 98 | 136 |
| | % | 15.2% | 17.6% | 18.5% | • | % | 22.4% | 16.9% | 18.5% | _ | % | 18.8% | 17.3% | 18.5% |
| 5 | n | 120 | 72 | 107 | 5 | n | 84 | 32 | 49 | 5 | n | 204 | 104 | 156 |
| Ľ | % | 27.6% | 25.4% | 29.2% | , | % | 19.4% | 11.3% | 13.4% | , | % | 23.5% | 18.3% | 21.3% |
| 6 | n | 178 | 96 | 85 | 6 | n | 79 | 44 | 32 | 6 | n | 257 | 140 | 117 |
| Ľ | % | 41.0% | 33.8% | 23.2% | | % | 18.2% | 15.5% | 8.7% | 0 | % | 29.6% | 24.6% | 15.9% |
| Total | n | 434 | 284 | 367 | Total | n | 434 | 284 | 367 | otal | n | 868 | 568 | 734 |
| | % | 100.0% | 100.0% | 100.0% | | % | 100.0% | 100.0% | 100.0% | To | % | 100.0% | 100.0% | 100.0% |

Note: Highlighted figures represent highest rank by percentage.

Table 9. Geography as a School Subject by Year - Boys

| | | Rank | | | | | | | |
|----------------|------|------|------|------|------|------|------|-------|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Total | |
| Geography | Year | % | % | % | % | % | % | % | |
| as a | 1983 | 2.0 | 5.3 | 12.1 | 17.1 | 27.3 | 36.3 | 100 | |
| School Subject | 1993 | 5.5 | 11.8 | 13.3 | 18.0 | 24.3 | 27.1 | 100 | |
| BOYS | 2003 | 5.1 | 8.2 | 13.0 | 20.3 | 29.0 | 24.5 | 100 | |

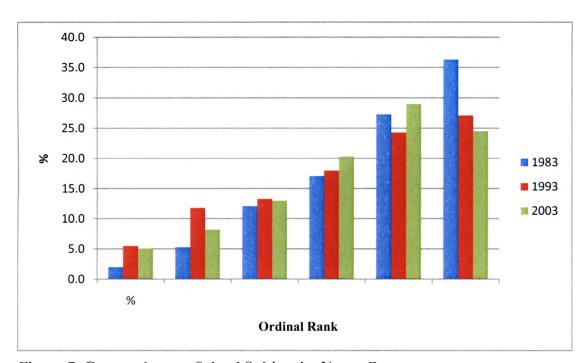


Figure 7. Geography as a School Subject by Year - Boys

Table 10. Geography as a Social Study Subject by Year - Boys

| | | Kank | | | | | | | |
|--------------|------|------|------|------|------|------|------|-------|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Total | |
| Geography | Year | % | % | % | % | % | % | % | |
| as a | 1983 | 12.7 | 18.7 | 20.4 | 19.3 | 14.5 | 14.3 | 100 | |
| Social Study | 1993 | 16.1 | 20.0 | 23.1 | 16.5 | 12.2 | 12.2 | 100 | |
| BOYS | 2003 | 16.3 | 23.7 | 20.8 | 15.8 | 13.8 | 9.6 | 100 | |

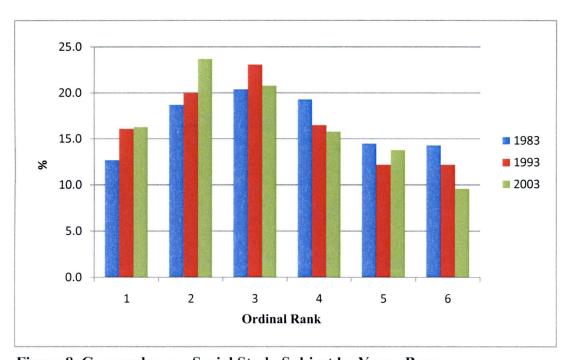


Figure 8. Geography as a Social Study Subject by Year - Boys

Table 11. Geography as a Subject - Total Boys

| | | | | | Rank | | | |
|-------|------|------|------|------|------|------|------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Total |
| | Year | % | % | % | % | % | % | % |
| TOTAL | 1983 | 7.4 | 12.0 | 16.3 | 18.2 | 20.9 | 25.3 | 100 |
| BOYS | 1993 | 10.8 | 15.9 | 18.2 | 17.3 | 18.2 | 19.6 | 100 |
| | 2003 | 10.7 | 15.9 | 16.9 | 18.0 | 21.4 | 17.0 | 100 |

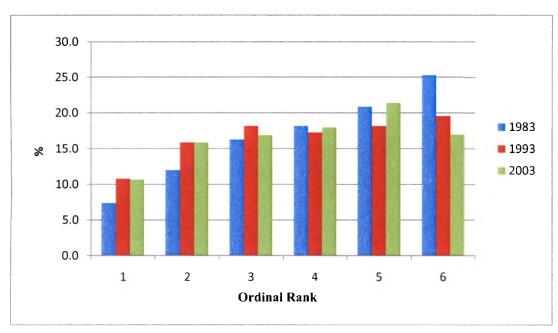


Figure 9. Geography as a Subject - Total Boys

Table 12. Subjects Ranking #1 in 2003 - Boys

| | | Total | | |
|-------------------------|--------------|-------|--------|------|
| | | n | % | Rank |
| ts | PE | 147 | 41.4% | 1 |
| je | Art & Music | 71 | 20.0% | 2 |
| dus | Math | 56 | 15.8% | 3 |
| 10 | Science | 49 | 13.8% | 4 |
| School Subjects | Geography/SS | 18 | 5.1% | 5 |
| Š | Reading | 14 | 3.9% | 6 |
| | Total | 355_ | 100.0% | |
| | | | | |
| ects | History | 180 | 50.7% | 1 |
| ign | Geography | 58 | 16.3% | 2 |
| SS | Anthropology | 36 | 10.1% | 3 |
| die | Economics | 36 | 10.1% | 3 |
| Stu | Sociology | 23 | 6.5% | 4 |
| a | Government | 22 | 6.2% | 5 |
| Social Studies Subjects | Total | 355 | 100.0% | |
| () | | | | |

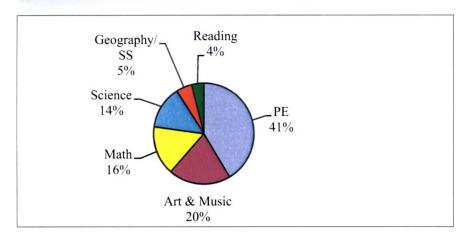


Figure 10. School Subjects Ranking #1 in 2003 - Boys

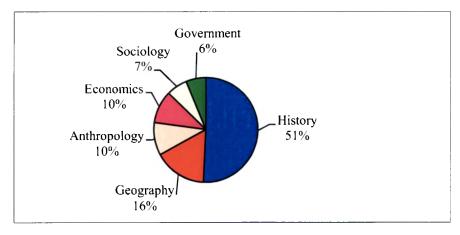


Figure 11. Social Studies Subjects Ranking #1 in 2003 - Boys

Girls

Geography as a School Subject - Girls rose one rank in 2003 even though the percent dropped by 4.6%. Geography as a Social Study - Girls split the previous two studies (4th in 1983, 2nd in 1993) to stand 3rd in 2003; however, overall for the three study years it was the highest at 22.9%. Tables 13 and 14 and Figures 12 and 13 demonstrate these changes. When looking at Geography as a Subject, the results compare to those of School Subjects in that Geography ranked #5 in 2003 (Table 15, Figure 14).

In 2003, when girls were surveyed, their least favorite of all the School Subjects was Geography, while their favorite was Art & Music. This is shown on Table 16 and Figure 15. When surveyed on Social Studies subjects (Table 16 and Figure 16) the girls only preferred History to Geography, mirroring the same preferences as the boys.

Table 13. Geography as a School Subject by Year - Girls
Rank

| | | Капк | | | | | | |
|----------------|------|------|-----|------|------|------|------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Total |
| Geography | Year | % | % | % | % | % | % | % |
| as a | 1983 | 2.8 | 5.1 | 8.3 | 15.2 | 27.6 | 41.0 | 100 |
| School Subject | 1993 | 2.1 | 8.1 | 13.0 | 17.6 | 25.4 | 33.8 | 100 |
| GIRLS | 2003 | 5.7 | 8.7 | 14.7 | 18.5 | 29.2 | 23.2 | 100 |

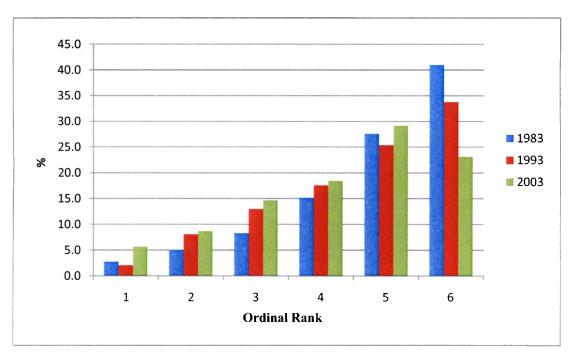


Figure 12. Geography as a School Subject by Year - Girls

Table 14. Geography as a Social Study Subject by Year - Girls

| | | | Rank | | | | | |
|--------------|------|------|------|------|------|------|------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Total |
| Geography | Year | % | % | % | % | % | % | % |
| as a | 1983 | 8.1 | 16.6 | 15.4 | 22.4 | 19.4 | 18.2 | 100 |
| Social Study | 1993 | 19.0 | 20.1 | 17.3 | 16.9 | 11.3 | 15.5 | 100 |
| GIRLS | 2003 | 19.9 | 16.6 | 22.9 | 18.5 | 13.4 | 8.7 | 100 |

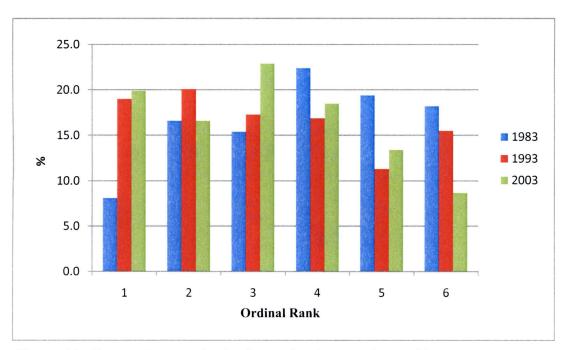


Figure 13. Geography as a Social Study Subject by Year - Girls

Table 15. Geography as a Subject - Total Girls

| | | | | | Rank | | | |
|-------|------|------|------|------|------|------|------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Total |
| | Year | % | % | % | % | % | % | % |
| TOTAL | 1983 | 5.4 | 10.8 | 11.9 | 18.8 | 23.5 | 29.6 | 100 |
| GIRLS | 1993 | 10.6 | 14.1 | 15.1 | 17.3 | 18.3 | 24.6 | 100 |
| - | 2003 | 12.8 | 12.7 | 18.8 | 18.5 | 21.3 | 15.9 | 100 |

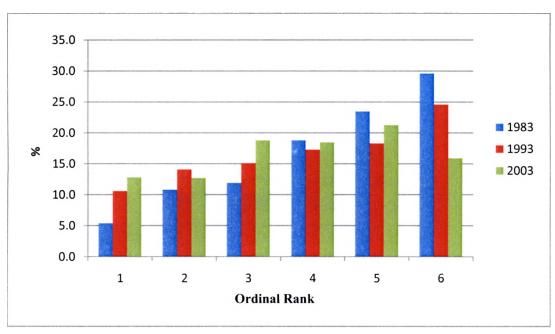


Figure 14. Geography as a Subject - Total Girls

Table 16. Subjects Ranking #1 in 2003 - Girls

| | | Total | | |
|-------------------------|--------------|-------|--------|------|
| | | n | % | Rank |
| ts | Art & Music | 127 | 34.6% | 1 |
| jec | PE | 111 | 30.2% | 2 |
| Sub | Math | 55 | 15.0% | 3 |
| 0 | Science | 30 | 8.2% | 4 |
| School Subjects | Reading | 23 | 6.3% | 5 |
| S | Geography/SS | 21 | 5.7% | 6 |
| | Total | 367 | 100.0% | |
| | | | | |
| ects | History | 157 | 42.8% | 1 |
| ubj | Geography | 73 | 19.9% | 2 |
| SS | Anthropology | 58 | 15.8% | 3 |
| die | Sociology | 31 | 8.4% | 4 |
| Stu | Economics | 24 | 6.5% | 5 |
| al | Government | 24 | 6.5% | 6 |
| Social Studies Subjects | Total | 367 | 100.0% | |

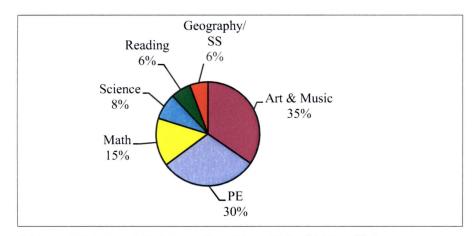


Figure 15. School Subjects Ranking #1 in 2003 - Girls

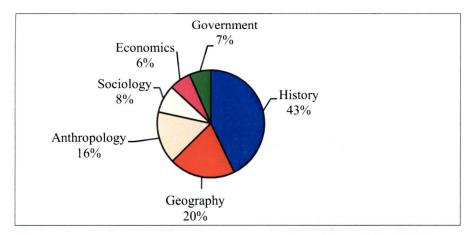


Figure 16. Social Studies Subjects Ranking #1 in 2003 - Girls

Public Schools

Although only individual subject data were available for the 2003 survey period, only public schools were surveyed in the previous two studies, so that data should all be considered Public School data as well. For 2003, Geography/Social Studies was tied for fifth with Reading as the least preferred School Subject with each of those subjects receiving less than 5% of the tally (Table 17, Figure 17).

As has been shown in all the previous categories, Geography followed only History as the most preferred Social Study subject (Table 17, Figure 18). History has been the favorite subject in all three study periods.

Private Schools

The introduction of private schools to the survey was new in 2003 and the results showed quite a different result than those for public schools. Table 18 and Figure 19 show that Geography/Social Studies as School Subjects tied for fourth with Math and only outranked Reading by two votes. While Physical Education was the favorite School Subject for public schools, Art and Music took the number one position for private schools, with Science also ranking above Physical Education. Table 18 and Figure 20 also show that Geography was beaten by Anthropology to claim the second spot in Social Study subjects, although only by one student or 1.3%. History still was overwhelmingly voted number one, which is comparable to public schools.

Table 17. Subjects Ranking #1 in 2003 - Public Schools

| | Total | | |
|--------------|---|---|--|
| | n | % | Rank |
| PE | 246 | 38.1% | 1 |
| Art & Music | 173 | 26.8% | 2 |
| Math | 103 | 16.0% | 3 |
| Science | 61 | 9.5% | 4 |
| Geography/SS | 31 | 4.8% | 5 |
| Reading | 31 | 4.8% | 5 |
| Total | 645 | 100.0% | |
| | | | |
| History | 337 | 46.7% | 1 |
| Geography | 131 | 18.1% | 2 |
| Anthropology | 94 | 13.0% | 3 |
| Economics | 60 | 8.3% | 4 |
| Sociology | 54 | 7.5% | 5 |
| Government | 46 | 6.4% | 6 |
| Total | 722 | 100.0% | |
| | Art & Music Math Science Geography/SS Reading Total History Geography Anthropology Economics Sociology Government | PE 246 Art & Music 173 Math 103 Science 61 Geography/SS 31 Reading 31 Total 645 History 337 Geography 131 Anthropology 94 Economics 60 Sociology 54 Government 46 | n % PE 246 38.1% Art & Music 173 26.8% Math 103 16.0% Science 61 9.5% Geography/SS 31 4.8% Reading 31 4.8% Total 645 100.0% History 337 46.7% Geography 131 18.1% Anthropology 94 13.0% Economics 60 8.3% Sociology 54 7.5% Government 46 6.4% |

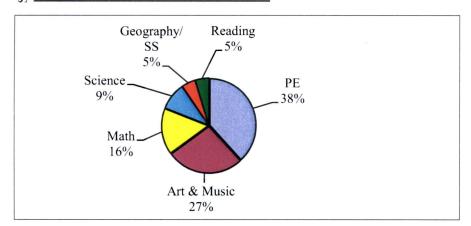


Figure 17. School Subjects Ranking #1 in 2003 - Public Schools

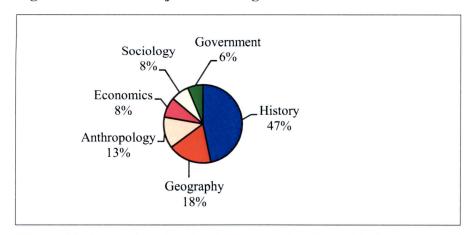


Figure 18. Social Studies Subjects Ranking #1 in 2003 - Public Schools

Table 18. Subjects Ranking #1 in 2003 - Private Schools

| | | Total | | |
|-------------------------|--------------|-------|--------|------|
| | | n | % | Rank |
| ts | Art & Music | 25 | 32.5% | 1 |
| jec | Science | 18 | 23.4% | 2 |
| Sub | PE | 12 | 15.6% | 3 |
| 0 5 | Geography/SS | 8 | 10.4% | 4 |
| School Subjects | Math | 8 | 10.4% | 4 |
| S | Reading | 6 | 7.8% | 6 |
| | Total | 77 | 100.0% | |
| 70 | | | | |
| ects | History | 33 | 42.9% | 1 |
| lbj | Anthropology | 16 | 20.8% | 2 |
| SS | Geography | 15 | 19.5% | 3 |
| die | Economics | 6 | 7.8% | 4 |
| Stu | Government | 5 | 6.5% | 5 |
| la | Sociology | 2 | 2.6% | 6 |
| Social Studies Subjects | Total | 77 | 100.0% | |

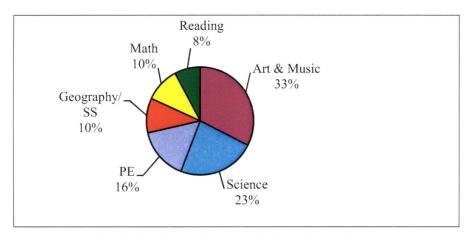


Figure 19. School Subjects Ranking #1 in 2003 - Private Schools

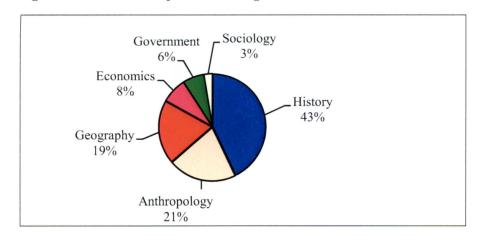


Figure 20. Social Studies Subjects Ranking #1 in 2003 - Private Schools

The results for the different grades showed a marked difference in preferences. As the age of the children grew, their preference for Geography as a School Subject fell significantly from 14.9% in 4th grade to 2.8% in 6th. As a Social Study Subject, Geography rose from 4th to 5th grade (15.7% to 21.1%), but fell at 6th grade at 17.8%.

Grade 4

In 2003, students in 4th grade preferred Math as their #1 subject at 37.9%, with Geography/Social Studies considerably lower at 14.9%. History was picked #1 (at 53.2%) as a Social Study Subject which has been the result throughout the entire study. While Geography came in 2nd, at 15.7%, it was higher than the 3rd preference of Economics by nearly 5%. Table 19 and Figures 21 and 22 show these results.

Grade 5

When surveyed in 2003, the fifth grade students dropped Math to the third spot (Table 21, Figure 23) with Physical Education jumping from the sixth spot by 4th graders to the preferred number one spot by 5th graders. Geography/Social Studies continued to beat Reading to fill the fifth preferred position. In the Social Studies subjects, History remained in the number one spot with Geography following in number two (Table 21, Figure 24).

Grade 6

The 6th grade students surveyed in 2003, chose Geography as their least favorite School subject (Table 22, Figure 25); however, it did only rank lower than Reading by two votes or .8%. The difference between History and Geography opened up slightly; however, they remained at their traditional ranks of #1 (History) and #2 (Geography), as shown in Table 22 and Figure 26.

Table 19. Subjects Ranking #1 in 2003 - Grade 4

| | | _Total | | |
|-------------------------|--------------|--------|--------|------|
| | | n | % | Rank |
| ts | Math | 94 | 37.9% | 1 |
| jec | Art & Music | 68 | 27.4% | 2 |
| Sub | Geography/SS | 37 | 14.9% | 3 |
| School Subjects | Reading | 30 | 12.1% | 4 |
| sho | Science | 10 | 4.0% | 5 |
| Š | PE | 9 | 3.6% | 6 |
| | Total | 248 | 100.0% | |
| | | | | |
| ects | History | 132 | 53.2% | 1 |
| ubj | Geography | 39 | 15.7% | 2 |
| SS | Economics | 27 | 10.9% | 3 |
| die | Anthropology | 24 | 9.7% | 4 |
| Stu | Government | 15 | 6.0% | 5 |
| <u>_</u> | Sociology | 11 | 4.4% | 6 |
| Social Studies Subjects | Total | 248 | 100.0% | |
| J | | | | |

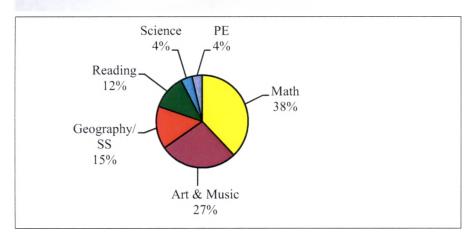


Figure 21. School Subjects Ranking #1 in 2003 - Grade 4

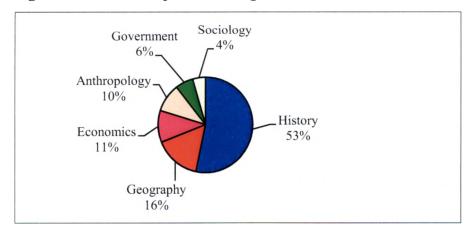


Figure 22. Social Studies Subjects Ranking #1 in 2003 - Grade 4

Table 20. Subjects Ranking #1 in 2003 - Grade 5

| n % | Rank |
|--|------------------|
| ₽ PE 76 33.5 | % 1 |
| . Art & Music 51 22.5 | % 2 |
| Math 31 13.7 | ¹ % 3 |
| Science 28 12.3 | % 4 |
| ## Art & Music 51 22.5 | % 5 |
| Reading 19 8.4 | % 6 |
| Total 227 100.0 | 0% |
| | |
| History 98 43.2 | % 1 |
| Geography 48 21.1 | % 2 |
| Anthropology 31 13.7 | 1% 3 |
| $\frac{9}{6}$ Sociology 19 8.4 | .% 4 |
| Government 17 7.5 | % 5 |
| Economics 14 6.2 | % 6 |
| History 98 43.2 Geography 48 21.1 Anthropology 31 13.7 Sociology 19 8.4 Government 17 7.5 Economics 14 6.2 Total 227 100.0 | 10/0 |

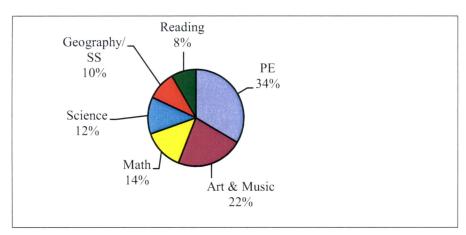


Figure 23. School Subjects Ranking #1 in 2003 - Grade 5

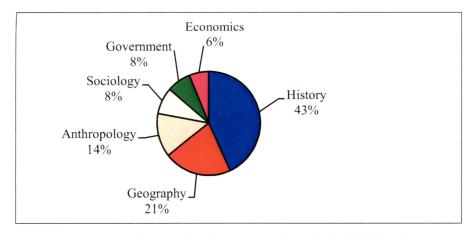


Figure 24. Social Studies Subjects Ranking #1 in 2003 - Grade 5

Table 21. Subjects Ranking #1 in 2003 - Grade 6

| | | Total | | |
|-------------------------|--------------|-------|--------|------|
| | | n | % | Rank |
| ts | PE | 88 | 35.6% | 1 |
| jec | Art & Music | 79 | 32.0% | 2 |
| Sub | Math | 43 | 17.4% | 3 |
| 0 | Science | 21 | 8.5% | 4 |
| School Subjects | Reading | 9 | 3.6% | 5 |
| Š | Geography/SS | 7 | 2.8% | 6 |
| | Total | 247 | 100.0% | |
| · • | | | | |
| ect | History | 107 | 43.3% | 1 |
| ubj | Geography | 44 | 17.8% | 2 |
| SS | Anthropology | 39 | 15.8% | 3 |
| die | Sociology | 24 | 9.7% | 4 |
| Stu | Economics | 19 | 7.7% | 5 |
| ial | Government | 14 | 5.7% | 6 |
| Social Studies Subjects | Total | 247 | 100.0% | |
| | | | | |

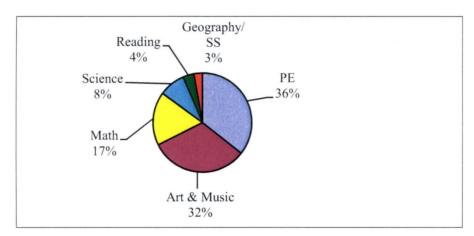


Figure 25. School Subjects Ranking #1 in 2003 - Grade 6

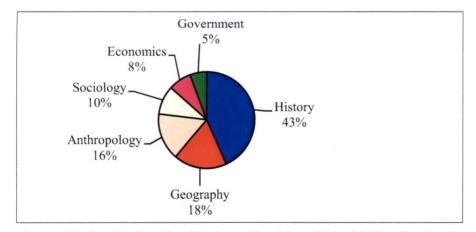


Figure 26. Social Studies Subjects Ranking #1 in 2003 - Grade 6

Teachers

Twenty-eight teachers completed the survey form. For these 28 teachers, the average years employed was 12.73 with a low of 0.5 and a high of 35. The average teacher had taken only 1.53 courses in Geography in college. Out of the 28 teachers, ten taught 4th grade, ten taught 5th grade and six taught 6th grade, and the other two failed to mark which grades they taught.

The 2003 survey for School Subjects showed that Geography split the previous two study periods (1983 - 4th, 1993 - 2nd) to rank third. There was one less vote counted in 2003 for School Subjects as one of the teachers failed to fill in that section of the survey. Table 22 and Figure 27 present the rank by year for Geography as a favorite School Subject.

In both 1983 and 1993, Geography was ranked the preferred Social Studies subject at 40% each year. In 2003, it fell to second place. Table 23 and Figure 28 show these preferences.

Because of the comparatively low sample total (n=28), the number of votes for the ordinal ranking and preference for Geography is relatively similar except for the number one (1983 and 1993) and the number five and six positions (all three study years) in Social Study subjects.

When comparing the Social Studies subjects the teachers personally preferred to those which they preferred to teach, the results were identical. History was first, followed by Geography, Sociology, Political Science, Anthropology and Economics. In School Subjects, the results were slightly different. In order of the teacher's personal preference: Reading, Geography, Fine Arts, Math, Science, and Physical Education. In order of

Table 22. Geography as a School Subject by Year - Teachers

| | | | | | Rank | | | |
|----------------|------|------|------|------|------|-----|------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Total |
| Geography | Year | % | % | 0/0 | % | 0/0 | % | % |
| as a | 1983 | 23.0 | 18.0 | 21.0 | 26.0 | 6.0 | 6.0 | 100.0 |
| School Subject | 1993 | 22.0 | 41.0 | 18.0 | 11.0 | 4.0 | 4.0 | 100.0 |
| TEACHERS | 2003 | 18.5 | 18.5 | 25.9 | 18.5 | 7.5 | 11.1 | 100.0 |

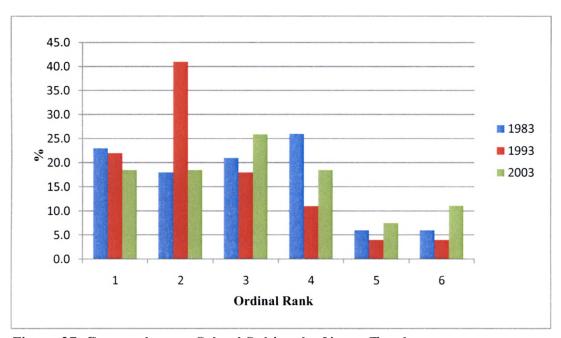


Figure 27. Geography as a School Subject by Year - Teachers

Table 23. Geography as a Social Study Subject by Year - Teachers

| | | Kalik | | | | | | |
|--------------|------|-------|------|------|------|-----|-----|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Total |
| Geography | Year | % | % | % | % | 0/0 | % | % |
| as a | 1983 | 40.0 | 26.0 | 15.0 | 13.0 | 0.0 | 6.0 | 100.0 |
| Social Study | 1993 | 40.0 | 33.0 | 19.0 | 8.0 | 0.0 | 0.0 | 100.0 |
| TEACHERS | 2003 | 28.6 | 32.1 | 14.3 | 25.0 | 0.0 | 0.0 | 100.0 |

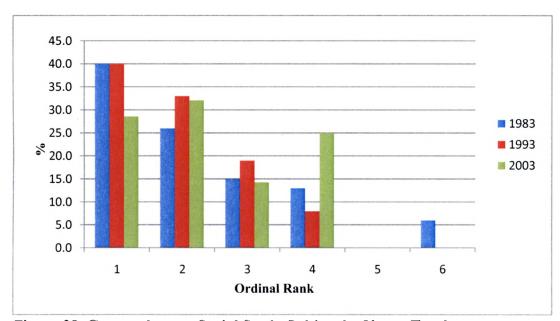


Figure 28. Geography as a Social Study Subject by Year - Teachers

teaching preference: Reading, Geography, Science, Math, Fine Arts, and Physical Education.

When marking teaching techniques used, only 75% said they used globes and 89% said they used maps in their classrooms. Maps are the quintessential tool of the geographer, and without them, teaching Geography becomes more difficult, possibly leading to lower ranking for Geography by students.

Overall Results

Table 24 presents the overall relative popularity of the school subjects included in this study for all three study years. Overall, the rank of Geography as a course preference increased one level between 1993 and 2003 in both the Geography as a School Subject category (fifth out of six) and Geography as a Social Studies Subject category (second out of six). This was a notable change in both areas. Over the past twenty years, Geography as a Social Studies category has risen two levels. This confirmed the study premise that there would be a change and it would be notable. Physical education and art and music continue as the students' most popular school subjects, as other researchers have found (Goodlad 1984, Haladyna and Thomas 1979). History continued as the most popular subject in Social Studies. As found in the previous study, Geography continued to have a higher rating as a Social Studies subject than as a School Subject.

Table 25 shows the notable differences between the different variables and Geography/Social Studies as a School Subject, Geography as a Social Study and Geography –Total. Some areas rose in rank but dropped in percentage, while others dropped but gained in percentage. Overall the ranks tended to rise by one.

Table 24. Overall Relative Popularity of School Subjects and Social Studies Subjects Among Students in 1983, 1993, and 2003

| | 1983 | | |
|-----------------|--------------------|-----------------------|--|
| Rank | School Subjects | Social Study Subjects | |
| 1 | Physical education | History | |
| 2 | Art and music | Economics | |
| 3 | Mathematics | Anthropology | |
| 4 | Reading | Geography | |
| 5 | Science | Sociology | |
| 6 Geography | | Government | |
| <u> </u> | 1993 | | |
| Rank | School Subjects | Social Study Subjects | |
| 1 | Art and music | History | |
| 2 | Physical education | Economics | |
| 3 | Mathematics | Geography | |
| 4 Science | | Anthropology | |
| 5 Reading | | Sociology | |
| 6 | Geography | Government | |
| | 2003 | | |
| Rank | School Subjects | Social Study Subjects | |
| 1 | Physical education | History | |
| 2 Art and music | | Geography | |
| 3 Mathematics | | Anthropology | |
| 4 Science | | Economics | |
| 5 Geography | | Sociology | |
| 6 | Reading | Government | |

Table 25. Notable Results by Variable

| Table 25. Notable I Variable | | Group | Results for 2003 |
|---------------------------------|----------|-------------------------------------|---|
| | Boys | Geography as a School Subject | Rose 1 rank at 29%, a difference of 1.9% |
| Gender | | Geography as a Social Study Subject | Rose 1 rank at 23.7%, a difference of .6% |
| | | Total | Rose 1 rank at 21.4%, a difference of 1.8% |
| | Girls | Geography as a School Subject | Rose 1 rank but dropped from 33.8% to 29.2% |
| | | Geography as a Social Study Subject | Dropped 1 rank but rose from 20.1% to 22.9% |
| | | Total | Rose 1 rank but dropped from 24.6% to 21.3% |
| School Type | Public | Geography as a School Subject | Tied for 5th at 4.8% |
| | | Geography as a Social Study Subject | Selected 2nd at 18.1% |
| | Private* | Geography as a School Subject | Tied for 4th at 10.4% |
| | | Geography as a Social Study Subject | Selected 3rd at 19.5% |
| | 4 | Geography as a School Subject | Selected 3rd at 14.9% |
| | | Geography as a Social Study Subject | Selected 2nd at 15.7% |
| Crada | 5 | Geography as a School Subject | Selected 5th at 9.7% |
| Grade | | Geography as a Social Study Subject | Selected 2nd at 21.1% |
| | 6 | Geography as a School Subject | Selected 6th at 2.8% |
| | | Geography as a Social Study Subject | Selected 2nd at 17.8% |
| Теза | hers | Geography as a School Subject | Dropped to 3rd from 2nd at 25.9% from 41% |
| Teachers Overall | | Geography as a Social Study Subject | Dropped to 2nd from 1st at 32.1% from 40% |
| | | Geography as a School Subject | Rose 1 rank to 5th |
| | | Geography as a Social Study Subject | Rose 1 rank to 2nd |

Note: Private is new for 2003 study year.

CHAPTER V

SUMMARY AND CONCLUSIONS

The 2003 study showed an increase in the popularity of Geography, not only as a School Subject but also as a Social Studies Subject. The increase could be attributed to the increased prominence in the curriculum and to the increase in national attention to Geography as a subject. Over the last twenty years (from 1983 to 2003), the ranking of Geography has increased two levels in Geography as a Social Studies Subject and one level in Geography as a School Subject. Although Geography did improve in both categories, it is still on the lower end of the ordinal rankings. History continues to be the most preferred Social Study subject. Physical Education and Art and Music have continued as the favorites among School Subjects.

As shown in Table 25, when Geography was ranked on an ordinal scale in 2003, it increased one level as a School Subject although percentage wise it dropped 1.5%. As a Social Studies subject, Geography fell from 2nd place to 3rd place; however, in 1993, it tied for 2nd place with both spots receiving 20% of the vote.

Boys' preference for Geography as a School Subject increased by one rank. Reading remained the subject least favored among male respondents. Geography as a Social Study also rose one rank from 3^{rd} to 2^{nd} . Physical Education overwhelmingly was

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the favorite subject for boys.

Continuing the trend for increasing by one level, girls ranking of Geography as a School Subject rose from 6th place to 5th place. In the ordinal rankings as a Social Studies Subject, Geography rose from 3rd place to 2nd place. Geography was their least favorite School Subject and History was their favorite Social Study Subject with Geography placing second.

Adding private schools to the study revealed some differences between public and private schools in subject preference by students. Public school students followed the trend of Geography ranking above Reading for School Subjects and following only History for Social Study Subjects. Private school students showed a higher preference for Geography as a School Subject, tying Math for 4th but still ahead of Reading. For Social Study subjects, History still carried the number one spot and Anthropology beat Geography to claim 2nd place, but only by one vote. Smaller class sizes and student-to-teacher ratio would account for some of those differences, but more research is necessary to see if that trend will continue.

Comparing grade levels for 2003 showed interesting differences between the groups. Grade 4 students preferred Math as their favorite School Subject, with Art & Music second and then Geography. In Social Studies Subjects, Geography was still second behind History. Grade 5 students, however, dropped Geography to the fifth position with only Reading ranking lower. As a Social Study Subject, once again History was preferred and Geography came in second. Grade 6 students actually preferred Reading over Geography, as it fell to last place. Again Geography ranked behind History in Social Studies Subjects.

The percentage of teachers who prefer Geography remained higher than those of students. In 2003, Geography split the previous two study years to place third, dropping significantly from the second place it held in 1993 (41% to 25.9%). As a Social Study subject, it dropped one rank; however, the decline was not as great as the other category, going from 40% the first two study years to 32.1% in 2003.

As Petersen and Sack presented in their 1998 article, "Geography may fare better as a social study than as a school subject because of the nature of the competing subjects." This continued to be the case for the 2003 study. Also, the students may be more familiar with the terms "History" and "Geography" than with terms such as "Sociology," "Anthropology," and "Economics."

Children may also be more favorable to subjects taught in an active style versus a passive style. On average, 70% of the teachers said they used a combination of all types of teaching methods, but when asked to mark which methods they employed in their classroom less than 50% cited using any of the active learning styles. The only items to be marked relating to Geography were maps and globes. Although 89% said they used maps, only 75% said they used globes. Whether this is just a deficiency in classroom materials or part of the lesson plans of the teachers would require a survey of classroom materials available.

The importance of the *Guidelines for Geographic Education* (1983) and the institution of the National Standards in Geography (1993) cannot be overstated. The continuing work by the State Alliances should help increase teacher involvement in Geography, and hopefully interest as well. The trend of active-technique teaching styles will also hopefully continue to build interest in Geography as a subject by students.

As Roger Downs stated in 1994, "It would be nice to have some data." This study now has three complete decennium studies of children's attitudes towards geography in San Marcos, Texas. This became the only study of its kind and length in the literature. Although more studies will reveal the continuing trends of the attitudes of these particular age/grade children, having both public and private results should give the teachers and administration some idea of what needs to be done in order to increase the popularity of Geography in their school district.

The increased importance of Geography in the curricula as well as more teachers using active-based teaching methods should help the subject of Geography become more popular among students. I feel that the close relationship between the San Marcos Independent School District and Texas State University-San Marcos has given Geography an advantage in the local schools. I feel that Geography will continue to become more popular in the future as a closer relationship between the school district and the university develop. This is very desirable from Geography's point of view, as it will draw more students into the study of this discipline. The subject popularity can be increased by allocating geographic resources to the classroom, and by raising awareness of the bond between the university and the school district.

APPENDIX A

Student's Survey

| Are you a: | |
|----------------|---|
| | Boy |
| | Girl |
| School Subject | cts: |
| | Art & Music |
| | Geography (Social Studies) |
| | Mathematics |
| | Physical Education Reading |
| | Reading |
| | Science |
| Social Studies | s Subjects: |
| | Anthropology |
| | Economics |
| | Geography |
| | Government |
| | History |
| | Sociology |
| Social Studie | es Explanations |
| Anthropology | The study of humans, their cultural and physical differences (also archaeology). The way that different groups of people are and live, their customs and culture. |
| Economics: | The study of production, distribution, and consumption of goods and services. How products and services are made and supplied. |
| Sociology: | The study of groups of people. How groups of people behave and what they are like as a group. |
| Geography: | The study of the earth and its features (people, environments, countries). Where is something and why? Places, regions, environments and movement. |

Government: The study of how people govern cities, counties, states and countries.

How government works. Comparing types of governments.

History: The study of past human events, up to the present. What happened in the

past, where, when, how and why. How people lived in the past.

Note: This was printed on one 8.5x11" paper single-sided..

APPENDIX B

Teacher's Survey

Please answer each question as accurately and legibly as you can. If you have any problems, please ask the researcher. Thank you for cooperating in this survey.

| 1. | How long have you been employed as a teacher? | | | |
|----|---|--|--|--|
| 2. | What degrees have you received and in what major? | | | |
| 3. | How many college courses have you had in each of the following subjects? | | | |
| | Anthropology Economics Fine Arts Geography History Mathematics Physical Education Political Science Reading Science Sociology | | | |
| 4. | Are you: | | | |
| | Male Female | | | |
| 5. | Are you: | | | |
| | Teaching several different subjects in the same class, or Teaching Social Studies to different classes? | | | |
| 6. | What grade(s) are you presently teaching? | | | |
| | 4 6 | | | |
| 7. | Use numbers 1 through 6 to rank the following subjects in order from the one you like the most (#1) to the one you like the least (#6): | | | |
| | Anthropology Economics Geography History Political Science Sociology | | | |

| δ. | like the most (#1) to the one you like the least (#6): | | | | |
|-----|---|--|--|--|--|
| | Fine Arts | Geography | | | |
| | Mathematics | Physical Education | | | |
| | Reading | Science | | | |
| 9. | Use numbers 1 through 6 to rank the | he following subjects in order from the one you | | | |
| | like the most (#1) to the one you li | ke the least (#6): | | | |
| | Anthropology | Economics | | | |
| | Geography | History | | | |
| | Political Science | Sociology | | | |
| 10. | | he following subjects in order from the one you (#1) to the one you like the least (#6): | | | |
| | Fine Arts | Geography | | | |
| | Mathematics | Physical Education | | | |
| | Reading | Science | | | |
| 11. | Check the method or methods that | you use in teaching geography: | | | |
| | Discovery (inductive) meth Expository (deductive) met Inquiry method Lecture method | | | | |
| 12. | Check the techniques that you use | in teaching geography: | | | |
| | Arts and Crafts | Brochures | | | |
| | Community Trips | Current Events | | | |
| | Debates | Diagrams and charts | | | |
| | Dioramas | Dramatizations | | | |
| | Field Trips | Films, filmstrips, slides | | | |
| | Games | Globes | | | |
| | Graphs | Guest speakers | | | |
| | Informal discussions | Interviewing | | | |
| | Journals | Learning Centers | | | |
| | | | | | |
| | Magazines | Maps | | | |
| | Modeling | Music | | | |
| | Observation-experiences | Outside reading | | | |
| | Panel discussions | Problem solving | | | |
| | Projects | Questioning strategies | | | |
| | Reading activities | Reference materials | | | |
| | Reporting | Research paper | | | |

| Role playing Simulation games Writing activities | Scrapbooks Travel guides |
|--|--------------------------|
| Thank you for your time! | |

Note: This was printed on one 8.5x11" paper double sided.

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VITA

Pamela Kaye Marsh was born and raised in Amarillo, Texas. She graduated from Caprock High School in 1982. She has lived also in Illinois, New Mexico, and Nevada. While living in Nevada, she worked as a professional poker dealer and she began taking general college courses at Clark County Community College (now Community College of Southern Nevada). In 1993 she returned to Texas and continued taking college courses at Amarillo College. She graduated with an Associate of Arts degree in General Studies in 1998. In 2000, after a summer as a nanny in Germany, she returned to college full-time, studying at West Texas A&M University in Canyon, Texas. She worked as a bookkeeper in a CPA's office during this time and upon returning from San Marcos. She graduated with a Bachelor of Arts degree in Geography in 2002. During her time at WTAMU, she was selected "Who's Who in American Universities and Colleges", elected president of Mortar Board Honor Society, and was selected as a member of Beta Gamma Phi and Alpha Chi honor societies. She reactivated the campus chapter of Gamma Theta Upsilon and served as president. In the fall of 2002, she started graduate studies in Geography at Texas State University-San Marcos. In January 2004 she returned to Amarillo while finishing her thesis at a distance. In the fall of 2005, she began to teach geography part-time at WTAMU.

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