DOCUMENT RESUME

ED 214 990 TM 820 246

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TITLE	High School and Beyond: A National Longitudinal Study For the 1980's. Sample Design Report.
INSTITUTION	National Opinion Research Center, Chicago, Ill.
SPONS AGENCY	National Center for Education Statistics (ED), Washington, D.C.
PUB DATE	Dec 81
CONTRACT	300-78-0208
NOTE	261p.; Small print in some tables.
EDRS PRICE	MF01/PC11 Plus Postage.
DESCRIPTORS	Catholic Schools; *Grade 10; *Grade 12; High Schools; *High School Students; *Longitudinal Studies; Minority Groups; Private Schools; Public Schools; Research Design; *Sampling; *School Surveys; Student Characteristics
IDENTIFIERS	*High School and Beyond (NCES); *Stratification

ABSTRACT

The 1980 National Center for Education Statistics' National Longitudinal Survey, "High School and Beyond," was intended to be a general, multi-purpose study, serving a number of diverse needs. The present study sought to increase the data's usefulness, accuracy, and scope. While allowing for analyses of schools and students on a national level, the study also permitted separate analyses on specific types of schools and subclasses of students. Included are descriptions of the sample design, sample selection, and sample results. Chapter 2 discusses the construction of the sample frame of high schools in the United States. Chapter 3 examines the manipulation of the frame with respect to its stratified design, while the actual school selection procedures and results are reviewed in chapter 4. Chapter 5 then describes the construction of the student sampling frame, the selection of students, and those results. The last two chapters examine the calculations of the sample weights and the sampling errors. (Author/GK)

BEYOND

U S DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION

SAMPLE DESIGN REPORT

A Report to the National Center for Education Statistics under Contract No. 300-78-0208 by the National Opinion Research Center

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December 1981

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PREFACE

The data and analyses presented in this report are from the first (1980) wave of the National Center for Education Statistics study High School and Beyond, a longitudinal study of U.S. high school seniors and sophomores. This study was conducted for NCES by the National Opinion Research Center at the University of Chicago.

The sample was a two-stage stratified probability sample with schools within a stratum drawn with a probability proportional to their size. Once a school was selected, up to 36 sophomores and 36 seniors were drawn randomly from the students enrolled in each selected school.

Several special strata were included in the sample design. Schools in these special strata were selected with probabilities higher than those for schools in regular strata to allow for special study of certain types of schools or students. The following kinds of schools were oversampled:

- Public schools with high proportions of Hispanic (Cuban, Puerto Rican, and Mexican) students.
- Catholic schools with high proportions of minority group students.
- Public alternative schools.
- Private schools with high proportions of National Merit Scholarship finalists.

Substitutions were made for noncooperating schools in those strata where it was possible. Out of 1,122 possible schools, students at 1,015 schools and school administrators from 988 schools filled out questionnaires.

In many schools the actual number of seniors and sophomores was less than the target number for several reasons. First, in some schools fewer than the number 36 sophomores or 36 seniors were enrolled. This reduced the number of eligible students from 73,080 (72 students in each of 1,015 schools) to 69,662. Second, 8,278 students were absent on the survey date. Third, 1,982 students, or in some cases their parents, declined to participate, exercising their right in a voluntary survey. Substitutions were not made for non-cooperating students. Finally, 1,132 cases were deleted because they contained only very incomplete information. Thus, data are available for 30,030 sophomores and 28,240 seniors. This represents a completion rate of 84 percent: 58,270 out of the 69,662 eligible students. In addition to the students in the regular sample, data were collected from friends and twins of participating students.

Weights were calculated to reflect differential probabilities of sample selection and to adjust for nonresponse. Using appropriate weights yields estimates for high school sophomores and seniors in the United States and separate estimates for schools or students classified in various ways, such as by geographical region or school type.

Information of several sorts was obtained in the survey. Students completed questionnaires of about one hour in length, and took a battery of tests with a total testing time of about one and one-half hours. School officials completed questionnaires covering items of information about the schools. Finally, teachers gave their perceptions of specified characteristics of students in the sample whom they had had in class, to provide information beyond the students' own reports about themselves.

This report is one of several analyzing High School and Beyond base year survey data. The study was designed to be relevant both to many policy issues and to many fundamental questions concerning youth development and educational institutions. It is intended to be analyzed by a wide range of users, from those with immediate policy concerns to those with interests in more fundamental or long-range questions.

As succeeding waves of data on a subsample of these students become available (at approximately two-year intervals), the richness of the dataset, and the scope of questions that can be studied through it, will expand. In addition, use of the data in conjunction with NCES's study of the cohort of 1972 seniors (also available from NCES), for which data at five time points are now available, enriches the set of questions that can be studied.

The data are available on computer tape for a nominal fee from:

Statistical Information Office
National Center for Education Statistics
1001 Presidential Building
400 Maryland Avenue, SW
Washington, D.C. 20202
Phone: (202) 436-7900

ACKNOWLEDGMENTS

The design of HIGH SCHOOL AND BEYOND was initially developed by the Longitudinal Studies Branch of the National Center for Education Statistics. Edith M. Huddleston, NCES project officer for HIGH SCHOOL AND BEYOND, and William B. Fetters, mathematical statistician, have guided this project since its inception, and have been responsible for many aspects of the research design. The current NCES project officer is Samuel S. Peng.

A study of this scope and magnitude would not have been possible without the active cooperation of many persons at various levels of educational administration: Chief State School Officers, Catholic Archdioceses and other private school organizations, principals and teachers in the schools, and of course, the students and their parents. The expertise, support, and persuasiveness of numerous study coordinators at participating schools was especially critical to the successful conduct of the study. Those who will use these data for the study of American education are deeply indebted to all these people.

A second debt is owed to all those people on the field and project staff of HIGH SCHOOL AND BEYOND, whose efforts brought into being the data that will make possible the study of issues involving young people and their schools, data on which the present report is based.

Special thanks are due to members of the National Planning Committee, who have been active in advising NCES on the design, implementation, and uses of the study: Ellis B. Page, Chairman (Duke University), Robert F. Boruch (Northwestern University), Bruce K. Eckland (University of North Carolina, Chapel Hill), Barbara Heyns (New York University), David S. Mundel (Employment and Economic Policy Administration, City of Boston), Robert C. Nichols (State University of New York, Buffalo), Sally B. Pancrazio (Illinois Office of Education), and David E. Wiley (Northwestern University).

The National Opinion Research Center (NORC), under the direction of NCES, took responsibility for the remainder of the design and conducted the base-year survey; NORC's preliminary analysis of the base year data contributed to the development of this publication. James S. Coleman served as Principal Investigator at NORC, with Carol B. Stocking as Project Director. Other contributing NORC staff members were Fansayde Calloway, who directed field work for the project, and Antoinette Delk, Larry Dornacker, Martin Frankel, and Natalie Suter.

CHAPTER 1

HIGH SCHOOL AND BEYOND

SAMPLE DESIGN

The 1980 National Center for Education Statistics' National Longitudinal Survey, "High School and Beyond," was intended to be a general, multi-purpose study, serving a number of diverse needs. For example, while attempting to collect data comparable to the 1972 study, the present study sought to increase the data's usefulness, accuracy, and scope. While allowing for analyses of schools and students on a national level, the study also permitted separate analyses on specific types of schools and subclasses of students.

NORC's sample design reflected these survey objectives. On one level, the design yielded a probability sample of approximately 36,000 sophomores and 36,000 seniors capable of national projections. On another level, the sample was one in which Blacks, Hispanics, Alternative Public schools, and specific types of Private schools were sufficiently overrepresented to allow for separate analyses. The sample design was also flexible enough for individual states to request a large enough sample for a within-state representative sample of schools and students.

In general, the HS&B sample was a two-stage stratified cluster sample. In the first stage, an updated sample frame of public and private high schools in the United States was stratified (grouped and ordered) according to several key variables. These variables were similar to the stratification variables used in the earlier study. The clusters (in this case, the schools) were then selected within each stratum of schools with probabilities proportional to the size of their estimated average tenth and/or twelfth grade enrollment.

By defining stratum or strata groups in accord with domains of study, it was possible to oversample certain types of schools to insure a sufficient sample size for independent analyses. We also incorporated procedures which allowed explicit replacement of schools which refused to cooperate or which were ineligible for selection.

In the second stage of the sample, NORC selected 36 students from both the sophomore and senior classes of each selected school. We incorporated provisions to account for changes in the student sample frame between the time of sample selection and the actual date of interviewer visit. We also adjusted the final sample to account for school and student non-response. Finally, to measure the sampling variability of the sample estimates, we computed the exact design-specific standard errors for certain variables, and approximation factors for other variables.

What follows is a detailed description of the sample design, sample selection, and sample results. Chapter 2 discusses the construction of the sample frame of high schools in the United States. Chapter 3 examines the manipulation of the frame with respect to its stratified design, while the actual school selection procedures and results are reviewed in chapter 4. Chapter 5 then describes the construction of the student sampling frame, the selection of students, and those results. The last two chapters examine the calculations of the sample weights and the sampling errors.

CHAPTER 2

SAMPLE FRAME CONSTRUCTION

In designing a sample frame, one can either use an explicit or an implicit list of the elements to be sampled. For the High School and Beyond survey, the creation of an explicit list of all high school sophomores and seniors in the United States would have been an impossible task. NORC therefore opted to use an implicit list of students by constructing a list of public and private schools in the United States. It was imperative, however, that the list of schools be as complete and accurate as possible, and that as many of the schools as possible have data on the variables to be used in the subsequent stratification of the sample frame.

2.1 Sources

In the 1972 study, Westat used the Office of Education's (OE) 1970-1971 School Universe Tape. Since there was no equivalent OE tape for 1978-1979, NORC decided to use the 1978-79 "School Universe Computer File" distributed by the Curriculum Information Center, Inc. (CIC) of Denver, Colorado. The CIC school universe tape included both public and private (parochial and non-parochial) schools, as well as schools that were neither private nor part of a specific public school district. The latter group included area vocational schools, Department of Defense overseas schools, Bureau of Indian Affiars schools, and "continuation" schools.[1]

[1] A continuation school is a school in California which enrolls high school dropouts to fulfill California's requirement of attendance up to 18 years of age. No diploma is granted but graduation requirements do exist.

Another asset of the CIC school universe file was its annual record updating procedure, conducted by surveying each school by telephone. In addition, CIC received a continual flow of information from the National Catholic Education Association (NCEA), the Council for American Private Education (CAPE), the Bureau of Indian Affairs (BIA), and the Department of Defense (DoD) regarding school openings, closings, enrollments, and the like. Given this, NORC concluded that the CIC tape was the most complete and accurate list of schools available at the time.

However, to test the CIC school universe file's comprehensiveness, NORC decided to check the CIC file against the National Center for Education Statistics' (NCES) non-public school survey computer file, and the NCES Common Core Data (NCES-CCD) public school survey computer file. Any school in these files that was not included in the CIC file was added to the CIC file to create a final NORC high school universe file.

Finally, the CIC school universe tape did not include two of the variables presumed necessary for stratification: racial composition and community income level. To obtain the former, NORC examined the 1976 and the 1972 DHEW/Office of Civil Rights (OCR) Secondary School Civil Rights Computer File of public schools, and the National Catholic Education Association's (NCEA) schools list for public and Catholic schools, respectively. The Demographic Research Company's (DRC) Income Information computer file provided the schools' community income levels. Any schools in the updated universe file which still did not have the required stratification data were linked to the listing of the school's community in the 1977 County and City Data Book or the 1970 Census Data Book to complete the missing information.

2.2 General Matching Procedure

In general, NORC used the same procedures whenever we matched two school universe files. First, we "cleaned" the two computer tapes, i.e., school districts without high schools, and other inappropriate schools or school districts were eliminated from each file. Next, NORC sequentially ordered each school universe file according to its respective identifying codes. Then, specially designed computer programs scanned the two school universe files for duplicate schools. Since the programs could not perform this matching procedure alone, we also matched the schools manually. In each case, the result was a single school universe file containing the matched schools plus in some cases, the unique schools from the separate files. The final step involved the linking of stratification data to the school or school district, again by computer programs and by hand.

2.3 Matching Procedures - Public Schools

2.3.1 CIC/OCR Universe Match

Since the OCR public school universe file contained the most complete set of racial composition data, NORC decided to match the CIC public school and the OCR public school universe files first.

2.3.1.1 File Preparation

The CIC school universe file initially contained records for 12,253 public high school districts, which held records for a total of 18,239 high schools. First, we eliminated 245 subdistricts from the file, with the exception of subdistricts in the states of Maine, New Hampshire, and Vermont, due to the unique district structure in these three states. From the remaining

12,008 districts, NORC deleted 7 districts which did not have schools with tenth or twelfth grade classes. We then sorted the final 12,001 school districts by CIC state county and district codes.

Each school district in the CIC file contained the following data: CIC codes (state number, county number, CIC district number); the district's name, address, zip code, county name, phone number, grade span, and exact enrollment; and the CIC district level code. Each individual school in the CIC file had the following information: the school's CIC code, building number, name, address, zip code, enrollment, grade span, type (regular public, area vocational, regional/county center schools) and 10th/12th grade combination.

The OCR school universe file was primarily a file of 15,748 public school districts. However, only 3,650 of these districts had information on the individual schools within the districts. These 3,650 districts were the whole of a weighted random sample (from the 15,748 districts) capable of state-by-state and national projections. This sample was used in OCR's 1976 Elementary and Secondary School Civil Rights Survey.

Of the 3,650 school districts with individual school records, 384 districts had neither a tenth nor a twelfth grade class. These subsequently were deleted from the file. We sorted the remaining 3,266 districts with school data and the 12,098 districts without school information by state and district OCR codes, in ascending order.

Each school district in the OCR file contained the following information: OCR code (state and district numbers); and the district's name, county name, city name, zip code, number of individual schools, number of students by race, and total enrollment. The districts with individual school information had the following information for each school: OCR code, school OE code, and the school's name, number of grades and the number of students by race.

2.3.1.2 CIC/OCR School Universe Matching Procedure

Since there was no common ID code for the CIC and OCR districts or schools, the matching of the two universe files necessarily involved the alphanumeric linking of the district/school names, county names, city names, and zip codes. This was performed first on the district level, and then on the school level.

2.3.1.3 District Matching Procedures

To link identical districts in the two files, NORC scanned and compared the alphanumeric items of district name, county name, city name, and zip code. To facilitate the matching procedure, we used a specially designed FORTRAN alpha-matching computer program.

Initially, we divided each universe file's districts into 51 subsets according to the state (and Washington, D.C.) in which the districts were located by assigning CIC two-digit alpha state codes to the OCR district records. Then, within each state, the computer program scanned and compared the districts' name several times, each time subtracting one character from the district name.

Two problems emerged immediately. First, in many cases the district names in both files were not equivalent due to missing, abbreviated, or mispelled names. Second, many different districts had the same name. The first problem, which prevented duplicate districts from being matched, was solved by modifying the FORTRAN program. The second problem, which caused incorrect matchings, was resolved by comparing the county and city names and the zip codes of these incorrectly matched districts. Finally, since the FORTRAN program could not handle all of the matching, NORC used manual scanning techniques to solve any remaining problems.

This procedure resulted in the matching of a total of 11,493 school districts. Of these matched districts, 8,285 were OCR districts without individual school records that were linked to CIC districts with a total of 9,190 CIC schools. The additional 3,208 matched districts were OCR districts comprised of 7,285 OCR schools, which were linked to CIC districts with 6.755 CIC schools. This left 3,813 of the 12,098 OCR districts without school records, and 58 of the 3,266 OCR districts with school records unmatched. Of the 12,001 CIC districts, only 508 were left unmatched. These included 2,294 individual schools (see table 2.1.).

Table 2.1.--CIC/OCR public school district match

Item	CIC file	Item	OCR file
Total districts	12,001	Total districts	15,364
Districts to be matched	12,001	Districts without school data	12,098
Districts matched to OCR ...	8,285 1/	Districts matched to CIC	8,285
Unmatched districts	3,716	Unmatched districts	3,813
Districts to be matched	3,716 2/	Districts with school data	3,266
Districts matched to OCR ...	3,208 3/	Districts matched to CIC	3,208 4/
Unmatched districts	508	Unmatched districts	58
Total matched districts	11,493	Total matched districts	11,493
Total matched schools	15,945	Total matched schools	7,285
Total unmatched districts ..	508	Total unmatched districts	3,871
Total unmatched schools	2,294		

1/ Representing 9,190 schools

2/ Unmatched schools in previous matching attempt

3/ Representing 6,755 schools

4/ Representing 7,285 schools

2.3.1.4 School Matching Procedures

NORC executed the school matching procedure for all of the high schools with OCR school records in the matched districts. Thus, in the 3,208 matched districts, there were 7,285 schools from the OCR file and 6,755 schools from the CIC file. We gave each school an OCR and a CIC district code, and then sorted the two files in ascending order by OCR state and district codes. The only item available for comparison was the schools' name, which we scanned with a slightly modified alpha-matching FORTRAN program that successively compared smaller and smaller character strings of the school names within each district. Again, as noted above (see section 2.2, District Matching Procedure), the same problems existed and were solved by hand scanning of the schools' names, grade spans, or type codes.

In the end, we matched 5,524 schools via the computer with 589 additional matches picked up by hand. Thus the total number of matched schools was 6,113. This left 642 CIC and 1,172 OCR schools unmatched (see table 2.2.).

Table 2.2.--CIC/OCR public school match

School match procedures	CIC file	OCR file
Matched districts with OCR school data 1/...	(3,208)	(3,208)
Number of schools	6,755	7,285
Total matched schools	6,113	6,113
Matched by computer	5,524	5,524
Matched by hand	589	589
Total unmatched schools	642	1,172

1/ See table 2.1.

2.3.1.5 OCR Racial Data/CIC Universe Attachment Procedures

The primary reason for using the OCR File was to link the CIC schools to the district and school racial data contained in that file. This data was located on the OCR school and district records as the number of American Indians, Orientals, Blacks, Whites, and Hispanics in the school or district, respectively. For stratification purposes, we needed to convert those figures into percentages of the total district or school enrollment; we used a FORTRAN program designed for this purpose.

Initially, NORC took the 6,113 matched schools with OCR school records and computed the racial data directly from OCR school records. We then attached these figures to those schools' records in the CIC universe file. For the remaining 9,190 matched schools which did not have OCR school records, we computed the racial data from the schools' OCR district records. The computer program again attached these figures to the CIC universe file, although some of the matching had to be performed manually. This resulted in 2,936 unmatched CIC schools without racial data and 15,303 matched CIC schools with racial data (see table 2.3.).

2.3.1.6 First Stage NORC Public School Universe File

To create the preliminary NORC public school universe file, we attached all of the unmatched schools from the CIC universe file to the matched schools. (The unmatched OCR schools were not added to this new file, since the OCR file was three years old.) Therefore, with 9,190 matched schools without OCR school records and 6,113 matched schools with OCR school records, the total number of matched schools was 15,303. To this we added the 2,936 unmatched CIC schools from the racial data match. This led to a total of 18,239 public high schools in the preliminary NORC public school universe file (see table 2.3.)

Table 2.3.--NORC public school universe (stage one)

Public school universe	Number
Total schools	18,239
Total matched schools (with racial data)	15,303
Matched schools (district match)1/	9,190
Matched schools (school match)2/	6,113
Total unmatched schools (without racial data)	2,936
Unmatched schools (district match)1/	2,294
Unmatched schools (school match)2/	642

1/ See table 2.1.

2/ See table 2.2.

2.3.2 DRC Income File/NORC Universe Match - Stage One

In order to have income data for each school in the universe, NORC obtained the Income Computer File from the Demographic Research Company (DRC). This file contained the 1979 projections of the number of households, the median family income, and the percent of households with income over $25,000, $15,000 and $10,000 for every zip code in the U.S. After sorting the 15,303 matched schools (with OCR racial data) and the DRC file in ascending zip code order, a specially designed zip code-matching FORTRAN computer program scanned the zip codes and linked the income data to the schools' records. In this fashion, 14,892 of the 15,303 matched schools obtained income data. The remaining 411 schools remained unmatched due to missing school zip codes in the income and/or the school files. We therefore attached the school districts' zip codes to the 411 schools and resorted the schools as before. Using the same computer program, we linked these 411 schools to the DRC file. This resulted in an additional 109 schools receiving the income data and left 302 schools without any income data but with racial data.

The 2,936 schools without racial composition data (those CIC schools left unmatched with the OCR file) underwent the same procedure. In this fashion we were able to link 2,741 schools to the DRC income file via their zip codes. The 195 remaining schools were supplied with their district's zip codes; 101 of them were linked with the DRC file, leaving 94 schools without income or OCR racial composition data. In sum, 396 schools did not have income data. All missing data records were filled with "-1" (see table 2.4.).

Table 2.4.--DRC income file/NORC universe match

Schools	With racial data	Without racial data
Total schools 1/	15,303	2,936
Total schools with income data	15,001	2,842
Linked via school zip code	14,892	2,741
Linked via district zip code	109	101
Total schools without income data ...	302	94

1/ See table 2.3.

2.3.3 NCES-CCD/NORC Universe Match

The final step in the creation of the public high school universe file was the matching of the NCES-CCD public school survey computer file with the preliminary public school universe file created by NORC (see section 2.3.1). The purppse here was to supplement the NORC universe to create a more comprehensive universe file.

2.3.3.1 File Preparation

The NCES-CCD file contained 77,281 public schools; only 15,414 of these had either a tenth or a twelfth grade. We sorted these 15,414 high schools by ascending OCR state and district codes; we did the same to the 15,226 OCR-coded schools[1] in the NORC file.

2.3.3.2 Matching Procedures

2.3.3.2.1 District Match

Since both the NCES-CCD and the OCR-coded NORC schools had OCR district codes, NORC used a binary search procedure within each state to match the numerical codes. Of the 15,414 NCES-CCD high schools, 14,148 matched with school district codes in 13,151 of the 15,226 OCR-coded NORC high schools. This left 1,266 unmatched NCES-CCD high schools and 2,075 unmatched NORC schools, in addition to the 3,013 NORC schools which did not have OCR codes (see table 2.5.).[1]

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[1]While in the first match between the CIC and OCR files, we were able to link 15,303 schools, it turned out that 77 of them did not have OCR codes. Thus, at this point the NORC file had 15,226 schools with OCR codes and 3,013 (instead of 2,936) schools without OCR codes.

Table 2.5.--NCES-CCD/NORC public school district match

Schools	NORC		NCES-CCD
	With OCR dist. codes	Without OCR dist. codes	
Total[1/]........	15,226	3,013	15,414
Matched	13,151	-----	14,148
Unmatched	2,075	3,013	1,266

1/ See footnote on preceding page.

2.3.3.2.2 School Match

The next step was matching the 14,148 district-matched NCES-CCD schools to the 13,151 district-matched NORC high schools. As before, we used the alpha-matching FORTRAN program, which in this case compared the alphanumeric variables of school name and city name within each state. The aforementioned problems of non-equivalent character strings were resolved as before. We performed several runs, using different sized character strings for school name (city name was used only on the last run). Finally, NORC employed the hand matching procedures for the still unmatched high schools. The result here was 12,815 matched schools, 1,333 unmatched NCES-CDD schools, and 336 unmatched OCR-coded NORC schools (see table 2.6.).

The last step used the 1,333 unmatched NCES-CCD schools and the 1,266 district unmatched NCES-CCD schools. These, sorted by zip codes and city names, were manually compared to the 3,013 non-OCR-coded NORC schools. The procedure matched 1,495 schools, with 1,104 NCES-CCD high schools remaining unmatched (see table 2.7.).

Table 2.6.--NCES-CCD/NORC public school match-step 1

	NORC	NCES-CCD
Schools matched by district 1/	13,151	14,148
Matched schools	12,815	12,815
Unmatched schools	336	1,333

1/ See table 2.5.

Table 2.7. NCES-CCD/NORC public school match-step 2

	NORC	NCES-CCD
Remaining unmatched schools	3,013 1/	2,599 2/
Matched schools	1,495	1,495
Unmatched schools	1,518	1,104 3/

1/ See table 2.5.

2/ Equals the 1,333 NCES-CCD unmatched schools in table 2.6. plus the 1,266 NCES-CCD unmatched schools in table 2.5.

3/ These 1,104 schools were added to the 18,239 schools (see table 2.5.) to form the 19,343 schools in the revised NORC universe file.

2.3.3.2.3 Second Stage NORC Public School Universe File

To update our preliminary public school universe file, the 1,104 unmatched NCES-CCD schools underwent file modifications (to fit the final universe tape format). These then were merged with the 18,239 public high schools in the second-stage NORC public high school universe file.

All CIC schools without OCR codes that were matched with NCES-CCD schools received the NCES-CCD and/or OCR state and district codes.

2.3.4 Racial Composition/NORC Universe Match

In the now complete NORC public school universe file of 19,343 high schools, only 12,229 schools had the OCR racial composition data necessary for stratification purposes.[1] To update the remaining 7,114 uncoded schools, NORC used several sources of data.

First, we employed the OCR's 1972 public high school computer file and used a computer program similar to the one used in matching the 1976 OCR file with the CIC schools (see section 2.3.1). This resulted in 3,250 schools obtaining racial composition data.

The 1970 Census Data Book provided the racial data for an additional 1,092 schools, while the 1977 County and City Data Book provided data for 2,089 more schools. Of the latter group, 1,349 schools received city level data, 629 received county level data, and 111 received city or county level data. Finally, of the 683 schools that still did not have racial composition data, 677 received the information by internally matching them with other racially coded schools in the NORC file via OCR district and zip code matching. The remaining six uncoded schools were assumed to be 100 percent White (see table 2.8.).

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[1]While table 2.3. in section 2.3.1 shows 15,303 schools with racial data, we discovered that 3,074 had faulty data. Thus the Stage One NORC public school universe file had 12,229 schools with racial data and 6,010 schools without racial data.

Table 2.8.--The racial composition/second stage NORC public school universe match

Racial data source	Number
Total public schools	19,343
1976 OCR file 1/	12,229
1972 OCR file	3,250
1970 census data book	1,092
1977 county and city data book	2,089
Other NORC schools	677
No racial data 2/	6

1/ See footnote on preceding page.

2/ Assumed to be 100 percent white.

2.3.5 DRC Income File/NORC Universe Match - Stage Two

The last piece of missing data was the income level of the schools. Using the DRC Income file, NORC matched the zip codes of the file against the zip codes of the 1,104 NCES-CCD schools added to the universe file. Of these, 753 received income data, while 351 remained without income data. Of the 19,343 schools in the NORC public high school file, 18,596 schools had income data, leaving 747 schools unmatched (i.e. without income data) (see table 2.9.).

Table 2.9.--The DRC income/second stage NORC public school universe match

Schools	Number
Total public schools	19,343
Total schools with income data	18,596
First match 1/	17,843
Second match	753
Total schools without income data	747
First match 1/	396
Second match	351

1/ See table 2.4.

2.4 Matching Procedures: Private Schools

2.4.1 NCES/CIC Universe Match

To check the comprehensiveness of the CIC's Catholic and private school universe file, NORC checked the CIC file against the National Center of Education's non-public school survey computer file.

2.4.1.1 File Preparation

The NCES file contained 17,307 NCES non-public schools; NORC eliminated 11,346 schools which did not have a tenth or twelfth grade, using a special FILEBOL program. We sorted the 5,961 NCES high schools and the 5,095 CIC non-public schools by state and telephone numbers in ascending order.

2.4.1.2 Matching Procedures

Since the CIC and NCES schools lacked a common ID number, matching could only be accomplished by the aforementioned FORTRAN alpha-matching program's scanning and comparison of school zip codes, telephone numbers, name, address and city name. As before, when we matched the CIC public and OCR public school files, the matching proceeded state by state with different runs comparing different character strings. The problems of non-equivalent character strings for the same schools were also resolved as before.

2.4.1.3 Preliminary NORC Private School Universe

This matching procedure resulted in 4,294 matched schools, with 801 CIC schools and 1,667 NCES schools left unmatched (see table 2.10.). Thus the preliminary NORC non-public school file contained a total of 6,762 schools (see table 2.11.).

Table 2.10.--NCES/CIC non-public school universe match

Schools	NCES file	CIC file
Total schools	5,961	5,095
Matched schools	4,294	4,294
Unmatched schools	1,667	801

Table 2.11.--Preliminary NORC private school universe file

Schools	Number
Total schools	6,762
Matched schools	4,294
Unmatched NCES schools	1,667
Unmatched CIC schools	801

2.4.2 DRC Income File/NORC Universe Match

Using the DRC Income data file, 6,397 of the total 6,762 non-public schools received income data via the zip code linking procedure described above. The remaining 365 schools did not have the income data (see table 2.12.).

Table 2.12.--DRC income file/NORC private school universe match

Schools	Number
Total schools[1/]	6,762
Schools with income data	6,397
Schools without income data	365

1/ See table 2.11.

2.5 NORC Public School/Non-Public School Universe Attachment

To create a final universe tape of all high schools, public and non-public, NORC attached its non-public school universe file of 6,762 schools (see section 2.4) to its public school universe file of 19,343 schools (see section 2.3). Therefore, the preliminary NORC high school universe contained 26,095 high schools.

In preparing this final tape for sample design and selection, we had to attach the U.S. Census Region Code and the U.S. Census Urbanization Code to each schools' record. Attachment occurred partially by hand and partially via a special SELECT computer program.

2.6 NORC School Universe File Cleaning

To prepare the NORC high school universe file for sample design and selection, it was necessary to subject the file to a detailed "cleaning" process. This primarily involved examining the file to insure that each school had the descriptive data required for stratification purposes and that the data were properly coded. (In what follows we will discuss each stratification variable individually, even though it was more of an involved interactive process. See table 2.13. for a summary.)

Table 2.13.--Cleaning of NORC high school universe file

Schools	Number
Schools in preliminary file	26,095
Duplicate schools	1,058
Continuation schools	311
Schools without 10th or 12th grades	1
Schools in final universe file	24,725

2.6.1 Duplicate Records

A closer examination of the universe file revealed that 1,058 schools were duplicates of other schools on the file. We therefore deleted these duplicates from the file, leaving 25,037 schools in the universe file.

2.6.2 Enrollment Data

There were 112 schools with missing enrollment data. The data were subsequently added to these records, via a special SELECT program.

2.6.3 "Continuation" Schools

NORC decided that those schools which were designated as "continuation" schools be deleted from the sampling frame since they were not actually high schools. The elimination of these 311 schools left 24,726 schools in the universe file.

2.6.4 Grade/Grade Spans

By far the most problematic set of data was the various codes that described the distribution of grades within each school. In general terms, there were about 2,000 schools which had inconsistent or missing values in two or three of the following data fields: grade span; 10th/12th grade code; and/or number of grades. A few of the problems were caused by the codes being in the wrong data fields on the universe file; in these cases a SELECT program merely moved the data to its proper location.

The remaining cases involved actual contradictions in the data. After lengthy discussions, NORC decided to use the value for the number of grades in a school as the true description of grade distribution. Thus using a SELECT program, we changed the grade span codes to reflect the number of grades. In the process, we had to balance any changes in grade span against the 10th/12th grade combination code. Since we determined that the number of grades and the combination codes were equally reliable, the changes in the grade span reflected the values in the other two variables.

Finally, we discovered one school that had neither a tenth nor a twelfth grade; this school was deleted from the universe file, leaving 24,725 schools in the high school universe file.

2.6.5 State Codes

Nine of the schools had inconsistent numeric and alpha CIC state codes. Since the numeric code indicated the geographical location of the school (and not the mailing address), we changed the alpha codes to reflect the numeric state codes.

2.6.6 Census Codes

Approximately 100 schools had missing or zero-filled values for the Census Region Code and/or the Census Urbanization Code. Once flagged, we altered the data for these schools to reflect the actual regional and urban locations of the schools.

2.6.7 Racial Composition Data

After examining the universe file, we discovered that the racial composition data from the 1972 OCR universe file had a different ordering of racial categories than the 1976 OCR file. We therefore altered the records of the 3,211 such schools (using a SELECT program) to match that of the remaining schools with racial composition data. The records of an additional 16 NCES-CCD schools which had received their racial data from CIC schools matched by OCR district codes or zip codes were altered in the same manner.

2.6.8 Black and Hispanic Catholic Schools

For stratification purposes, we needed to identify the predominately Black and Hispanic Catholic schools. A SELECT program placed an indicator of this in these 129 schools' data records.

2.7 Final NORC High School Universe File

The completed NORC High School Universe File contained a total of 24,725 schools, representing approximately 8,104,383 sophomores and seniors. Of these, 18,027 were public schools, and 6,698 were private schools, representing approximately 7,340,198 public school and 674,185 private school sophomores and seniors.

The composition of the universe file is detailed in figure 2.1. Note, however, that many of the schools lacked information on one or more of the variables listed. Of particular importance were the over 1,000 schools with no community income level data. In addition, information such as school sex composition, religious affiliation, and CIC or NCES school type was applicable to only a portion of the schools in the frame.

Fig. 2.1.--Contents of NORC high school universe file

IDENTIFICATION CODES

- OCR State, District & School OE Codes
- CIC State, County, District & School Codes
- NCES-CCD School Code
- School Name, Address, City, & Zip Code

SCHOOL SIZE

- Total Enrollment
- Grade Span (Low & High)
- 10th/12th Grade Combination:
  - 10th & 12th Grades
  - 12th Grade Only
  - 10th Grade Only
- Number of Grades

RACIAL DATA

- Percent American Indian
- Percent Oriental
- Percent Black
- Percent White
- Percent Hispanic

COMMUNITY INCOME

- Number of Households
- Median Family Income
- Percent Households with Income > $25,000
- Percent Households with Income > $15,000
- Percent Households with Income > $10,000

SCHOOL TYPE

- CIC School Type:
  - Regular Public School
  - Catholic School
  - Private School
  - Area Vocational School
  - Regional/County Center
- CIC Vocational Code:
  - Vocational Classes in Regular School
  - Vocational School
  - Other
- CIC Special Education Code:
  - Regular School with Special Education Classes
  - Special Education School
  - Others
- NCES School Type:
  - Day Only
  - Resident Only
  - Mixed
  - Elementary
  - Middle
  - Secondary
  - Elementary and Secondary
  - Special Education
  - Vocational/Technical
  - Alternative

Fig. 2.1.--Contents of NORC high school universe file (continued)

CENSUS CODES
- Region:
  - New England
  - Middle Atlantic
  - South Atlantic
  - E. South Central
  - W. South Central
  - E. North Central
  - W. North Central
  - Mountain
  - Pacific
- Urbanization Level:
  - Urban
  - Suburban
  - Rural

OTHER
- Student Sex:
  - Boys Only
  - Girls Only
  - Co-ed
- Religious Affiliation:
  - Baptist
  - Calvinist
  - Eastern Orthodox
  - Episcopalian
  - Friends
  - Jewish
  - Lutheran
  - Methodist
  - Presbyterian
  - Roman Catholic
  - Seventh Day Adventist
  - Other
  - None

Tables 2.14 through 2.18 describe the final NORC high school universe. Each variable considered (e.g., census region, or level of urbanization) is cross-tabulated with five school types: Non-Alternative, Non-Hispanic Public schools; Non-Alternative, Hispanic Public schools; Alternative Public schools; Private, Non-Catholic schools; and Catholic schools. These five school types are more fully described in chapter 3.

Each table not only shows the number of schools within each cell, but also shows the estimated number of tenth and twelfth grade students represented by those schools. For example, in table 2.14, there are 2,811 Non-Alternative, Non-Hispanic Public schools in the Northeast, containing approximately 1,581,326 students. The number in the parentheses that are next to the number of schools or students indicates the column percentage of the schools or students in that cell. That is, of all the Non-Alternative, Non-Hispanic Public schools in the NORC universe, 16.3 percent are located in the Northeast. The number in the parentheses below this percentage indicate the percentage of schools or students in that cell relative to the whole NORC universe. That is, of all the schools in the universe, 11.4 percent are Non-Alternative, Non-Hispanic Public schools in the Northeast.

Finally, the tables also show the row, column, and overall totals of schools and students. The numbers in the parentheses indicate the percentage of row or column totals relative to the overall totals. That is, the 4,707 schools and the 1,867,872 students in the Northeast represent 19.0 and 23.3 percent of the total number of schools and students, respectively. Also the 17,223 schools and 7,015,986 students in Non-Alternative, Non-Hispanic Public schools represent 69.7 and 87.5 per cent of the total number of schools and students, respectively.

Table 2.14.--NORC school universe of schools and students by Census region and school type

Region	Non-alternative non-Hispanic public	Non-alternative Hispanic public	Alternative public	Private non-Catholic	Catholic	Total
Northeast:						
Schools	2,811 (16.3)	18 (3.8)	62 (18.6)	1,154 (23.9)	662 (35.3)	4,707 (19.0)
	(11.4)	(0.1)	(0.3)	(4.8)	(2.7)	
Students	1,581,326 (23.0)	17,443 (7.4)	38,786 (43.0)	61,859 (27.0)	168,458 (38.0)	1,867,872 (23.3)
	(19.7)	(0.0)	(0.5)	(0.8)	(2.1)	
South:						
Schools	5,960 (34.6)	239 (50.7)	88 (26.4)	1,806 (37.4)	380 (20.3)	8,473 (34.0)
	(24.1)	(1.0)	(0.7)	(7.3)	(1.5)	
Students	2,186,507 (31.0)	114,805 (48.9)	17,876 (20.0)	95,323 (41.0)	71,987 (16.0)	2,486,498 (31.0)
	(27.3)	(1.4)	(0.0)	(2.0)	(0.9)	
North Central:						
Schools	5,816 (33.8)	11 (2.3)	98 (29.4)	862 (17.9)	603 (32.2)	7,390 (29.9)
	(23.5)	(0.0)	(0.4)	(3.5)	(2.4)	
Students	2,026,350 (29.0)	1,860 (0.8)	22,762 (25.0)	41,813 (18.0)	148,948 (34.0)	2,241,733 (27.7)
	(25.3)	(0.0)	(0.3)	(0.5)	(1.9)	
West:						
Schools	2,636 (15.3)	203 (43.1)	85 (25.5)	1,003 (20.8)	228 (12.2)	4,155 (16.8)
	(10.7)	(0.8)	(0.3)	(4.1)	(1.0)	
Students	1,221,803 (17.0)	100,784 (42.9)	9,896 (11.0)	39,352 (15.0)	51,445 (12.0)	1,418,280 (17.5)
	(4.3)	(1.3)	(0.0)	(0.5)	(6.4)	
Total:						
Schools	17,223 (69.7)	471 (1.9)	333 (1.4)	4,825 (19.5)	1,873 (7.6)	24,725(100.0)
Students	7,015,986 (87.5)	234,892 (2.9)	89,320 (1.1)	233,347 (2.9)	440,838 (5.5)	8,014,383(100.0)

Table 2.15.--NORC school universe of schools and students by Census division and school type

Division	Non-alternative non-Hispanic public	Non-alternative Hispanic public	Alternative public	Private non-Catholic	Catholic	Total
New England:						
Schools	795 (9.6)	1 (0.2)	29 (8.7)	390 (8.1)	175 (9.3)	1,390 (5.6)
	(3.2)	(0.0)	(0.1)	(1.6)	(0.7)	
Students	392,887 (6.0)	1,165 (0.0)	4,602 (5.0)	24,864 (11.0)	34,789 (8.0)	458,307 (5.7)
	(5.0)	(0.0)	(0.0)	(0.3)	(0.4)	
Mid Atlantic:						
Schools	2,016 (11.7)	17 (3.6)	33 (9.9)	764 (15.8)	489 (26.0)	3,317 (13.4)
	(8.6)	(0.0)	(0.1)	(3.1)	(2.0)	
Students	1,188,439 (17.0)	16,278 (7.0)	34,184 (38.0)	36,995 (27.0)	133,669 (30.0)	1,409,565 (17.4)
	(14.9)	(0.2)	(6.4)	(0.5)	(1.7)	
South Atlantic:						
Schools	2,112 (12.3)	(5.3)	50 (15.0)	1,130 (23.4)	163 (8.7)	3,480 (14.7)
	(8.5)	(0.0)	(0.2)	(4.6)	(0.7)	
Students	1,075,201 (15.0)	35,762 (15.0)	11,381 (13.0)	55,168 (24.0)	34,623 (8.0)	1,212,135 (15.0)
	(13.4)	(0.5)	(0.1)	(0.1)	(0.4)	
East South Central:						
Schools	1,537 (8.9)	0	12 (3.6)	400 (8.3)	71 (3.8)	2,020 (8.2)
	(6.2)		(0.0)	(1.6)	(0.3)	
Students	474,930 (7.0)	0	609 (1.0)	26,206 (11.0)	12,649 (3.0)	514,394 (6.3)
	(5.9)		(0.0)	(0.3)	(0.2)	
West South Central:						
Schools	2,311 (13.4)	214 (45.4)	26 (7.8)	276 (5.7)	146 (7.8)	2,973 (12.0)
	(9.4)	(0.9)	(0.1)	(1.1)	(0.6)	
Students	636,376 (9.0)	79,043 (34.0)	5,886 (7.0)	13,949 (6.0)	24,715 (6.0)	759,969 (9.4)
	(7.9)	(1.0)	(0.1)	(0.2)	(0.3)	
East North Central:						
Schools	3,049 (17.7)	3 (0.6)	55 (16.5)	626 (13.0)	395 (21.1)	4,128 (16.7)
	(12.3)	(0.0)	(0.2)	(2.5)	(1.6)	
Students	1,424,893 (20.0)	1,422 (1.0)	13,391 (15.0)	29,652 (13.0)	108,935 (25.0)	1,578,293 (19.5)
	(17.8)	(0.0)	(0.2)	(0.4)	(1.4)	
West North Central:						
Schools	2,767 (16.1)	8 (1.7)	43 (12.9)	236 (4.9)	208 (11.1)	3,262 (13.2)
	(11.2)	(0.0)	(0.2)	(1.0)	(0.8)	
Students	601,457 (9.0)	438 (0.0)	9,371 (10.0)	12,161 (8.0)	40,013 (9.0)	663,440 (8.2)
	(7.5)	(0.0)	(0.1)	(0.2)	(0.1)	
Mountain:						
Schools	956 (5.6)	100 (21.2)	23 (6.9)	203 (4.2)	46 (2.5)	1,328 (5.4)
	(3.9)	(0.4)	(0.1)	(0.8)	(2.0)	
Students	322,451 (5.0)	37,215 (16.0)	5,073 (6.0)	7,428 (3.0)	7,308 (2.0)	379,475 (4.7)
	(4.0)	(0.5)	(0.1)	(1.0)	(1.0)	
Pacific:						
Schools	1,680 (9.8)	103 (21.9)	62 (18.6)	800 (16.6)	182 (9.7)	2,827 (11.4)
	(6.8)	(0.4)	(0.3)	(3.2)	(0.7)	
Students	899,352 (13.0)	63,569 (27.0)	4,823 (5.0)	26,924 (12.0)	44,137 (10.0)	1,038,805 (12.8)
	(11.2)	(0.8)	(0.1)	(0.3)	(0.6)	
Total:						
Schools	17,223 (69.7)	471 (1.9)	333 (1.4)	4,825 (19.5)	1,873 (7.6)	24,725 (100.0)
Students	7,015,986 (87.5)	234,892 (2.9)	89,320 (1.1)	233,347 (2.9)	440,838 (5.5)	8,104,383 (100.0)

Table 2.16.--NORC school universe of schools and students by level of urbanization and school type

Urbanization level	Non-alternative non-Hispanic public	Non-alternative Hispanic public	Alternative public	Private non-Catholic	Catholic	Total
Urban:						
Schools	1,833 (10.6)	94 (20.0)	182 (54.7)	1,486 (30.8)	422 (22.5)	4,017 (16.0)
	(7.4)	(0.4)	(0.7)	(6.0)	(1.7)	
Students	1,558,338 (22.0)	97,804 (42.0)	56,348 (63.0)	61,742 (26.0)	89,516 (20.0)	1,863,748 (23.0)
	(19.4)	(1.2)	(0.7)	(0.8)	(1.1)	
Suburban:						
Schools	5,857 (34.0)	144 (30.6)	109 (32.7)	1,620 (33.6)	1,128 (60.2)	8,858 (35.8)
	(24.0)	(0.6)	(0.4)	(6.6)	(4.6)	
Students	3,306,834 (47.0)	87,084 (37.0)	27,139 (30.0)	99,741 (43.0)	302,073 (69.0)	3,822,871 (47.2)
	(41.3)	(1.1)	(0.3)	(1.2)	(3.8)	
Rural:						
Schools	9,533 (55.4)	233 (49.5)	42 (12.6)	1,719 (35.6)	323 (17.2)	11,850 (47.9)
	(38.6)	(0.9)	(0.2)	(7.0)	(1.3)	
Students	2,150,811 (31.0)	50,004 (21.0)	5,833 (7.0)	71,864 (31.0)	49,249 (11.0)	2,327,761 (28.7)
	(26.8)	(0.6)	(0.1)	(0.9)	(0.6)	
Total:						
Schools	17,223 (69.7)	471 (1.9)	333 (1.4)	4,825 (19.5)	1,873 (7.6)	24,725(100.0)
Students	7,015,983 (87.5)	234,892 (2.9)	89,320 (1.1)	233,347 (2.9)	440,838 (5.5)	8,014,383(100.0)

Table 2.17.--NORC school universe of schools and students by percentage Black and school type

Percentage Black	Non-alternative non-Hispanic public	Non-alternative Hispanic public	Alternative public	Private non-Catholic	Catholic	Total
Less than 25% Black:						
Schools	14,739 (85.6)	453 (96.2)	227 (68.2)	4,825(100.0)	1,873(100.0)	22,117 (90.0)
	(59.6)	(1.8)	(0.9)	(20.0)	(7.6)	
Students	5,807,546 (83.0)	218,083 (93.0)	61,762 (69.0)	233,347(100.0)	440,838(100.0)	6,761,576 (84.4)
	(72.5)	(2.7)	(0.8)	(2.9)	(6.0)	
Greater than 25% Black:						
Schools	2,484 (14.4)	18 (3.8)	106 (31.8)	0	0	2,608 (10.0)
	(10.1)	(0.1)	(0.4)			
Students	1,208,440 (17.0)	16,809 (7.0)	27,558 (31.0)	0	0	1,252,807 (15.6)
	(15.1)	(0.2)	(0.3)			
Total:						
Schools	17,223 (69.7)	471 (1.9)	333 (1.4)	4,825 (19.5)	1,873 (7.6)	24,725(100.0)
Students	7,015,986 (87.5)	234,892 (2.9)	89,320 (1.1)	233,347 (2.9)	440,838 (5.5)	8,014,383(100.0)

Table 2.18.--NORC school universe of schools and students by size of average combined sophomore and senior enrollment and school type 1/

Average enrollment per grade	Non-alternative non-Hispanic public	Non-alternative Hispanic public	Alternative public	Private non-Catholic	Catholic	Total
≤ 36:						
Schools	2,977 (17.3) (12.0)	107 (22.7) (0.4)	142 (42.6) (0.6)	3,822 (79.2) (15.5)	419 (0.2) (1.7)	7,467 (30.2)
Students	122,625 (2.0) (1.5)	62,333 (27.0) (0.8)	4,781 (5.0) (0.1)	93,543 (40.0) (1.2)	14,487 (3.0) (0.2)	297,769 (3.7)
37-100:						
Schools	4,264 (24.8) (17.3)	95 (20.7) (0.4)	89 (26.7) (0.4)	870 (18.0) (3.5)	560 (29.9) (2.3)	5,878 (23.8)
Students	550,167 (8.0) (6.9)	4,210 (2.0) (0.1)	10,412 (12.0) (0.1)	94,731 (91.0) (1.2)	73,895 (17.0) (0.9)	733,415 (9.0)
101-175:						
Schools	2,885 (16.8) (11.7)	56 (11.9) (0.2)	33 (9.9) (0.1)	94 (1.4) (0.4)	468 (25.0) (1.9)	3,536 (14.3)
Students	758,478 (11.0) (9.5)	12,243 (5.0) (0.2)	8,528 (6.0) (0.1)	23,444 (10.0) (0.3)	125,448 (28.0) (1.6)	928,141 (11.5)
176-250:						
Schools	1,789 (10.4) (7.2)	24 (5.1) (0.1)	9 (2.7) (0.0)	26 (0.5) (0.1)	242 (12.9) (1.0)	2,090 (8.5)
Students	735,388 (10.0) (9.2)	15,137 (6.0) (0.2)	3,456 (4.0) (0.0)	11,015 (5.0) (0.1)	99,595 (23.0) (1.2)	864,591 (10.7)
251-325:						
Schools	1,280 (7.4) (5.2)	27 (5.7) (0.1)	14 (4.2) (0.1)	6 (0.1) (0.0)	107 (5.7) (0.4)	1,434 (5.8)
Students	717,095 (10.0) (9.0)	10,270 (4.0) (0.1)	7,422 (8.0) (0.1)	3,336 (1.0) (0.0)	60,276 (14.0) (0.8)	798,399 (9.9)
326-400:						
Schools	1,022 (5.9) (4.1)	34 (7.2) (0.1)	7 (2.1) (0.0)	3 (0.1) (0.0)	39 (2.9) (0.2)	1,105 (4.5)
Students	715,220 (10.0) (8.9)	15,815 (7.0) (0.2)	4,738 (5.0) (0.1)	2,188 (1.0) (0.0)	27,842 (6.0) (0.4)	765,803 (9.4)
401-475:						
Schools	88[illegible] (5.1) (3.6)	30 (6.4) (0.1)	6 (1.8) (0.0)	1 (0.0) (0.0)	20 (2.1) (0.1)	940 (3.8)
Students	749,939 (11.0) (9.4)	24,794 (11.0) (0.3)	5,291 (6.0) (0.1)	935 (0.0) (0.0)	17,471 (11.0) (0.2)	798,430 (9.9)
476-550:						
Schools	686 (4.0) (2.8)	34 (7.2) (0.1)	10 (3.0) (0.0)	0	7 (0.4) (0.0)	737 (3.0)
Students	673,914 (10.0) (8.4)	26,569 (11.0) (0.3)	10,372 (12.0) (0.1)	0	7,186 (2.0) (0.1)	718,041 (8.9)
551-625:						
Schools	489 (2.8) (2.0)	25 (5.3) (0.1)	4 (1.2) (0.0)	1 (0.0) (0.0)	7 (0.4) (0.0)	526 (2.1)
Students	554,565 (8.0) (6.9)	34,461 (15.0) (0.4)	10,372 (12.0) (0.1)	1,125 (0.0) (0.0)	8,035 (2.0) (0.1)	608,558 (7.5)
> 625:						
Schools	948 (5.5) (3.8)	39 (8.3) (0.2)	19 (5.7) (0.1)	2 (0.0) (0.0)	4 (0.2) (0.0)	1.012 (4.1)
Students	1,438,595 (18.0) (18.0)	29,060 (12.0) (0.4)	30,299 (34.0) (0.4)	3,030 (1.0) (0.0)	6,603 (1.0) (0.1)	1,507,587 (18.6)
Total:						
Schools	17,223 (69.7)	471 (1.9)	333 (1.4)	4,825 (19.5)	1,873 (7.6)	24,725 (100.0)
Students	7,015,986 (87.5)	234,892 (2.9)	89,320 (1.1)	233,347 (2.9)	440,838 (5.5)	8,014,383 (100.0)

1/ Table entries for student totals are the sum of 10th and 12th grade enrollments. Grades 9 and 11 are omitted from these totals.

CHAPTER 3

SCHOOL UNIVERSE STRATIFICATION

The next phase of the High School and Beyond sample involved stratifying the NORC High School Universe File. We sorted the sample frame in such a way as to create groups of schools, called strata. Each stratum contained schools which were relatively similar in terms of certain variables deemed relevant to the survey's objectives. The actual selection of schools then occurred independently within each stratum.

Stratification techniques served several study-specific design objectives. First, stratification was used to decrease the variance of sample estimates by reducing the within-stratum component of the overall variance. In addition, policy-related issues required that certain unique subpopulations (e.g., Alternative schools, high ability Black Catholic students) be sufficiently represented to allow for separate analyses in both phases of the study. Stratification permitted us to set up such subpopulations as separate "domains," forming their own "special" strata which could be oversampled to achieve the desired sample size, without invalidating the national representativeness of the sample.

Another consideration involved being able to compare the present study's data to the data from the 1972 survey. This required at the least, a comparable sample of students. Since the earlier study also used stratification, one means of attaining comparability would be to use stratification variables similar to those of the earlier study. Finally, the study design required that each state be given the opportunity to "augment" the national sample for its own purposes. This could be achieved via stratification.

3.1 Stratification Design

NORC's sample design for the High School and Beyond Survey called for a two stage stratified cluster sample. The first stage involved the selection of 1,122 high schools from a stratified list of eligible high schools, with the selection process proceding independently within each of the strata. The second stage then called for the selection of an equal number of students from each selected school.

The first step, after constructing the sample frame, involved stratifying the NORC High School Universe File. To remain faithful to the stratification design of the 1972 study, NORC had initially proposed using the following seven stratification variables in the following order: 1) Type of Control (public, Catholic, and non-Catholic private); 2) Geographic Region (nine Census Divisions); 3) Racial and Ethnic composition (various combinations of White, Black, and Hispanic enrollment ratios); 4) Degree of Urbanization (urban central city, suburban, and rural); 5) Income Level of the Community; 6) Proximity to a College; and 7) Enrollment Size. These variables roughly paralled those used in the earlier study.

However, NORC later decided that the sixth stratification variable, proximity to a college or university, and the fourth variable, degree of urbanization, were so similar that we were able to drop the former variable from our stratification scheme without any loss of information. Also, as mentioned in chapter 2, there were several schools that lacked information about the income level of the schools' communities. Thus we decided not to use that variable as well. Finally, as we would later discover, the five remaining variables did not allow for a useful stratification of the private schools. We therefore added a male and female composition variable to the stratification of the private schools only.

The overall design of the stratification process involved creating three major strata by separating the public schools, the private non-Catholic schools, and the private Catholic schools from each other. We then further subdivided each of these three control categories into successively smaller strata by separating the schools along the remaining stratification variables, in the aforementioned order. If via this procedure any of the substrata became relatively small, we retraced the process and recombined the substrata along revised variable categories.

Initially, NORC had planned to create approximately 500 substrata of equal size, as measured by the total of the schools' tenth and twelfth grade enrollments. We would then be able to select two schools from each substratum, for a total of 1,000 sampled schools, each selection made with probabilities proportional to the size of the school's enrollment. This, coupled with the selection of an equal number of students from each school, would have created approximately equal student probabilities of selection. In addition, using paired selection variance computational techniques, we would have an unbiased estimate of the sample estimators' precision.

Several factors prevented NORC from achieving these objectives. The first was the matter of each state's option of requesting a within-state representative sample. Such an augmentation sample involved the possibility of selecting an additional number of schools from the augmenting state so that all of the schools selected from that state were the whole of a within-state representative sample with an acceptable estimation precision. Second, the study's objectives required that we have enough sample cases to separately analyze several key but rare type of schools and students. Third, the grossly unequal enrollment size of the schools made it virtually impossible to create meaningful substrata of roughly equal size while maintaining the two selected schools per substrata criterion.

As a result, NORC modified its intended sample design to accomodate these problems. After dividing the schools in the universe along the two control categories of public and non-public schools, we separated those schools for which there were specific analysis ne... from the rest. Then, where possible, we further subdivided the schools within each of the above categories along regional lines. These subgroups thus formed the "explicit" strata, or "superstrata." Within each superstratum, we then further "substratified" the schools along the remaining stratification variables, whenever possible. These groups formed the "subst..ta" within each superstratum. Each superstratum had its own combination of substrata, depending upon the internal distribution of the stratifying variables and the size of the superstratum. A systematic selection of schools (with probabilities proportional to enrollment size) was then carried out independently within each superstratum. Oversampling to achieve desired sample sizes was thereby possible.

We also intended to design the stratification in a manner enabling us to assume that each pair of selected schools came from an "implicit" stratum. Thus we had the option of using paired selection variance computations. (As it turned ...t, this method of variance computations proved infeasible, due to the large number of ineligible schools in the sample. See sections 4.4 and 7 for a more detailed explanation).

In wh..t follows, we will describe the stratification of each of the two control categories: Public high schools; and Private high schools.

3.2 Public School Stratification

Within the subclass of public high schools, there is considerable policy-related and scholarly interest in two types of schools and students. The first interest is in Hispanic, particularly Cuban, students; the second is in "Alternative" schools. Thus to insure sufficient representation of these two groups, we created three subgroups of public high schools: 1) Non-Alternative, Non-Hispanic schools (see section 3.2.1); 2) Non-Alternative, Hispanic schools (section 3.2.2); and 3) Alternative schools (section 3.2.3).

3.2.1 Non-Alternative/Non-Hispanic Public School Stratification

3.2.1.1 Explicit Strata ("Superstrata")/State Augmentation

We first stratified the Non-Alternative, Non-Hispanic Public schools ccording to the nine Census Divisions (New England, Mid-Atlantic, South Atlantic, East South Central, West South Central, East North Central, West North Central, Mountain, and Pacific). Of immediate impact here were the augmentation options offered to individual states. As designed, the national sample could not provide a within-state representative sample for each state. Therefore, each state was given the option to increase its expected sample of public schools (under proportional allocation among strata) in order to create a representative sample for the state. One of the types of augmentation, known as "piggybacking," involved drawing additional schools from the augmenting state so that the within-state sample would be representative for <u>both</u> the state and the nation.[1]

If the states chose to adopt the piggybacking option, we had to alter the national sample design to reflect this. Of primary concern was the minimum sample size required within each state to 1) produce the within-state representative school sample, 2) produce an adequate precision for within-state sample estimates, 3) satisfy the statistical requirement of a normal distribution of possible sample estimates, and 4) provide sufficient "randomization" for the assumptions of the central limit theorem to hold. While NORC's technical opinion was that a minimum of 80 primary sampling units (schools) would satisfy these conditions, we allowed each state the option of achieving a minimum statistical validity with 50 selected schools from that state (schools expected from a proportional sample allocation without augmentation, plus the schools added via augmentation). We did, however, recommend that at least 60 schools be in the total augmented state sample. To this end, we prepared tables showing the expected levels of precision (standard errors) for sample sizes ranging from 50 to 100, allowing the state to chose its own level of precision relative to the increased costs of adding more schools.

Using 1976 and 1977 NCES data, we calculated the expected allocations of sampled public schools by state, assuming a total sample size of 932 public schools (excluding the 68 private schools) with allocations proportional to each

1 The other two available augmentation options were the Supplementary State Sample and the Independent State Sample. In the former, the state sample consisted of two mutually exclusive parts: 1) the schools from that state in the national sample, and 2) a separate supplementary school sample which, when added to Part One, created within-state representative sample. However, the supplementary part of the sample did not become part of the national sample.

The Independent State Sample involved selecting a separate state-representative sample. The selections were made after the national sample was drawn, and the frame of schools for the independent sample did not include the schools selected for the national sample.

state's population of public high school students. Five states (New York, Pennsylvania, Texas, Ohio, and California) would have had at least the minimum number of schools for an adequate state sample without augmentation. These states became their own superstrata so that the selected schools would represent the state as well as being part of the national sample. Illinois, however, selected the piggyback option and required oversampling; Illinois therefore also formed its own superstratum. Therefore, all public schools became stratified into 15 "superstrata" (or explicit strata) - the nine Census Divisions plus the six individual states (see table 3.1.).

3.2.1.2 Substratification

For the 15 Non-Alternative, Non-Hispanic Public school superstrata, we first sorted the schools in each separate superstratum into the following six substrata: high-Black rural; high-Black suburban; high-Black urban; low-Black rural, low-Black suburban; and low-Black urban, setting the cutoff percentile for low-Black/high Black at 25% Black. The urbanization coding was as follows: urban=central city; suburban=no ntral city part of SMSA; and rural=non-SMSA.

If, however, any of the six substrata became too small to allow us to draw two selections from a substratum, it was collapsed into an adjoining substrata. Within each substratum, we ordered the schools according to their total tenth and twelfth grade enrollment. From substrata to substrata, this ordering was "back-to-back" (i.e., low to high in the first substrata, high to low in the second substrata, low to high in the third substrata, etc.). (See chapter 4 for a detailed discussion of the selection procedure.)

Table 3.1.--Non-alternative, non-Hispanic public school stratification

Stratum #	Superstratum	Substratum	Enrollment
1	New England	Urban	Ascending
		Suburban	Descending
		Rural	Ascending
2	New York	Low-Black Urban	Ascending
		Low-Black Suburban	Descending
		Low-Black Rural	Ascending
		High-Black	Descending
3	New Jersey (Mid-Atlantic minus NY. and PA.)	Low-Black Non-Rural	Ascending
		Low-Black Rural	Descending
		High-Black Non-Urban	Ascending
		High-Black Urban	Descending
4	Pennsylvania	Low-Black Urban	Ascending
		Low-Black Suburban	Descending
		Low-Black Rural	Ascending
		High-Black	Descending
5	South Atlantic	Low-Black Urban	Ascending
		Low-Black Suburban	Descending
		Low-Black Rural	Ascending
		High-Black Rural	Descending
		High-Black Suburban	Ascending
		High-Black Urban	Descending
6	East South Central	Low-Black Urban	Ascending
		Low-Black Suburban	Descending
		Low-Black Rural	Ascending
		High-Black Rural	Descending
		High-Black Suburban	Ascending
		High-Black Urban	Descending
7	West South Central (minus Texas)	Low-Black Urban	Ascending
		Low-Black Suburban	Descending
		Low-Black Rural	Ascending
		High-Black Rural	Descending
		High-Black Non-Rural	Ascending
8	Texas	Low-Black Urban	Ascending
		Low-Black Suburban	Descending
		Low-Black Rural	Ascending
		High-Black Non-Urban	Descending
		High-Black Urban	Ascending

Table 3.1.--Non-alternative, non-Hispanic public school stratification (continued)

Stratum #	Superstratum	Substratum	Enrollment
9	Ohio	Low-Black Urban	Ascending
		Low-Black Suburban	Descending
		Low-Black Rural	Ascending
		High-Black	Descending
10	East North Central (minus Ohio & Illinois)	Low-Black Urban	Ascending
		Low-Black Suburban	Descending
		Low-Black Rural	Ascending
		High-Black	Descending
11	Illinois	Low-Black Urban	Ascending
		Low-Black Suburban	Descending
		Low-Black Rural	Ascending
		High-Black	Descending
12	West North Central	Low-Black Urban	Ascending
		Low-Black Suburban	Descending
		Low-Black Rural	Ascending
		High-Black	Descending
13	Mountain	Urban	Ascending
		Suburban	Descending
		Rural	Ascending
14	Pacific (minus California)	Urban	Ascending
		Suburban	Descending
		Rural	Ascending
15	California	Low-Black Urban	Ascending
		Low-Black Suburban	Descending
		Low-Black Rural	Ascending
		High-Black Non-Urban	Descending
		High-Black Urban	Ascending

After the actual substratification was completed, only the South Atlantic and the East South Central superstrata could support the six substrata sorting procedure. In every other superstratum, at least one class had to be incorporated into an adjacent class (see table 3.1.).

In the New England, Mountain, and Pacific strata, we had only the three urbanization level substrata. In the New York, Pennsylvania, Ohio, East North Central, Illinois, and West North Central strata, all high-Black schools were left undifferentiated along urbanization lines, while low-Black schools were in separate urban, suburban, and rural substrata. In New Jersey, high-Black rural and suburban substrata were collapsed, as were the low-Black urban and suburban substrata. In the West South Central strata, the high-Black suburban and high-Black urban classes were combined, while in Texas and California the high-Black rural and high-Black suburban classes were combined. Thus there were 64 total cells in the Non-Alternative, Non-Hispanic Public school superstrata.

3.2.2 Non-Alternative/Hispanic Public School Stratification

Another source of initial sample design modification involved an augmentation of the original study design to allow for a more comprehensive investigation and analysis of Hispanic students in United States' high schools. This required a sufficient sample of students from each major U.S. Hispanic group: Mexican-Americans; Puerto Ricans; and Cuban-Americans; as well as the high ability subgroup of each. At the same time, NORC wished to integrate this Hispanic supplement into the broader study. These two objectives required that approximately

20% of the national sample be of Hispanic origin, with at least 500 Cuban-American students in each grade cohort. We could not maintain the integrity of an equal probability sample however, while simultaneously fulfilling those numerical requirements. Thus, students in certain Hispanic groups would have to be oversampled and correspondingly weighted. We achieved the required subgroup oversampling by selecting high proportion Hispanic schools with a probability which was an increasing function of the proportion of Hispanic students in the student body. The degree to which each oversampled subgroups' sample could be incorporated effectively into the national sample varied among the Hispanic subgroups. We estimated that only the Cuban-American sample could not be incorporated, since it would be primarily a Dade County, Florida sample (due to the disproportionate geographical allocation and proportionately small number of Cuban-Americans). Mexican-Americans and Puerto Ricans would require small and moderately high weights respectively. For the latter subgroup, we hoped to increase sampling efficiency by increasing the number of schools in which Puerto Rican students could be found.

Overall, NORC proposed to increase the proposed total sample size of 1,000 schools by no more than 100, with about 50% being predominantly Puerto Rican schools, 35% being Cuban schools, and the remainder being Mexican-American schools. To implement this we first separated all public schools in our public school universe which had an Hispanic enrollment of greater than 35% from those which had an Hispanic enrollment of less than 35%. In order to resolve the aforementioned caveats regarding the Cuban-Americans, we further separated those Hispanic schools with predominantly Cuban-American enrollments from the rest of the Hispanic schools. These Cuban schools were defined as schools in which 20% or more of the students were identified as Cuban-Americans.

3.2.2.1 Non-Cuban/Hispanic Public School Stratification

3.2.2.1.1 Explicit Stratification

Following the explicit stratification scheme used for Non-Alternative, Non-Hispanic Public schools (see section 3.2.1), we stratified the Non-Cuban Hispanic Public schools along the same 15 explicit Census Division/state lines. The relatively small number of Hispanic schools forced us to collapse these 15 strata into five "superstrata" (see table 3.2.).

3.2.2.1.2 Substratification

Again, following the stratification design of the Non-Alternative, Non-Hispanic schools, we substratified these five superstrata along urbanization level and enrollment lines. (Stratification by race was not feasible.) However unilateral three-way urbanization level stratification became feasible only for the West South Central and Pacific superstrata. The small size of the urbanization substrata in the remaining Non-Cuban Hispanic superstrata (preventing the possible selection of two schools per implicit strata) required us to collapse these substrata into each other. Thus, no stratification by urbanization could be achieved in the Northeast and North Central, or South Atlantic strata, while the Mountain stratum was substratified along urban/suburban and rural lines.

Within these rather limited substrata, we again ordered the schools (back-to-back among substrata within superstrata) according to the schools' total tenth and twelfth grade enrollment.

Table 3.2.--Non-alternative, Hispanic public school stratification

Stratum #	Superstratum	Substratum	Enrollment
16	Northeast & North Central	NONE	Ascending
17	South Atlantic	NONE	Ascending
18	West South Central	Urban Suburban Rural	Ascending Descending Ascending
19	Mountain	Urban & Suburban Rural	Ascending Descending
20	Pacific	Urban Suburban Rural	Ascending Descending Ascending
21	Cuban Public	NONE	

3.2.2.2 Cuban Public School Stratification

This separate special stratum of Cuban Public schools allowed for the separate analysis of Cuban students in public high schools. We were able to identify twenty schools with a Cuban enrollment of 20% or more. As it turned out, five of these schools were in New Jersey, 14 were in Florida, and one was in California. At that time, we were unable to determine the degree to which these schools were representative of the U.S. Cuban population; this would have to await the actual data collection to see what fraction of Cuban students in the United States were in these schools.

Since our design required a sufficient number of students for separate analysis, we did not internally stratify or order these schools in any particular way; our aim was to use all 20 of the schools in the sample. The Cuban sample frame was designated as Stratum #21.

3.2.3 Alternative Public School Stratification

One of the special studies requested in the RFP involved a separate sample of "Alternative" Public high schools in order to study the effects of such an education on the students attending them. We defined an Alternative high school as one in which a significant portion of a student's time is spent in non-classroom activities. In order to draw the sample, we had three options: 1) use whatever Alternative schools were naturally selected in the national sample; 2) draw a special supplementary sample and add it to whatever Alternative schools were naturally selected; and 3) create a special strata of the Alternative schools in our universe, oversampling it to achieve a large enough sample for separate analysis.

Each option had its drawbacks. The first would most likely achieve a sample of 10 to 20 schools, too small for statistical considerations. The second either would increase the costs or reduce the basic sample size. The third would create a non-self-weighting segment of the national sample.

The first option prevented separate analysis of Alternative schools and was automatically unfeasible. The second option, if the overall sample size was reduced, left open the possibility of undersampling Hispanic students in the student selection stage. Therefore, we chose the third option of making Alternative schools a separate special strata, oversampled to achieve the minimum of 50 schools. Thus we would later have the further option of either incorporating these 50 schools into the national sample with low weights or taking a subsample (proportionate to the population size of the stratum) of these 50 schools for inclusion into the national sample.

Since we could identify only 333 Alternative schools in our universe, we could not feasibly divide the schools into explicit geographical strata (as we did with the rest of the public schools) and still retain the possibility of making two selections per stratum. We therefore created substrata (within the Alternative school superstratum) along the 15 geographical divisions; those too small for our purposes were combined with others. Thus, we ended up with 11 regional substrata (see table 3.3.). Further substratification along urbanization and racial lines was possible in only three geographical substrata. In New York and the East North Central region, substrata of urban and suburban/rural were created; in the South Atlantic, low-Black, high-Black substrata were formed. Finally, the schools in each of these 14 cells were sorted by tenth and twelfth grade enrollments, using the back-to-back method.

This superstratum of Public Alternative schools was designated as Stratum #22.

Table 3.3.--Alternative public school stratification

Stratum #	Superstratum	Substratum I: region	Substratum II: race/urbanization	Enrollment
22	Alternative Public	New England	NONE	Ascending
		New York	Urban	Descending
			Suburban & Rural	Ascending
		New Jersey	NONE	Descending
		Pennsylvania	NONE	Ascending
		South Atlantic	Low-Black	Descending
			High-Black	Ascending
		South Central	NONE	Descending
		East North Central	Urban	Ascending
			Suburban & Rural	Descending
		Illinois	NONE	Ascending
		West North Central	NONE	Descending
		Mountain	NONE	Ascending
		Pacific	NONE	Descending

3.3 Private School Stratification Design

To stratify the universe of Private schools, NORC first separated the Elite schools from the remainder of the Private schools. The latter set of schools was divided into four categories: Non-Catholic schools; Non-Black, Non-Hispanic Catholic schools; Black/Hispanic, Non-Cuban Catholic schools; and Cuban Catholic schools. Within each category or superstratum, we then began the successive branching process.

3.3.1 Elite School Stratification

Twelve schools comprised the Elite Private school superstratum (# 34). We defined the "elite" schools as the twelve private schools with the highest percentage of graduating seniors who were National Merit Scholarship semi-finalists, subject to the following conditions: 1) the 1978 senior class had to graduate forty or more students; and 2) no more than one school could be selected from a single state. Of the twelve schools selected in this stratum, one was Catholic and the rest Non-Catholic.

3.3.2 Non-Elite, Non-Catholic Private School Stratification

The importance of Non-Catholic private schools in the overall United States educational system and in particular, California, had become significant enough to require that we have a large enough sample of them for separate analysis. Thus, the Non-Elite, Non-Catholic private schools became a separate superstratum (Stratum #33). Here, as in the other special strata, further explicit stratification by census division would yield some substrata too small for possible implementation of the two selections per stratum sample design. We were, however, able to create nine regional substrata (see table 3.4.).

Table 3.4.--Non-Catholic private school stratification

Stratum #	Superstratum	Substratum I region	Substratum II[1] religious affiliation
33	Non-elite Non-Catholic	New England	NON-NCES[2]
			Unaffiliated
			Baptist
			Calvinist
			Episcopalian
			Friends
			Jewish
			Methodist
			Other
		New York	Other
			Presbyterian
			Lutheran
			Jewish
			Friends
			Episcopalian
			Eastern Orthodox
			Baptist
			Unaffiliated
			NON-NCES
		Mid-Atlantic (minus NY)	NON-NCES
			Unaffiliated
			Baptist
			Calvinist
			Episcopalian
			Friends
			Jewish
			Lutheran
			Methodist
			Presbyterian
			Other
		South Atlantic	Other
			Presbyterian
			Methodist
			Lutheran
			Jewish
			Friends
			Episcopalian
			Calvinist
			Baptist
			Unaffiliated
			NON-NCES

Table 3.4.--Non-Catholic private school stratification (continued)

Stratum #	Superstratum	Substratum I region	Substratum II[1/] religious affiliation
33 (cont.)		East South Central	NON-NCES Unaffiliated Baptist Calvinist Episcopalian Jewish Lutheran Methodist Presbyterian Other
		West South Central	Other Presbyterian Methodist Lutheran Episcopalian Baptist Unaffiliated NON-NCES
		North Central	NON-NCES Unaffiliated Baptist Calvinist Episcopalian Friends Jewish Lutheran Methodist Presbyterian Other
		West (minus California)	Other Presbyterian Methodist Lutheran Jewish Friends Episcopalian Calvinist Baptist Unaffiliated NON-NCES

Table 3.4.--Non-Catholic private school stratification (continued)

Stratum #	Superstratum	Substratum I region	Substratum II[1] religious affiliation
33(cont.)		California	NON-NCES Unaffiliated Baptist Calvinist Episcopalian Friends Jewish Lutheran Methodist Presbyterian Other
34	Elite, Non-Catholic	NONE	NONE

1/ Within each substratum, enrollment size increases.

2/ Religious affiliation data was available only for the schools from the NCES private school file.

Within each regional substrata, we ordered the schools according to religious affiliation on a back-to-back basis. Within each affiliation group, the schools were ordered according to their total tenth and twelfth grade enrollment, from the smallest to the largest.

3.3.3 Catholic - Private School Stratification

The final step of stratification involved the Catholic schools. To allow for separate analyses of predominantly Cuban Catholic schools, and Catholic schools with a high proportion (25%) Blacks <u>and</u> Hispanics, we separated the latter two types of Catholic schools from the remaining Catholic schools, creating three separate superstrata.

3.3.3.1 Non-Black, Non-Hispanic Catholic School Stratification

Within our Non-Black, Non-Hispanic Catholic school superstratum (Stratum #35), we first sorted the schools into the 11 regional substrata (see table 3.5.). Then, wherever possible, we hoped to control for the sex composition of the schools. We attempted stratification by four classifications: all boys' schools, all girls' schools, coed schools, and non-NCES schools (which lacked information on school enrollment by sex). With the exceptions of New York, Pennsylvania, and the West, this substratification could not occur within the limits of our sample design. For those three regions, we could only create two substrata by sex within region: coed schools; and all other schools.

Finally, within each of these fourteen substrata, the schools were ordered on a back-to-back basis, tenth and twelfth grade enrollment size alternately increasing and decreasing (see table 3.5.).

Table 3.5.--Catholic school stratification

Stratum #	Superstratum	Substratum I: region	Substratum II sex	Enrollment
35	Non-Black, Non-Hispanic Catholic	New England	NONE	Ascending
		New York	Non NCES, boys only, girls only	Descending
			Coed	Ascending
		New Jersey	NONE	Descending
		Pennsylvania	Non NCES, boys only, girls only	Ascending
			Coed	Descending
		South Atlantic	NONE	Ascending
		South Central	NONE	Descending
		Ohio	NONE	Ascending
		East North Central	NONE	Descending
		Illinois	NONE	Ascending
		West North Central	NONE	Descending
		West	Non NCES, boys only, girls only	Ascending
			Coed	Descending
36	Non-Cuban, Black/Hispanic Catholic	Northeast	Non NCES, girls only	Ascending
			Coed, boys only	Descending
		South	NONE	Ascending
		East North Central	NONE	Descending
		Illinois	Non NCES	Ascending
			other	Descending
		West	Non NCES, girls only	Ascending
			boys only	Descending
			Coed	Ascending
37	Cuban Catholic	New Jersey	NONE	Ascending
		Florida	Boys only, girls only	Descending
			Coed	Ascending

3.3.3.2. Black/Hispanic Catholic School Stratification

All Catholic schools with an estimated high proportion (25%) of Black and Non-Cuban Hispanic students formed a separate Black/Hispanic Catholic school superstratum (Stratum #36).

Within thi. ,uperstrata, we were able to form five regional substrata (see table 3.5.). Substratification continued along school sex composition lines: coed; girls only; boys only; and non-NCES. Again, not all of the regions permitted this stratification, so this only occurred where and to the extent it was feasible (see table 3.5.).

Finally, we again ordered each of these nine substrata on a back-to-back basis according to the total tenth and twelfth grade enrollment, alternately increasing and decreasing.

3.3.3.3. Cuban Catholic School Stratification

We created a separate superstratum (Stratum #37) of the 14 Catholic schools where we could identify 20 percent or more of the students as Cuban. Substratification occurred first along state lines - New Jersey and Florida - where these schools were located, and then by single sex schools versus coed schools in Florida only. These three substrata were internally ordered by total tenth and twelfth grade enrollment on a back-to-back basis, alternately increasing and decreasing (see table 3.5.).

3.4 Washington State Augmentation Stratification

The State of Washington also opted to augment its part of the national sample. Rather than use the piggybacking method as described above for Illinois, Washington State decided to draw an "independent" state sample.

With this method, a separate in-state representative sample of schools would be drawn from a universe that excluded those state schools selected in the national sample.

To implement this for Washington State, NORC took all of the public high schools (including Alternative Public high schools) in the state and excluded the 12 schools selected in the national sample and the three schools selected as replacements for out-of-scope schools. We attempted to stratify this universe in a manner comparable to the stratification scheme of the other public school strata. However, a close examination of the Washington State universe showed this to be impossible. Therefore, we only could substratify the schools along the three urbanization lines: urban, suburban, and rural. As before, each school within the substrata was ordered according to total tenth and twelfth grade enrollment sizes on a back-to-back basis (see table 3.6.).

The Washington State superstratum was designated as Stratum #38.

Table 3.6.--Washington state augmentation stratification

Superstratum	Substratum	Enrollment size
Washington State (#38)	Urban	Ascending
	Suburban	Descending
	Rural	Ascending

CHAPTER 4

SCHOOL SAMPLE SELECTION

4.1 Primary Selection

The first stage of the HS & B sample design called for the selection of schools from a stratified list, with selections made proportional to the size of the school's average tenth and twelfth grade enrollment. We independently selected schools from each superstratum, after allocating a specific proportion of the total sample to each of the six major school types Thus we allowed for the disproportionate oversampling of certain key school types, while at the same time developing an overall sample capable of national projections for the sample estimates. We also selected the initial school sample in such a way as to allow for the use of paired selection variance estimates; i.e., each pair of selected schools could, if necessary, be considered as coming from a single implicit stratum of relatively similar schools.

4.1.1 School Type Allocation

The selection of sample schools occurred independently within each of the six general school types: (1) Non-Hispanic Public; (2) Hispanic Public; (3) Alternative Public; (4) Black/Hispanic Catholic; (5) Other Catholic; and (6) Other Private. Within each school type, selections also occurred independently within each superstratum. While we applied the same general procedures within each school type, variations in the design resulted from the data analysis requirement that certain superstrata be disproportionately sampled.

Initially, school sample selection involved determining expected sample size for each of the six general types of schools. This was a function of the average number of students per grade for each school type and for the population, in addition to the analytical requirements of the study (i.e., the requirement of a disproportionate sample by school type).

The general formula for calculating the expected number of sample schools is:

$$E(n_t) = \left(\frac{MOS_t}{MOS}\right) (n) \qquad (1)$$

where:

$E(n_t)$ = expected number of sample schools for the t^{th} school type (t=1 to 6);

MOS_t = the measure of the size (the total of the average number of students per tenth and/or twelfth grade) summed over all schools in the t^{th} school type;

MOS = the measure of size for the entire population of schools;

n = the desired sampled size for the whole sample.

Each time we calculated an expected sample size for a school type, we subtracted the expected sample size (or desired sample size if different) and the measure of size from the population totals of the respective variables. With the new population totals, we again applied the formula to the next school type (see **table 4.1**).

To begin with, all of the schools in NORC's High School Universe File contained 8,318,524 sophomores and seniors. The MOS was the average number of students per the two grades, or 4,159,262 students. Our initial total desired sample size (n) was set at 1,000 schools out of the 24,725 total schools. Based on the purely proportional (to the MOS) sampling of schools from each type of school, we initially calculated the expected proportional allocation

Table 4.1.--Sample allocations by school type

(A) School type	(B) Total MOS	(C) School type MOS_t	(D) Proportion (C/B)	(E) Desired total sample (n)	(F) Expected sample $[E(n_t)] = (D*E)$	(G) Desired sample $[D(n_t)]$
Total schools	4,159,262	--	--	1,000	--	1,000
Alternative public schools		47,297	.1137	--	11	50
Total alternative schools	4,111,965	--	--	950	--	--
Total minus private schools		340,828	.0819	--	79	137 (138)
Black Catholic		17,565	.00427	--	4	40
Catholic		203,415	.0495	--	47	47 (48)
Private		119,848	.0291	--	28	50
Total public schools	3,771,137	-	--	813	--	--
Non-Hispanic		3,656,884	.9697	--	788	788
Illinois		188,037	.0499	--	41	62
Hispanic		114,253	.0303	--	25	125 (126)

SUMMARY

School type	Sample size		
Alternative	50		
Private	138		
Black Catholic		(40)	
Catholic		(48)	
Other private		(50)	
Public	934		
Non-Hispanic public		(808)	
Illinois			((62))
Other			((746))
Hispanic public		(126)	
Total	1,122		

of Alternative Public schools (school type #3) in such a sample. Using formula #1, with $MOS_{t=3} = 47,297$, the expected sample size equalled:

$$E(n_{t=3}) = \frac{47,297}{4,159,262} \cdot 1,000 = 11.37 \doteq 11$$

However, the analysis specifications required a desired sample size $[D(n_{t=3})]$ of 50, thus necessitating an approximately 400 percent oversample.

Next with n = 950 schools remaining $(n-D(n_{t=3}) = 1,000 - 50)$ and a MOS of 4,111,965 remaining $(MOS - MOS_{t=3} = 4,159,262 - 47,297)$, we calculated the expected proportional allocations of Black/Hispanic Catholic (#4), Other Catholic (#5), and Other Private (#6) schools. With respective MOS_t's of $MOS_{t=4} = 17,565$, $MOS_{t=5} = 203,415$ and $MOS_{t=6} = 119,848$, we calculated expected sample sizes of (using formula #1):

$$E(n_{t=4}) = \frac{17,565}{4,111,965} \cdot 950 = 4.06 \doteq 4;$$

$$E(n_{t=5}) = \frac{203,415}{4,111,965} \cdot 950 = 47.0;$$

$$E(n_{t=6}) = \frac{119,848}{4,111,965} \cdot 950 = 27.69 \doteq 28,$$

for Black/Hispanic Catholic, Other Catholic, and Other Private schools respectively.

To achieve sample sizes of approximately 40 to 50 schools, we would require some degree of oversampling. For the Black/Hispanic Catholic schools, it was decided to reduce the desired sample size here from 50 to 40. It also was decided to maintain the expected sample size of 47 (but rounding up to 48) for the Other Catholic schools and to sample 50 Other Private schools. Thus the desired total private school allocation was the sum of the desired sample sizes $[\sum_{t=4}^{6} D(n_t)] = (40 + 48 + 50)$, equalling 138 sampled private schools.

Thus with n = 813 schools remaining $(n - \sum_{t=4} D(n_t) = 950-137)$[1] and a MOS 3,771,137 remaining $(MOS - \sum_{t=4}^{6} MOS_t = 4{,}111{,}965 - 340{,}828)$, we computed the expected proportional allocations for Non-Hispanic (#1) and Hispanic (#2) Public schools. For the Non-Hispanic Public schools, with $MOS_{t=1} = 3{,}656{,}884$, we expected:

$$E(n_{t=1}) = \frac{3{,}656{,}884}{3{,}771{,}137} \cdot 813 = 788.37 \doteq 788$$

schools in the sample.

At this point, we needed to account for the state oversampling required by Illinois' piggyback augmentation. From the 788 expected Non-Hispanic Public schools, using $MOS_{t=1} = 3{,}656{,}884$ and the Illinois' MOS = 188,037, we calculated that we would proportionately sample 41 schools from Illinois:

$$E(n_I) = \frac{188{,}037}{3{,}656{,}884} \cdot 788 = 40.52 \doteq 41.$$

Since Illinois requested a sample size of 62, we added the 20 schools to the Non-Hispanic Public school allocation (after rounding up the 41 expected schools to 42), achieving a total sample size of 808 Non-Hispanic Public schools, with 746 (808-62) outside of Illinois.

Finally, we calculated the expected proportional allocation of Hispanic

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[1] While we had set the desired sample size for other Catholic schools at 48, we used the calculated expected sample size of 47 schools in this calculation, making for 137 (instead of 138) sampled private schools $[\sum_{t=4}^{6} D(n_t)]$.

Public schools (with $MOS_{t=2}$ = 114,253) to be:

$$E(n_2) = \frac{114,253}{3,771,137} \cdot 813 = 24.63 \doteq 25$$

sampled schools. However for separate analyses we required an additional 100 schools. Thus, rounding to an even number of 26 expected schools, the desired sample size $[D(n_{t=2})]$ for Hispanic Public schools was 126. Overall, our total national sample size equalled 1,122 schools $\left([\sum_{t=1}^{6} D(n_t)] = (808 + 126 + 50 + 48 + 50)\right)$.

4.1.2 Superstratum Allocations

The number of schools to be selected within each superstratum within each school type also varied from school type to school type depending on oversampling requirements. In general, however, we used a modification of formula #1 to calculate the expected superstratum sample size for each of the 27 superstrata. The number of sample selections per superstrata was equal to:

$$E(n_h) = \frac{MOS_h}{MOS_t} \cdot D(n_t) \qquad (2)$$

where:

$E(n_h)$ = the expected number of schools selected in the h^{th} superstratum, h = 1 to 22, 33 to 37;

MOS_h = the total average number of students per grade in the h^{th} superstratum;

MOS_t = the total average number of students per grade in the t^{th} school type, t = 1 to 6;

$D(n_t)$ = desired number of sample schools in the t^{th} school type, as calculated in table 4.1 with formula #1.

In each case, we rounded $E(n_h)$ to the nearest even number in order to get the desired sample size $[D(n_h)]$ to use paired selection techniques for the variance computations, if we so opted (see table 4.2.).

Within each superstratum, we used systematic sampling procedures with selections made proportional to the size of the average enrollment per grade. To avoid later weighting, we first set the MOS of any school with less than 36 students per grade at 36, which was the projected student sample per grade within a selected school. We then cumulated this adjusted school MOS within each superstratum.

Systematic selection requires the use of a selection internal (I_h) and a random start (RS_h) for each of the h superstrata. The first selected school is that which contains the RS_t^{th} student in the superstratum. The second school contains the $RS_h + I_h^{th}$ student, the third contains the $RS_h + 2I_h^{th}$ student, and so on. The selection interval is calculated as:

$$I_h = \frac{AdjMOS_h,}{D(n_h)} \quad , \quad (3)$$

where:

I_h = the selection interval for the h^{th} superstratum;

$AdjMOS_h$ = the total average number of students per grade for the h^{th} superstratum when schools with less than 36 students per grade have their MOS adjusted to equal 36;

$D(n_h)$ = desired number of schools to be selected in the h^{th} superstratum as calculated with formula #2.

Any school with a MOS greater than its superstratum's calculated I_h was removed from the frame and selected with certainty (probability of selection = 1.00). We then calculated a new selection interval based on the remaining schools'

Table 4.2.--Non-alternative, non-Hispanic public school sample

(A) Super-stratum	(B) Total $MOS_{t=1}$	(C) Stratum MOS_h	(D) Proportion (c/b) W_h	(E) Total sample $N_{t=1}$	(F) Stratum sample size (d·e) $E(N_h)$	(G) Actual sample size $D(N_h)$
Total	3,656,884	- -	- -	808		- -
Illinois		188,037	.0514	- -	41.5	62 1/
Total (minus Illinois)	3,468,847	- -	- -	746	- -	- -
New England		198,041	.0571		42.6	42
New York		269,916	.0778		58.0	58
New Jersey		127,887	.0369		27.5	28
Pennsylvania		224,914	.0648		48.4	48
South Atlantic		560,914	.1617		120.6	120
East South Central		247,465	.0713		53.2	54
West South Central		157,350	.0454		33.8	34
Texas		176,318	.0508		37.9	38
Ohio		227,722	.0656		48.97	48
East North Central		344,605	.0993		74.1	74
West North Central		312,260	.0900		67.2	68
Mountain		163,610	.0472		35.2	36
Pacific		122,466	.0353		26.3	26
California		335,384	.0967		72.1	72

1/ Oversampled to achieve within-state representativeness.

cumulated adjMOS and the remaining superstratum sample allocation. The random start (RS_h) was a number (unique for each superstratum) between 1 and I_h, generated by a FORTRAN subroutine (see table 4.3.).

As noted before, we initially designed the school sample so as to be able to use paired selection variance computational techniques, if we so desired. The selection procedure did not use paired selection methods in an explicit fashion. However, we could assume paired selections by considering each successive pair of selected schools as coming from an implicit strata or zone of size $2I_h$. With this kind of stratification, a single school could straddle two implicit strata. To maintain our desired first-stage probability of selection, we did not adjust the boundaries of the implicit strata or the adjusted MOS of the borderline schools to exactly fit the zone. We compensated for this by selecting a single random start per superstratum, rather than one random start per zone. This, coupled with selecting oversized schools (where AdjMOS > I_h) with certainty, prevented the multiple selection of the same school when the school straddled the zone boundary. Finally, the even-numbered allocations of schools to superstrata prevented a pair of schools (used for possible variance computations) from straddling two superstratum.

4.1.2.1 Non-Alternative, Non-Hispanic Public School Selection

Recall that we had divided the Non-Alternative, Non-Hispanic Public schools into 15 geographical strata in which each in turn was substratified along feasible Black/White racial lines and urbanization levels, and ordered on a back-to-back (ascending, descending) basis along tenth and twelfth grade

Table 4.3.--Selection intervals and random starts for non-alternative, non-Hispanic public schools

(A) Super-stratum	(B) Adjusted stratum MOS (adj MOS_h)	(C) Stratum sample size [$D(n_h)$] 1/	(D) Selection interval (I_h = adj $MOS_h/D(n_h)$)	(E) Random start (RS_h)
New England (1)	198,720	42	4731.43	2853.61
New York (2)	270,827	58	4669.43	3165.06
New Jersey (3)	127,654	28	4559.07	3135.06
Pennsylvania (4)	225,134	48	4690.29	2242.80
South Atlantic (5)	558,339	120	4652.83	3697.92
East South Central (6)	248,216	54	4596.59	4554.37
West South Central (7)	162,619	34	4782.91	1043.20
Texas (8)	181,036	38	4764.11	4630.20
Ohio (9)	228,002	48	4750.04	4170.06
East North Central (10)	345,687	74	4671.47	2101.51
Illinois (11)	188,984	62	3048.13	2685.25
West North Central (12)	326,743	68	4805.04	301.64
Mountain (13)	169,439	36	4706.64	2679.23
Pacific (14)	129,109	26	4965.73	103.81
California (15)	337,991	72	4694.32	280.64

1/ See table 4.2.

enrollment size. Our goal was to select a proportionate stratified systematic sample of schools from among the 15 major strata with within-superstratum selections made proportional to the stratum's total of tenth and twelfth grade students per grade.

The only deviation from this sample selection design concerned the Illinois augmentation sample which required an oversampling of schools. Thus of the 808 sample schools allocated to the Non-Alternative, Non-Hispanic Public schools, 62 would be from Illinois with 746 from the remaining 14 superstrata.

To get a proportionate sample from the remaining 14 superstrata, we first subtracted the measure size for Illinois from that of all Non-Alternative, Non-Hispanic Public schools, leaving the measure of size for the remaining schools at 3,468,847 ($RevMOS_{t=1} = MOS_{t=1} - MOS_{h=11}$ = 3,656,884 - 188,037). Thus using formula #2, we calculated the expected number of sample schools from each of the 14 superstrata (see table 4.2., column F).

To use the paired selection model for variance computations, the allocated number of sample schools had to be a multiple of two. Therefore, we rounded the computed number of expected selections to the nearest even number to arrive at the desired superstratum sample size [$D(n_h)$] (see table 4.2., column G).

We then calculated a unique selection interval for each of the 15 superstratum (including Illinois), using formula #3. A random start for each superstratum was selected and the sample selections proceeded (see table 4.3.).

4.1.2.2 Non-Alternative, Non-Cuban Public School Selection

As noted above, we expected that we would sample 25 Hispanic Public schools from the 813 allocated public schools via proportionate allocation of sample units per school type. However, to meet sample size requirements for this supertratum, we estimated that we would need 106 Non-Cuban Hispanic Public schools and twenty additional schools for the analysis of Cuban Public schools.

The total average number of Hispanic Public school students per grade was 118,546. After subtracting the 15,264 Cuban Public school students, we had 103,282 students per grade ($MOS_{t=2}$). As before, we calculated the average number of students per tenth and twelfth grade in the whole of each of the five Non-Alternative, Non-Cuban Hispanic superstratum. The expected number of sample schools per superstratum $E(n_h)$ was again calculated using formula #2. We rounded $E(n_h)$ to the nearest even number to arrive at the desired stratum sample size $[D(n_h)]$ (see table 4.4.).

We then calculated a selection interval (formula #3) and picked a random start. In one superstratum (South Atlantic, #17), there was one school which contained more students per grade than the calculated interval (i.e., the school AdjMOS > $I_{h=17}$). As designed, this school was selected with certainty, i.e. with a probability of selection equal to 1.00. After selection, the total number of students per grade in this school was removed from that stratum's total:

$$AdjMOS_{h=17} - adjMOS\ school = REVadj\ MOS_h = 5{,}819 - 1{,}220 = 4{,}579.$$

We then calculated a new selection interval based on the smaller $REVadjMOS_{h=17}$ with $D(n_{h=17}) - 1$ possible selections: $I_{h=17} = REVadjMOS_{h=17} / [D(n_{h=17}) - 1] =$ 4,599/5 = 919.80 (see table 4.5.).

4.1.2.3 Cuban Public School Selection

Since we could only identify 20 public schools with 20 percent or more Cuban enrollees, we selected each school with certainty.

Table 4.4.--Non-alternative, Hispanic public school sample

(A) Stratum	(B) Total MOS	(C) Stratum MOS	(D) Proportion (c/b)	(E) Total sample	(F) Stratum sample (d·e)	(G) Actual sample size
Total	118,546	--	--	126	--	--
Cuban		15,264	.1288	--	16.2	20 1/
Total (minus Cuban)	103,282	--	--	106	--	--
Northeast and North Central		7,887	.0764	--	8.1	8
South Atlantic		5,819	.0563	--	6.0	6
West South Central		39,607	.3835	--	40.7	40
Mountain		18,908	.1831	--	19.4	20
Pacific		31,061	.3007	--	31.9	32

1/ The Cuban stratum was oversampled to achieve a sample size of 20. Its MOS was removed from the total MOS for the remaining sample size calculations.

Table 4.5.--Selection intervals and random starts for non-alternative, non-Cuban Hispanic public schools

(A) Super-stratum	(B) Adjusted stratum MOS (adj MOS_h) 1/	(C) Stratum sample size ($D(n_h)$)	(D) Selection interval (I_h = adj $MOS_h/D(N_h)$)	(E) Random start (RS)
Northeast and North Central (16)	8,005	8	1000.63	603.50
South Atlantic (17)	5,819	6	969.83	- -
Self-representing schools	(1,220)	(1)	- -	- -
Non-self-representing schools	4,599	5	919.80	623.46
West South Central (18)	40,647	40	1,016.18	698.78
Mountain (19)	19,249	20	962.45	460.22
Pacific (20)	31,296	32	978.00	777.28

1/ See table 4.4.

4.1.2.4 Alternative Public Schools

Our initial computations showed that we could expect eleven Alternative Public schools in a proportionate stratified sample. Design requirements, however, required at least 50 selections, so this stratum was oversampled to achieve that sample size goal.

Initally we calculated a selection interval as before. In this stratum, four schools' MOS were greater than that interval. These were selected with certainty. A new selection interval, based on the smaller stratum MOS and 50-4 = 46 selections, was calculated. After selecting a random start, the sample was selected (see table 4.6.).

4.1.2.5 Non-Catholic Private Schools

Given the fact that our expected allocation of Non-Catholic Private schools in a proportionate sample was 28, we had to oversample to achi ve a total of 50 such schools in the sample.

Since there were only 12 identified Elite schools, these twelve were selected with certainty. The remaining 38 selections were to come from the Non-Elite, Non-Catholic Private school stratum. We computed a selection interval and selected a random start as before (see table 4.7.).

4.1.2.6 Catholic Private School Selections

We noted earlier that we needed 88 Catholic schools in the sample while we expected only 51 (4 Black/Hispanic and 47 others). Thus we oversampled the Black/Hispanic schools to achieve that goal while maintaining the expected allocations for the remaining Catholic schools.

For the Non-Black, Non-Hispanic Catholic schools, we computed a selection interval and selected a random start to select 48 sample schools.

Table 4.6.--Selection intervals and random starts for alternative public schools

(A) Super-stratum	(B) Adjusted stratum MOS (adj MOS_h)	(C) Stratum sample size $[D(N_h)]$	(D) Selection interval $[I_h = \text{adj } MOS_h/D(N_h)]$	(E) Random start (RS_h)
Alternative public (22)	49,990	50	999.80	--
Self-representing schools	(4,269)	(4)	--	--
Non-self-representing schools	45,721	46	993.93	216.79

Table 4.7.--Selection intervals and random starts for private schools

(A) Super-stratum	(B) Adjusted stratum MOS (adj MOS_h)	(C) Stratum sample size [$D(N_h)$]	(D) Selection interval [I_h = adj $MOS_h/D(N_h)$]	(E) Random start (RS_h)
Non-elite, non-Catholic (33)	207,634	38	5,464.05	3,295.47
Elite, non-Catholic (34)	929	12	- -	- -
Self-representing schools	(929)	(12)	- -	- -
Non-self-representing schools	- 0 -	- 0 -	- -	- -
Non-Black, non-Hispanic Catholic (35)	210,312	48	4,381.50	3,012.95
Black/Hispanic, non-Cuban Catholic (36)	16,287	30	542.90	259.60
Cuban Catholic (37)	2,105	10	210.50	- -
Self-representing schools	(1,017)	(4)	- -	- -
Non-self-representing schools	1,088	6	181.33	144.12

The remaining Catholic schools had been stratified into Cuban and Non-Cuban schools. We decided to select 10 of the 14 Cuban schools. The initially computed selection interval was smaller than the MOS for four of these schools; these were selected with certainty. Again, we calculated a new selection interval based on the smaller adjusted MOS and the 10-4 = 6 selections. We then selected a random start.

This left 30 selections for the Black/Hispanic Non-Cuban Catholic schools, which were selected via an interval and random start (see table 4.7.).

4.1.2.7 Washington State Augmentation School Sample

The Washington State Augmentation sample was designed and selected after the national HS & B sample was drawn. We used the same systematic sampling techniques as in the national sample, with selections again made with probabilities proportional to the size of the average tenth and twelfth grade enrollment.

To achieve statistical validity, we selected a sample of fifty schools from the 371 schools in the Washington State universe. With a total adjusted measure of size ($adjMOS_{h=38}$) equal to 61,643, we computed a selection interval of 1232.86 (using formula #3). The selected random start was 743.56.

4.2 Supplemental Selections

In selecting a sample for a survey it is almost always the case that some of the sampling units will refuse to cooperate, that is, refuse to be interviewed. While in this case the 1,122 schools were not strictly the ultimate data collection units but rather clusters of respondents, their cooperation was essential if we were to interview the ultimate sampling units, i.e., the students in the selected schools.

In addition, although NORC made an intensive effort to insure that all of the schools in our high school universe were eligible for the survey, a few ineligible schools did remain in the sampling frame. This was the result of incorrect data and school closings, and could only be discovered after the school sample was fielded.

As required by the basic design specifications, we built procedures into the sample design to correct for the loss of schools caused by non-response (refusals) or ineligibility (out-of-scopes).

4.2.1 Substitutions for Refusal Schools

Schools that refused to participate in the HS&B survey gave several reasons for their non-cooperation. These reasons fell into the following categories:

1) the time factor - schools noted that they had already lost a great deal of time due to weather, teacher strikes, etc., and/or the administration of the tests and questionnaires would take too much time out of regular class work;

2) the teachers' present work load was already at a maximum, and the HS & B survey would be too much of a burden for the teachers to bear;

3) there was already too much research being conducted;

4) there was already too much government intervention in education;

5) this research would not be of any value to the present students; and

6) the school did not have the facilities available for administering the tests and questionnaires.

In most cases, the refusal schools gave a combination of these reasons as justification for their non-participation.

Table 5.9B --HS&B weighted student non-response rates by school type, superstratum, grade, and academic program

School type/superstratum	General	Academic	Vocational	Other	Total
Sophomores					
Non-alternative, non-Hispanic public schools	.1083(4459)	.0757(1675)	.0588(865)	.3383(441)	.0938(7440)
New England (1)	.1359(197)	.0407 (91)	.0420 (48)	.7448 (97)	.0873(433)
New York (2)	.1079(261)	.2266(415)	.0098 (8)	.2490 (37)	1371(721)
New Jersey (3)	.2842(174)	.1674(113)	.0415 (1[illegible])	.5564 (21)	.1879(325)
Pennsylvania (4)	.1133(106)	.0466 (56)	.0761 (62)	.3100 (28)	.0829(252)
South Atlantic (5)	.1109(760)	.0366(132)	.0780(276)	.1579 (3[illegible])	.0846(1205)
E. South Central (6)	.1139(499)	.0063 (11)	.0684 (84)	.2109 (24)	0831(618)
W. South Central (7)	.0548 (65)	.0121 (6)	.0240 (9)	.0 (0)	.0383 (80)
Texas (8)	.1470(287)	.0159 (14)	.0201 (22)	.0 (0)	.0808(323)
Ohio (9)	.0789(184)	.2092(337)	.1456 (71)	.2439 (14)	.1350(606)
E. North Central (10)	.1608(645)	.0352 (78)	.0644(109)	.3623 (56)	.1099(888)
Illinois (11)	.0683(193)	.0584 (54)	.0712 (65)	.6998 (77)	.0815(389)
W. North Central (12)	.0503(320)	.0511 (93)	.0386 (42)	.0 (0)	.0490(455)
Mountain (13)	.1114(277)	.0566 (70)	.0840 (44)	2761 (8)	.0933(399)
Pacific (14)	.0763(126)	0 (0)	.0 (0)	.0 (0)	.0524(126)
California (15)	.2129(364)	.1673(202)	.0352 (8)	.6237 (40)	.1919(614)
Non-alternative, Hispanic public schools	.1034(141)	.0180 (8)	.0660 (36)	.0148 (2)	.0755(187)
Northeast & N. Central (16)					
S. Atlantic (17)	.0500 (1)	.0 (0)	.0 (0)	.0 (0)	.0278 (1)
W.S. Central (18)	.0853 (47)	.0 (0)	.0 (0)	.0 (0)	.0461 (47)
Mountain (19)	.2257 (14)	.0737 (2)	.1212 (8)	.1698 (2)	.1607 (25)
Pacific (20)	.1077 (79)	.0380 (7)	.0967 (28)	.0 (0)	.0900(114)
Alternative schools (22)	.2752 (29)	.0833 (8)	.0889 (16)	.0 (0)	.1346 (53)
Non-public, non-Catholic schools	.0 (0)	.0367(273)	--	.0 (0)	.0347(273)
Non-elite (33)	.0 (0)	.0369(273)	--	.0 (0)	.0349(273)
Elite (34)	.0 (0)	.0 (0)	--	--	.0 (0)
Non-public, Catholic schools	.0245 (69)	.0096 (91)	.0 (0)	.0 (0)	.0124(160)
Non-Black, Non-Hispanic (35)	.0254 (68)	.0082 (74)	.0 (0)	.0 (0)	.0116(142)
Black/Hispanic, Non-Cuban (36)	.0 (0)	.0164 (4)	.0 (0)	.0 (0)	.0092 (4)
Cuban (37)	.0378 (1)	.1155 (12)	.0 (0)	.0 (0)	.0851 (13)
Total	.1028(4697)	.0519(2054)	.0575(917)	.2620(443)	.0788(8111)
Seniors					
Non-alternative, non-Hispanic public schools	.1347(4265)	.1127(2897)	.1280(2670)	.5142(482)	.1303(10314)
New England (1)	.2558(294)	.0809(179)	.0753(112)	.6428 (81)	.1338(666)
New York (2)	.0656(127)	.2658(493)	.3080(449)	.5153 (37)	.2079(1106)
New Jersey (3)	.2586(110)	.2845(227)	.0965 (46)	.6124 (33)	.2377(416)
Pennsylvania (4)	.2376(192)	.1082(142)	.0940 (82)	.6009 (33)	.1473(449)
South Atlantic (5)	.0819(450)	.0999(370)	.1009(475)	.2500 (52)	.0954(1347)
E. South Central (6)	.2223(736)	.0273 (53)	.1138(262)	.6911 (15)	.1408(1066)
W. South Central (7)	.0825 (69)	.0 (0)	.0387 (16)	.0 (0)	.0476 (85)
Texas (8)	.1412(220)	.0 (0)	.0107 (15)	1.000 (22)	.0623(257)
Ohio (9)	.0785(116)	.1581(330)	.0918 (93)	.6187 (30)	.1229(569)
E. North Central (10)	.1772(636)	.0793(183)	.2041(418)	-	.1557(1237)
Illinois (11)	.0559(107)	.0748(117)	.1237(141)	1.000 (138)	.1056(503)
W. North Central (12)	.1150(538)	.0849(252)	.0477 (78)	.0 (0)	.0929(868)
Mountain (13)	.1339(204)	.0730(121)	.3101(298)	.0 (0)	.1477(623)
Pacific (14)	.0327 (54)	.0 (0)	.0 (0)	--	.0219 (54)
California (15)	.3115(412)	.3232(432)	.4023(186)	1.000 (41)	.3386(1071)
Non-alternative, Hispanic public schools	.1678(229)	.1170 (39)	.0790 (51)	.1544 (9)	.1367(328)
Northeast & N. Central (16)					
S. Atlantic (17)	.1818 (2)	.0 (0)	.0 (0)	.0 (0)	.0571 (2)
W.S. Central (18)	.1779 (78)	.0760 (13)	.0135 (6)	.0996 (2)	.0946 (98)
Mountain (19)	.0764 (6)	.2947 (13)	.2896 (9)	1.000 (3)	.1995 (31)
Pacific (20)	.1708(144)	.1275 (13)	.1851 (36)	.1157 (3)	.1680(196)
Cuban (21)					
Alternative schools (22)	.3924 (39)	.2301 (24)	.0319 (4)	.0 (0)	.2078 (67)
Non-public, non-Catholic schools	.0 (0)	.0270(234)	.0 (0)	--	.0245(234)
Non-elite (33)	.0 (0)	.0269(231)	.0 (0)	--	.0243(231)
Elite (34)	.0 (0)	.0571 (3)	--	--	.0556 (3)
Non-public, Catholic schools	.0355 (78)	.0811(794)	.0 (0)	.0 (0)	.0675(872)
Non-Black, Non-Hispanic (35)	.0392 (78)	.0797(751)	.0 (0)	.0 (0)	.0674(829)
Black/Hispanic, Non-Cuban (36)	.0 (0)	.1239 (31)	.0 (0)	--	.0654 (30)
Cuban (37)	.0 (0)	.0979 (12)	.0 (0)	--	.0768 (12)
Total	.1278(4611)	.0894(3987)	.1202(2724)	.4676(491)	.1132(11813)

highest levels of non-response occur among students enrolled in the "Other" category. This is not strictly a type of educational program. Rather, the base of the ratio is actually equal to the number of refusal students for whom the school coded "Other," plus the number of cooperating students who did not answer the item in the actual HS&B survey. Thus, those students enrolled in General programs had the highest rate of non-response. Students in Academic and Vocational programs had nearly identical non-response rates, with the exception of the weighted seniors. In this case, the Vocational program students' non-response rate equalled that of the General program student. These patterns are fairly consistent across school type and superstrata, although there is a great deal of variation.

CHAPTER 6

SAMPLE WEIGHTS

The purpose of sample weighting was to account for disproportionate selection probabilities for students and for differential non-response.

The weighting design followed a three stage process. First, we calculated the selection probabilities of each of the cooperating schools. Then we multiplied the inverse of the probabilities by a factor that adjusted for ineligible and non-cooperating sample schools, to get the stage one (school level) weight (see section 6.1) Next we computed the selection probabilities for the students in each cooperating school in each grade level. Again the inverse of this was multiplied by a final student sample size adjustment factor, which took into account ineligible and non-responding sampled students as well as the new students selected from the updated student roster. The product equalled the stage two (student level) weight (see section 6.2). Finally, we took the product of the two weights to get an overall design weight for each student in the sample (see section 6.3).

We also computed overall design weights for the Washington State Augmentation sample. These weights, while similar to the national sample weights, used slightly different formulas in the calculations to account for this unusual situation and because certain items required for the adjustment factors were not available (see section 6.5).

6.1 School Levels Weights

The stage one probabilities of selection for high schools in the HS&B sample were calculated independently for each of the 27 superstrata. The probabilities were a function of the school's measure of size (average tenth and twelfth grade enrollment) and the selection interval used in that school's superstratum. Thus:

$$P_{1hi} = \frac{AdjMOS_{hi}}{I_h} \qquad (1)$$

$$= \frac{AdjMOS_{hi}}{(AdjMOS_h/n_h)}$$

where:

P_{1hi} = stage one probability of selection for the i^{th} school in the h^{th} superstratum;

$AdjMOS_{hi}$ = the average of the tenth and twelfth grade enrollment sizes for the i^{th} school in the h^{th} superstratum (where schools with an average less than 36 had their MOS set at 36);

I_h = selection interval for the h^{th} superstratum;

$AdjMOS_h$ = adjusted measure of size (the sum of the average of the tenth and twelfth grade enrollment sizes of all of the schools in the h^{th} superstratum, when schools with an average less than 36 had their MOS set at 36):

n_h = number of schools originally sampled in the h^{th} superstratum.

The only exceptions to this were those schools selected with certainty; i.e., schools whose MOS was greater than the selection interval (I_h) of their superstratum, or schools in the superstrata where all of the schools were selected (see chapter 4). The calculated P_{1hi} would be greater than 1.00 for the former and less than one for the latter type of schools. For these schools we therefore preset the selection probabilities at P_{1hi} = 1.00. When this occurred, measures of size were reproportioned within superstrata to produce the required number of selections.

As we noted in chapter 4, many of the sampled schools were either ineligible for sample selection or refused to participate in the survey. NORC's sample design replaced these non-responding schools and the non-responding replacement schools. However, survey completion deadlines prevented us from replacing every non-responding school. Thus, in all but a few superstrata (see chapter 5), there were fewer schools cooperating then were initially selected. To correct for varying eligibility rates as well as differential substitution rates, we calculated an adjustment factor for each superstratum which was equal to:

$$AF_{1h} = \frac{ELIGn_h}{COOPn_h} \qquad (2)$$

where:

AF_{1h} = the Stage one (school level) eligibility/non-replacement adjustment factor for the h^{th} superstratum;

$ELIGn_h$ = the number of eligible schools in the h^{th} superstratum among the initial selections;

$COOPn_h$ = the final number of cooperating schools in the h^{th} superstratum.

For the five superstratum in which there were both non-self-representing schools (P_{1hi} < 1.00) and self-representing schools selected with certainty (P_{1hi} = 1.00), we calculated separate adjustment factors for each subset of schools within each superstratum.

We calculated the school level stage one sample weight as:

$$W_{1hi} = \frac{1}{P_{1hi}} \cdot AF_{1h} \qquad (3)$$

where:

W_{1hi} = Stage one (school level) weight for the i^{th} school in the h^{th} superstratum;

P_{1hi} = Stage one (school level) selection probability for the i^{th} school in the h^{th} superstratum (see formula #1);

AF_{1h} = Stage one (school level) eligibility/non-response adjustment factor for the h^{th} superstratum (see formula #2). (There will be two AF_{1h} for superstratum with both self-representing and non-self-representing schools).

6.2 Student Level Weights

Within each grade of each cooperating school, the probability of selection for that grade's sampled students was equal to:

$$P_{2hij} = \frac{M_{1hij} + M_{2hij}}{N_{1hij} + N_{2hij}} \qquad (4)$$

where:

P_{2hij} = Stage two (student level) selection probability for the j^{th} grade in the i^{th} school of the h^{th} superstratum;

M_{1hij} = the number of original selected students in the j^{th} grade of the i^{th} school in the h^{th} superstratum;

M_{2hij} = the number of students selected from the update student roster from the j^{th} grade in the i^{th} school in the h^{th} superstratum;

N_{1hij} = the total number of students on the original student roster for the j^{th} grade in the i^{th} school in the h^{th} superstratum;

N_{2hij} = the total number of students in the update student roster for the j^{th} grade in the i^{th} school for the h^{th} superstratum.

A student selection probability was calculated independently for each grade within each school.

Then, to account for students deemed ineligible and not replaced by design and for non-cooperating eligible students, we computed a student non-response adjustment factor, equal to:

$$AF_{2hij} = \frac{M_{1hij} + M_{2hij} - INELIGm_{1hij}}{COOPm_{hij}} \qquad (5)$$

where:

AF_{2hij} = Stage two (student level) non-response adjustment factor for the j^{th} grade in the i^{th} school in the h^{th} superstratum;

$INELIGm_{1hij}$ = the number of ineligible and unreplaced students from the original student roster of the j^{th} grade in the i^{th} school in the h^{th} superstratum;

$COOPm_{hij}$ = the number of final cooperating students in the j^{th} grade in the i^{th} school in the h^{th} superstratum.

The final stage 2 (student level) weight was calculated as:

$$W_{2hij} = \frac{1}{P_{2hij}} \cdot AF_{2hij} \qquad (6)$$

where:

W_{2hij} = Stage two (student level) weight for the j^{th} grade in the i^{th} school in the h^{th} superstratum;

P_{2hij} = Stage two (student level) selection probability for the j^{th} grade in the i^{th} school in the h^{th} superstratum (see formula #4);

AF_{2hij} = Stage two (student level) non-response adjustment factor for the j^{th} grade in the i^{th} school in the h^{th} superstratum.

Again, we independently calculated a weight for each grade within each school within each superstratum.

6.3 Overall Design Weights

The overall design weight for all students in the HS&B sample was the product of the two stage-specific weights. That is:

$$DW_{hijk} = W_{1hi} \cdot W_{2hij} \quad (7)$$

where:

DW_{hijk} = overall design weight for the k^{th} student in the j^{th} grade of the i^{th} school in the h^{th} superstratum;

W_{1hi} = stage one (school) level weight for the i^{th} school in the h^{th} superstratum (see formula #3);

W_{2hij} = stage two (student level) weight for the j^{th} grade in the i^{th} school of the h^{th} superstratum (see formula #6).

Thus, the data for any student in a specific grade, school, and superstratum would be adjusted by that grade/school/superstratum's unique overall deisgn weight.

6.4 Post-Stratification Weighting

NORC alsc studied the usefulness of employing post-Stratification weighting to bring the HS & B sample estimates closer to the actual population means. To ·nd, we compared public and private school enrollment data from the NCES (the unpublished Fall 1979 survey for public schools and the published .978 survey for private schools) to the public and private school population projections from the Spring 1980 HS&B final weighted sample, respectively.

In both cases, we first adjust the NCES data to account for school drop-out rates between the fall and spring of a school year. For sophomores, NCES's Digest of Education Statistics showed an 8.65 per cent difference between Fall enrollment in grade ten and fall enrollment in grade eleven. NORC estimated that between one-third and one-half of this yearly dropout rate occurred between the fall and the spring. Thus we derived two adjustment factors of 97.12 percent (100 - 1/3 · 8.65) and 95.67 percent (100 - 1/2 · 8.65) for sophomores based on these estimates.

For seniors, NCES showed a difference of 5.70 percent between fall enrollment and spring/summer graduates. Since the HS&B sample covered both graduates and non-graduates we estimated that either 1.76 percent or 1.51 percent of the NCES non-graduates would have left school by the spring, based on answers to relevant questions in the current and 1972 HS&B surveys, respectively. Thus spring enrollment would be either 96.06 percent [100-(5.70 - 1.76)] or 95.81 percent [100-(4.70 - 1.51)] of the fall enrollment. Since the two estimates were sufficiently close, we used the average (95.94 percent) to estimate senior dropout rates.

In the case of the private schools only, we were comparing two different cohorts due to the year difference in the NCES private school and HS&B surveys. NORC therefore compared the 1979 NCES data to the 1978 NCES data for sophomores and seniors separately, calculating cohort ratios of .977 and .982, respectively.

Tables 6.1 and 6.2 show the adjusted NCES enrollment figures relative to the HS&B population projections, by grade and by regional/divisional subclasses. While some difference do exist, NORC believed that these were due primarily to the slightly different school universe frames used in the NCES and HS&B surveys. We therefore concluded that the HS & B projections were as close to correct as were the NCES data and that the use of post-stratification weights would not perceptibly increase the precision of the HS&B sample estimates.

Table 6.1.--Public school enrollment data comparisons between the fall 1979 NCES survey and the HS&B population projections, by region and grade 1/

	Sophomores						Seniors			
	(1) NCES Fall enrollment 1979	(2) Dropout rates x.9712 2/	(3) Dropout rates x.9567 2/	(4) HS&B pro- jection	(5) Comparison ratios (4/2)	(6) Comparison ratios (4/3)	(7) NCES Fall enrollment 1979	(8) Dropout rates x.9581 2/	(9) HS&B pro- jection	(10) Comparison ratio (9/8)
New England	198	192	189	197	1.03	1.04	171	164	167	1.02
Mid Atlantic	602	585	576	544	0.93	0.94	500	490	427	0.87
E.N. Central	703	683	673	684	1.00	1.02	611	585	548	0.94
W.N. Central	278	270	266	267	0.99	1.00	266	255	248	0.97
S. Atlantic	584	567	559	577	1.02	1.03	451	432	426	0.99
E.S. Central	230	223	220	199	0.89	0.90	181	173	160	0.92
W.S. Central	382	371	365	352	0.95	0.96	319	306	270	0.88
Mountain	187	182	179	180	0.99	1.01	167	160	152	0.95
Pacific	475	461	454	429	0.93	0.94	414	397	355	0.89
Total	3,638	3,534	3,481	3,430	0.97	0.99	3,091	2,961	2,753	0.93

1/ Numbers are in thousands.

2/ See section 6.4 for the calculations.

Table 6.2.--Private school enrollment data comparisons between the fall 1978 NCES survey and the HS&B population projections, by region and grade 1/

	Sophomores						Seniors			
	(1) NCES Fall enrollment 1978	(2) Cohort and dropout rates x.977 x.9712 2/	(3) Cohort and dropout rates x.977 x.9567 2/	(4) HS&B pro-jection	(5) Comparison ratios (4/2)	(6) Comparison ratios (4/3)	(7) NCES Fall enrollment 1978	(8) Cohort and dropout rates x.982 x.9581 2/	(9) HS&B pro-jection	(10) Comparison ratios (9/8)
North East	117	111	109	116	1.05	1.06	110	103	106	1.03
North Central	96	91	90	94	1.03	1.04	89	84	81	.96
South	85	81	79	89	1.10	1 13	74	70	73	1.04
West	48	46	45	53	1.15	1.18	39	37	46	1.24
Total	346	328	323	351	1.07	1.09	31[illegible]	294	305	1.04

1/ Numbers in thousands.

2/ See section 6.4 for calculations.

6.5 Washington State Sample Weights

Due to the unique structure of Washington State's supplementary augmentation sample, the weighting procedures described above underwent some modifications. First, there were actually two samples from Washington State. One of them consisted of the 15 schools from the state which were selected and which cooperated in the national sample. Five of these were schools from Washington which we selected as replacements for ineligible or refusal schools in the national sample. The second sample consisted of the 50 schools from the state selected in the augmentation sample.

The final sample for Washington State consisted of the total of these two samples. The selection probabilities for the first 15 schools selected in the national sample equalled 1.00; i.e., these schools automatically became part of Washington's sample and were therefore selected with certainty. Their stage one (school level) weights (W_{1i}) equalled the inverse of the probabilities of selection, i.e., the weights also equalled 1.00.

NORC selected the actual augmentation sample after the national sample was selected but before the field work had begun. Therefore, when we constructed the sample frame of schools for the Washington State augmentation sample, we removed those schools which were selected in the national sample. We did not, however, know about the five schools which we would select as replacement or substitutes for non-responding national sample schools nor about the two nationally sampled schools from Washington which would refuse to participate in the survey. Thus, for the calculation of the stage one weights we used a measure of size that was modified to account for these schools. This revised adjusted measure of size (RevAdjMOS) was equal to the superstratum's original adjusted MOS (average tenth and twelfth grade enrollment sizes summed over all schools, where we set the MOS of a school with an actual MOS of less than 36 at 36) minus the adjusted MOS of the five replacement/ substitute schools plus the adjusted MOS of the two refusal schools.

The stage one weight for each cooperating school in the Washington State sample was equal to:

$$W_{1i} = \frac{RevAdjMOS/n}{AdjMOS_i} \qquad (8)$$

where:

W_{1i} = the stage one (school level) weight for the i^{th} school;

RevAdjMOS = the revised adjusted measure of size for the superstratum (see above);

n = the original number of selections in the sample = 50;

$AdjMOS_i$ = the adjusted measure of size (average 10th and 12th grade enrollment) for the i^{th} school.

The stage two (student level) weight for all schools (W_{2ij}) was equal to;

$$W_{2ij} = \frac{M_{ij}}{COOPm_{ij}} \qquad (9)$$

where:

M_{ij} = the total roster size for the j^{th} grade in the i^{th} school;

$COOPm_{ij}$ = the number of cooperating students in the j^{th} grade in the i^{th} school.

This formula applied to both the certainty schools and the Washington State schools. We calculated a separate weight for each grade of each school in the sample. We did not, however, calculate a stage one or stage two non-response adjustment factor because we could not obtain the stage two student level non-response rates.

Finally, the overall design weight for a specific grade within a specific school (DW_{ij}) was equal to the product of the two stage specific rates, or:

$$DW_{ij} = W_{1i} \cdot W_{2ij} \quad (10)$$

Therefore, when analyzing data from Washington State's in-state representative sample, one would adjust the data from each grade within each school by its specific design weight.

CHAPTER 7

SAMPLING ERRORS

7.1 Exact Sampling Errors

To measure the precision of the HS&B sample estimates, NORC calculated the design-specific standard errors for several demographic subclasses of 35 and 38 statistics for sophomores and seniors respectively. These standard errors are shown in the Appendix.

As noted in the previous sections of this report, NORC had designed the initial school sample to allow for the use of paired selection variance computations. However, the final HS&B school sample contained a large number of replacement schools which were selected into the initial sample but which proved to be out-of-scope. While we drew the former from the superstratum of the schools they were replacing, there was no relationship between the replacement and replaced schools' positions in the superstratum. It was therefore more appropriate to use the general formula for computing the variances of a ratio estimator r (such as a sample mean) for a stratified unequal cluster sample.

To perform the necessary calculation, we revised the original superstrata to create computing strata. First, each self-representing school was removed from its original superstratum to form its own individual computing stratum. These schools, which had a selection probability equal to 1.0, had an average enrollment size greater than their respective superstratum's selection interval (I_h) or were in superstrata in which all of the schools were selected (see section 4). Since all of the schools in the Cuban Public school superstratum (#21) and the Elite, Non-Catholic Private school superstratum (#34) were selected with certainty, we were left with 25 major computing strata (the remaining original superstrata) plus an additional computing stratum for every self-representing school in the final sample for use in computing the variances. The variance formula below thus worked on two levels. For the 25 major computing strata the ultimate clusters were the selected schools, with the assumption of independent random selection of schools within each superstratum. For the computing strata comprised of a single self-representing school, the ultimate clusters were the selected students, with the assumption of independent random selection of students within each school.

The formula for computing the variance of a stratified ratio mean r for a particular variable Y is:

$$\mathrm{var}(r) = \frac{1}{x^2}\left[\sum_h^H \frac{1}{a_h-1}\left(a_h \sum_\alpha^{a_h} y^2_{h\alpha} - y_h^2\right) + r^2 \sum_h^H \frac{1}{a_h-1}\left(a_h \sum_\alpha^{a_h} x^2_{h\alpha} - x^2_h\right) - 2r \sum_h^H \frac{1}{a_h-1}\left(a_h \sum_\alpha^{a_h} y_{h\alpha}x_{h\alpha} - y_h x_h\right)\right] \quad (1)$$

where:

var(r) = the variance of a stratified ratio mean r;

r = the stratified ratio mean, equal to:

$$\frac{\sum_h^H \sum_\alpha^{a_h} y_{h\alpha}}{\sum_h^H \sum_\alpha^{a_h} x_{h\alpha}} = \frac{\sum_h^H y_h}{\sum_h^H x_h} = \frac{y}{x};$$

a_h = the number of ultimate clusters in the h^{th} computing stratum;

$y_{h\alpha}$ = the weighted value of the variable y for the α^{th} ultimate cluster in the h^{th} computing stratum. If the α^{th} ultimate cluster was a student, y_h equals:

$$(DW_{hijk})\ (Y_{hijk})$$

where DW_{hijk} is the design weight for the k^{th} student in the j^{th} grade in the i^{th} school in the h^{th} superstratum (calculated in section 6) and y_{hijk} is the value of y for the k^{th} superstratum. If the α^{th} ultimate cluster was a school, $Y_{h\alpha}$ equals:

$$\sum_{k}^{K} (DW_{hijk})\ (y_{hijk})$$

which is the sum of the students' weighted y values from a school;

$$y_h = \sum_{\alpha}^{a_h} y_{h\alpha} ;$$

$x_{h\alpha}$ = the sum of the weights within the α^{th} ultimate cluster in the h^{th} computing stratum. If the α^{th} ultimate cluster was a student, $x_{h\alpha}$ equals:

$$(DW_{hijk})$$

If the α^{th} ultimate cluster was a school, $x_{h\alpha}$ equals:

$$\sum_{k}^{K} (DW_{hijk})\ (x_{hijk})$$

which is the sum of design weights for the k students in the j^{th} grade in the i^{th} school.

$$x_h = \sum_{\alpha}^{a_h} x_{h\alpha} ;$$

$$x = \sum_{h}^{H} x_h .$$

To get the standard error of r[se(r)] we took the square root of the variance, or:

$$se(r) = \sqrt{var(r)} \qquad (2)$$

It should be noted that this formula does not take into account the internal stratification of each superstratum or the use of systematic sampling techniques within each superstratum.

7.1.1 Alternative Methods

The formula (equation 1 on page 164) used to calculate the variance of an estimate is an example of a Taylor Series estimator. Taylor Series estimators are based on the relationship between the variability of an estimate and the variability of the observations from which it is derived.

There are other methods for estimating sampling errors that compare estimates from two (or more) independent samples selected according to the same sample design. We do not usually have two samples. But, under certain circumstances, we can simulate estimates from two samples by dividing the actual sample into half-samples. Both Jackknife Repeated Replication (JRR) and Balanced Repeated Replication (BRR) are methods that use the general strategy of breaking the sample into half-samples.

NORC considered JRR and BRR but chose the Taylor Series estimator largely for practical purposes. Both JRR and BRR require elaborate computations as well as extensive costly programming. In our view, the practical advantages outweighed the statistical considerations. JRR and BRR are in theory applicable to "paired selection" designs. As we noted earlier (page 163), NORC had planned such a design for the High School and Beyond sample, but the use of replacement schools had altered our original plan. JRR and BRR estimators are believed to be less susceptible to distortion by a few "outliers" (i.e., highly deviant observations) and are thought to reflect variance due to non-response more accurately than Taylor Series estimators.

Frankel[1] has used Monte Carlo methods to investigate the relative accuracy of Taylor Series, JRR, and BRR estimates of sampling variances. His investigation indicates that no one of the techniques is uniformly better than the others. The results of the comparison depend on both the type of estimator whose variance is being calculated and on the index used to compare the techniques. Frankel examined means, differences between means, simple, partial, and multiple correlations; he examined the relative bias of the variance estimates and the relative mean square error. He also examined an index of his own.[2] On this last index, BRR variance estimators were consistently more accurate (the others tended to be somewhat more liberal), but even with this index the differences between the techniques were quite small (see Tables 7.1 through 7.9 in Frankel's report).

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[1] Frankel, M., Inference from survey samples: An empirical investigation. Ann Arbor, Michigan: Institute for Social Research, 1971.

[2] This index was the degree to which the distribution of the statistic defined below conformed to Student's t distribution:

$$\frac{x - E(x)}{SE(x)}$$

in which x is a sample estimate, E(x) is its expected value, and SE(x) is its standard error as estimated by Taylor Series, JRR, or BRR methods.

7.1.2 Implications of the Use of Taylor Series Estimators

For means and proportions, Taylor Series estimates are widely used because they are relatively easy and inexpensive to compute and because they do not appear to differ appreciably from BRR and JRR estimates. In the High School and Beyond study, the Taylor Series estimates may not fully capture the variance attributable to non-response weighting; as a result, the variance estimates presented here may be underestimates. On the other hand, the Taylor Series estimates we present ignore the internal stratification within superstrata and the use of systematic selection--which could lead to overestimation. We suspect that the estimates presented here would differ only slightly from BRR or JRR estimates and that the differences would show no consistent pattern.

For regression coefficients and other complex statistics, Taylor Series estimates lose their advantage in computational ease. BRR estimators are probably the most useful for estimating the variance of complex statistics. (For this reason, we calculated BRR variance estimates for a few key statistics. See Appendix A of the report prepared by Coleman et al.) Where priority is placed on such complex statistics, we recommend that BRR variance estimates be computed.

We note that some of the variance estimates are based on relatively few schools: some of the estimates have as few as 20 degrees of freedom. These variance estimates are, of course, quite variable themselves—and this instability would remain a problem even if BRR or JRR estimates had been used instead.

7.2 Approximate Sampling Errors

One may approximate the standard errors for statistics other than those shown in the Appendix by using the appropriate DEFT factors shown in tables 7.1 and 7.2 and the formulas described here. The DEFT factors are the square roots of the subclass-specific (sex, race, or region) design effects (DEFF), or:

$$\text{DEFT} = \sqrt{\text{DEFF}} = \sqrt{\frac{\text{Actual design-specific variance}}{\text{SRS variance}}}$$

The appropriate DEFT factor to use in the following formulas depends upon the type of statistic (percentage or mean), the cohort (sophomores or seniors), and the particular subclass (sex, race, or region) for which one is approximating the standard error.

7.2.1 Percentages

To approximate the standard error of a percentage, the following formula is applicable:

$$se(P) \doteq \text{DEFT} \sqrt{P(100-P)/n} \qquad (1)$$

where:

se(P) = the approximate standard error for the percentage P;

DEFT = the appropriate DEFT factor for the particular demographic subclass and grade cohort from which the percentage was developed, as shown in table 7.1;

P = the sample percentage (ranging from 0 to 100);

Table 7.1.--DEFT factors for percentages: sophomores and seniors

Subclass	Sophomores (20)		Seniors (22)	
	Mean	Standard deviation	Mean	Standard deviation
All students	1.6593	.3709	1.6140	.3561
Males	1.4637	.2706	1.4378	.2457
Females	1.4385	.2242	1.4384	.2319
White	1.4385	.3138	1.4514	.2975
Black	1.4782	.1921	1.4120	.1764
Hispanic	1.5095	.1715	1.5416	.1699
Public	1.5991	.3388	1.5350	.3125
Catholic	1.8811	.4339	1.9487	.5352
Private	2.3660	.9686	2.3108	1.0562
Low SES	1.3906	.1476	1.3860	.1601
Middle SES	1.3610	.1818	1.3196	.1788
High SES	1.2946	.1895	1.3351	.1820
Northeast	1.7465	.4743	1.6520	.4304
South	1.6559	.3450	1.5936	.3324
North Central	1.5525	.3370	1.5097	.3204
West	1.6046	.3813	1.6328	.3600
General	1.4062	.2095	1.3428	.1868
Academic	1.4046	.2457	1.4321	.2591
Vocational	1.3644	.1439	1.3116	.1401

n = the actual unweighted sample size for the demographic subclass and grade cohort from which the percentage was developed.

7.2.2 Means

One can compute approximate standard errors for means as follows:

$$se(\bar{x}) \doteq DEFT\sqrt{\frac{s^2}{n}} \qquad (2)$$

where:

$se(\bar{x})$ = the approximate standard error of the mean $\bar{x}$;

DEFT = the appropriate DEFT factor for the particular demographic subclass and grade cohort from which the mean was developed, as shown in table 7.2;

s^2 = the weighted element variance computed for the demographic subclass and grade conort from which the mean was developed;

n = the unweighted sample size for the particular mean.

7.2.3 Differences

The general formula for calculating the variance of a difference between x and y is:

$$Var(y-x) = Var(y) + Var(x) - 2Cov(x,y) \qquad (3)$$

where:

Var(y) = the variance of one estimate;

Var(x) = the variance of the second estimate;

Cov(x,y) = the covariance of the two estimates.

For estimates involving different schools, such as comparisons between two types of school, the covariance can be assumed to be zero. In that case,

Table 7.2.—DEFT factors for means: sophomores and seniors

Subclass	Sophomores (15)		Seniors (16)	
	Mean	Standard deviation	Mean	Standard deviation
All students	1.6398	.4403	1.5757	.3963
Males	1.3310	.2677	1.3045	.2552
Females	1.3881	.2667	1.3889	.2836
White	1.3349	.2761	1.3443	.3206
Black	1.3878	.3194	1.3707	.3021
Hispanic	1.2702	.2115	1.3158	.2134
Public	1.5870	.4367	1.5157	.3907
Catholic	1.8151	.3985	1.6420	.4744
Private	2.2932	.8230	2.1999	.5741
Low SES	1.2180	.2254	1.2996	.3017
Middle SES	1.1887	.1960	1.2092	.2589
High SES	1.2011	.2375	1.2168	.2585
Northeast	1.7837	.5839	1.5265	.3645
South	1.6416	.4449	1.6894	.5207
[illegible]rth Central	1.4395	.3523	1.4195	.3755
[illegible]st	1.7001	.4742	1.6013	.3445
General	1.2655	.2691	1.2531	.2961
Academic	1.3562	.2706	1.3387	.2655
Vocational	1.2191	.2336	1.1801	.2183

the variance of the difference between two estimates is just the sum of the variances of the two estimates.

Equation 3 applies both to differences between means and differences between percentages. Thus, one can approximate the standard error of a difference by calculating approximate standard errors for the two estimates being compared (using equation 1 on page 167 for percentages and equation 2 for means), squaring these standard errors, and then applying equation 3. The approximate standard error of a difference is the square root of the variance (as given in equation 3). Equation 3 can only be applied where we have an estimate of the covariance or where we can assume the covariance to be zero. The covariance will be zero when the difference being estimated involves different schools--such as comparisons between schools of different types or in different regions of the country.

7.3 Some Highlights

We note that the design effects are very similar for the sophomores and seniors. As a practical matter, it will not make much difference which set of DEFT factors are used in calculating approximate standard errors.

We also note that the design effects for this survey appear to be somewhat larger than the corresponding design effects in the NCES 1972 National Longitudinal Survey. There are several possible explanations for this difference. First of all, the design effects for this study were based on more variables than those reported in the 1972 NLS. New variables were added in calculating the design effects and some of the original variables were dropped (because they had been dropped from the questionnaire or had been altered). The difference in the design effects may simply reflect the difference in the variables used to calculate them. Second, the design effects reported for the 1972 NLS are actually estimated from results from the

Third Followup Survey. By then, most of the respondents from the original survey had graduated from high school. The populations of the two surveys thus differ and this may account for the difference in the design effects. Whatever the explanation for this difference, the design effects for both surveys are within the range commonly observed in surveys of this sort.

We note, finally, that the private schools and, to a lesser extent, the Catholic schools show higher design effects than the other subgroups in tables 7.1 and 7.2. This does not necessarily imply that estimates for these subgroups are more variable, only that they are less efficient than for other subgroups. This relatively greater inefficiency probably reflects the greater variability of the weights attached to the private schools (many but not all of which were selected with certainty) and the greater homogeneity of students at private and Catholic schools.

APPENDIX

ESTIMATES, STANDARD ERRORS, AND DESIGN EFFECTS
FOR SELECTED SURVEY ITEMS

VARIABLE IDENTIFIERS FROM HS&B CODEBOOK

	Label	HS&B Item Number
	Sophomores	
1	PROP WORKED LT 15 HRS./WK	149
2	PROP EARNED LT $1000	376
3	PROP 'SUCCESS IN WORK VERY IMPORTANT'	294
4	AVE ATT TO SELF	306
5	AVE ATT TO PLANNING	311
6	AVE IMPORTANCE OF PROX TO PARENT	301
7	AVE BOTH MATH NOT ATTEMPTED	610
8	PROP MT 3 HRS ON HOMEWORK	128
9	PROP LT B AVERAGE	085
10	PROP MT 3.50 MIN WAGE	160
11	PROP FATHER NOT US NATIVE	210
12	AVE QUALITY OF INSTRUCTION	285
13	AVE 'SOMEONE PREVENTS SUCCESS'	310
14	PROP NEVER CUT CLASS	335
15	PROP HARD OF HEARING	410
16	PROP W/NO PLACE TO STUDY	435
17	PROP NOT PLANNING ON COLLEGE	460
18	PROP ABSENT MT 2 DAYS	132
19	PROP DID NOT WORK LAST WK	146
20	PROP NOT LOOKING FOR WORK	147
21	PROP WHOSE MOM FINISHED COLLEGE	212
22	PROP-GOOD LUCK NOT IMPORTANT	307
23	PROP FEEL PROUD	317
24	PROP EXPECT TO FINISH COLLEGE	353
25	PROP W/HANDICAP	408, 410-414
26	PROP W/VOCATIONAL PROGRAM	017
27	AVE BOTH READING TEST - RIGHT	603
28	AVE BOTH VOCAB TEST - RIGHT	598
29	AVE BOTH MATH TEST - RIGHT	608
30	AVE CIVICS TEST - RIGHT	548
31	AVE READING TEST - RIGHT	523
32	AVE SCIENCE TEST - RIGHT	538
33	AVE VOCAB TEST - RIGHT	518
34	AVE WRITING TEST - RIGHT	543
35	AVE EARNING/HR	150

VARIABLE IDENTIFIERS FROM HS&B CODEBOOK (Continued)

Label		HS&B item number
	Seniors	
1	PROP WORKED LT 15 HRS./WK	149
2	PROP EARNED LT $1000	376
3	PROP W/LT $1000 EXPENSES	377
4	PROP ACCEPTED IN ARMED FORCES	180
5	PROP 'SUCCESS IN WORK VERY IMPORTANT'	294
6	AVE ATT TO SELF	306
7	AVE ATT TO PLANNING	311
8	AVE IMPORTANCE OF PROX TO PARENT	301
9	AVE SEN VOCAB NOT ATTEMPTED	560
10	AVE BOTH MATH NOT ATTEMPTED	610
11	PROP MT 3 HRS ON HOMEWORK	128
12	PROP LT B AVERAGE	085
13	PROP MT 3.50 MIN WAGE	160
14	AVE ATT TO SCHOOL COUNSELING	185
15	PROP FATHER NOT US NATIVE	210
16	AVE QUALITY OF INSTRUCTION	285
17	AVE 'SOMEONE PREVENTS SUCCESS'	310
18	PROP NEVER CUT CLASSES	335
19	PROP HARD OF HEARING	410
20	PROP W/NO PLACE TO STUDY	435
21	PROP NOT PLANNING ON COLLEGE	460
22	PROP ABSENT MT 2 DAYS	132
23	PROP DID NOT WORK LAST WK	146
24	PROP NOT LOOKING FOR WORK	147
25	PROP WHOSE MOM FINISHED COLLEGE	212
26	PROP-GOOD LUCK NOT IMPORTANT	307
27	PROP FEEL PROUD	317
28	PROP EXPECT TO FINISH COLLEGE	353
29	PROP W/HANDICAP	408, 410-414
30	PROP W/VOCATIONAL PROGRAM	017
31	AVE BOTH READING TEST - RIGHT	603
32	AVE BOTH VOCAB TEST - RIGHT	598
33	AVE BOTH MATH TEST - RIGHT	608
34	AVE MOSAIC (1) TEST - RIGHT	583
35	AVE PICTURE TEST - RIGHT	578
36	AVE READING TEST - RIGHT	563
37	AVE VISUAL TEST - RIGHT	593
38	AVE EARNING/HR	150

SOPHOMORE ESTIMATES

SUMMARY TABLE FOR SUBCLASS NO. 1 NAME=ALL

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0 6695	0.00387	0.00579	2 0062	1 4164
2	PROP EARNED LT $1000	0.5554	0.00460	0.00828	2.5510	1.5972
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1318	0 00238	0.01806	1.5389	1.2405
4	AVE ATT TO SELF	1.8032	0 00544	0.00302	1 2324	1 1101
5	AVE ATT TO PLANNING	2.9684	0.00695	0.00234	0.9278	0 9632
6	AVE IMPORTANCE OF PROX TO PARENT	1.9600	0.00530	0.00270	1.3850	1.1769
7	AVE BOTH MATH NOT ATTEMPTED	0.2878	0.01079	0.03749	3.2871	1 8130
8	PROP MT 3 HRS ON HOMEWORK	0.5092	0.00535	0.01050	3.4323	1 8527
9	PROP LT B AVERAGE	0.5496	0.00490	0.00891	2 9006	1 7031
10	PROP MT 3.50 MIN WAGE	0.6131	0.00449	0.00732	2.5162	1 5863
11	PROP FATHER NOT US NATIVE	0.1682	0.00407	0.02417	3 6352	1.9066
12	AVE QUALITY OF INSTRUCTION	2.7139	0 01133	0.00417	2.6124	1 6163
13	AVE 'SOMEONE PREVENTS SUCCESS'	2.7480	0.00616	0.00224	0.7849	0.8859
14	PROP NEVER CUT CLASSES	0.6986	0.00539	0.00771	3.8585	1 9643
15	PROP HARD OF HEARING	0.0047	0.00046	0.09834	1 5085	1.2282
16	PROP W/ NO PLACE TO STUDY	0.5227	0.00427	0.00816	2.2028	1 4842
17	PROP NOT PLANNING ON COLLEGE	0.3565	0.00531	0.01488	3.9461	1 9865
18	PROP ABSENT MT 2 DAYS	0.3496	0.00421	0.01205	2 3530	1.5340
19	PROP DID NOT WORK LAST WK	0.5788	0.00445	0.00768	2.4295	1.5587
20	PROP NOT LOOKING FOR WORK	0.7501	0.00346	0.00462	1.8840	1.3726
21	PROP WHOSE MOM FINISHED COLLEGE	0.1435	0.00450	0.03134	6.0021	2.4499
22	PROP- GOOD LUCK NOT IMPORTANT	0.8458	0.00323	0.00382	1.6007	1.2652
23	PROP FEEL PROUD	0.8444	0.00283	0.00335	1.2382	1.1128
24	PROP EXPECT TO FINISH COLLEGE	0.4058	0.00552	0.01360	3.8502	1.9622
25	PROP W/ HANDICAP	0.1529	0.00310	0.02025	2 4196	1.5555
26	PROP W/ VOCATIONAL PROGRAM	0.2101	0.00562	0.02674	5.8062	2.4096
27	AVE BOTH READING TEST- RIGHT	3.6713	0.02422	0.00660	3.6539	1 9115
28	AVE BOTH VOCAB TEST- RIGHT	3.7783	0.02599	0.00688	4.5287	2 1281
29	AVE BOTH MATH TEST- RIGHT	9.5573	0 05632	0.00589	4 2309	2 0569
30	AVE CIVICS TEST-RIGHT	5.8343	0.02540	0.00435	2 6685	1.6335
31	AVE READING TEST- RIGHT	9.0728	0.04929	0.00543	3.5899	1.8947
32	AVE SCIENCE TEST- RIGHT	10.9338	0.05705	0.00522	4.1552	2.0384
33	AVE VOCAB TEST- RIGHT	10.8956	0 06380	0.00586	4 5389	2.1305
34	AVE WRITING TEST- RIGHT	10.2737	0.05530	0.00538	3.7757	1 9431
35	AVE EARNING/HR	2.5606	0.00957	0.00374	1 6761	1.2946

	CV	DEFF	DEFT
MEAN	0.01248	2.8779	1.6510
MEDIAN	0 00688	2.6124	1 6163
STANDARD DEVIATION	0.01723	1 3183	0 3959

NOTE: SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 2 NAME=MALES

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.5836	0 00572	0 00980	1.7937	1.3393
2	PROP EARNED LT $1000	0.4509	0 00613	0.01360	2.0414	1 4288
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1258	0.00318	0.02525	1.2505	1.1183
4	AVE ATT TO SELF	1.7133	0.00654	0.00382	0.9361	0.9675
5	AVE ATT TO PLANNING	2.9188	0 00959	0.00329	0.8192	0.9051
6	AVE IMPORTANCE OF PROX TO PARENT	1.9486	0.00750	0.00385	1 3395	1.1574
7	AVE BOTH MATH NOT ATTEMPTED	0.2659	0 01348	0 05068	2.4038	1 5504
8	PROP MT 3 HRS ON HOMEWORK	0.4498	0.00694	0.01542	2.6084	1.6151
9	PROP LT B AVERAGE	0.5939	0 00642	0.01080	2.2728	1.5076
10	PROP MT 3.50 MIN WAGE	0.6851	0.00548	0.00799	1.8240	1.3505
11	PROP FATHER NOT US NATIVE	0.1509	0 00489	0 03241	2.5465	1.5958
12	AVE QUALITY OF INSTRUCTION	2.7102	0.01391	0.00513	1.9553	1.3983
13	AVE 'SOMEONE PREVENTS SUCCESS'	2.7144	0.00881	0.00325	0.7420	0.8614
14	PROP NEVER CUT CLASSES	0.6808	0.00653	0.00959	2.5378	1.5930
15	PROP HARD OF HEARING	0.0062	0.00079	0.12798	1.5166	1.2315
16	PROP W/ NO PLACE TO STUDY	0.4891	0.00601	0.01229	1.9537	1.3977
17	PROP NOT PLANNING ON COLLEGE	0.3862	0.00699	0.01809	2.8519	1.6888
18	PROP ABSENT MT 2 DAYS	0.3507	0.00568	0.01619	1.9020	1.3791
19	PROP DID NOT WORK LAST WK	0.5562	0.00586	0.01054	1.8591	1.3635
20	PROP NOT LOOKING FOR WORK	0.7312	0 00474	0.00648	1.5078	1 2279
21	PROP WHOSE MOM FINISHED COLLEGE	0.1568	0 00572	0 03647	4.0572	2.0142
22	PROP- GOOD LUCK NOT IMPORTANT	0.8251	0.00446	0 00540	1.3137	1.1462
23	PROP FEEL PROUD	0.8314	0.0040[illegible]	0 00488	1.1411	1.0682
24	PROP EXPECT TO FINISH COLLEGE	0.4031	0.00731	0.01813	3.0126	1.7357
25	PROP W/ HANDICAP	0.1612	0.00428	0.02656	1.9758	1.4056
26	PROP W/ VOCATIONAL PROGRAM	0.2120	0.00725	0 03419	4.2741	2.0674
27	AVE BOTH READING TEST- RIGHT	3.7331	0.02938	0.00787	2.3419	1.5303
28	AVE BOTH VOCAB TEST- RIGHT	3.8656	0.02953	0.00764	2.5587	1 5996
29	AVE BOTH MATH TEST- RIGHT	9.9649	0 06880	0.00690	2.6182	1.6181
30	AVE CIVICS TEST-RIGHT	5.8311	0.03143	0.00539	1.7875	1.3370
31	AVE READING TEST- RIGHT	9.3647	0 05844	0.00624	2.1542	1.4677
32	AVE SCIENCE TEST- RIGHT	11.6363	0.06340	0.00545	2.1160	1.4546
33	AVE VOCAB TEST- RIGHT	11 2952	0 06892	0.00610	2.3400	1.5297
34	AVE WRITING TEST- RIGHT	9.5633	0.06357	0.00665	2.3560	1.5349
35	AVE EARNING/HR	2.9197	0.01141	0 00391	1.1104	1.0537

	CV	DEFF	DEFT
MEAN	0.01623	2.0520	1.4069
MEDIAN	0 00799	1 9758	1 4056
STANDARD DEVIATION	0.02244	0.7875	0.2736

NOTE · SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO 3 NAME=FEMALES

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.7536	0.00472	0.00626	1.7021	1.3047
2	PROP EARNED LT $1000	0.6615	0.00575	0.00869	2.0752	1.4406
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1356	0.00346	0 02553	1 4973	1 2236
4	AVE ATT TO SELF	1.8906	0.00788	0.00417	1.2529	1 1193
5	AVE ATT TO PLANNING	3 0246	0.00898	0.00297	0.9106	0 9543
6	AVE IMPORTANCE OF PROX TO PARENT	1.9660	0.00713	0.00363	1.4669	1.2111
7	AVE BOTH MATH NOT ATTEMPTED	0 2739	0.01205	0.04399	2 1894	1 4797
8	PROP MT 3 HRS ON HOMEWORK	0 5792	0.00626	0.01081	2.3307	1.5267
9	PROP LT B AVERAGE	0.4835	0.00596	0 01232	2.0631	1.4363
10	PROP MT 3.50 MIN WAGE	0.5387	0.00589	0 01094	2.0226	1.4222
11	PROP FATHER NOT US NATIVE	0.1736	0.00479	0.02758	2 3542	1.5343
12	AVE QUALITY OF INSTRUCTION	2.7293	0.01309	0.00480	1.7482	1.3222
13	AVE 'SOMEONE PREVENTS SUCCESS'	2.7860	0 00792	0 00284	0.7205	0.8488
14	PROP NEVER CUT CLASSES	0.7166	0.00651	0.00908	2.9520	1.7181
15	PROP HARD OF HEARING	0.0028	0.00047	0 16903	1.2591	1.1221
16	PROP W/ NO PLACE TO STUDY	0.5533	0.00527	0.00952	1.6156	1.2711
17	PROP NOT PLANNING ON COLLEGE	0.3282	0 00590	0.01797	2.3645	1.5377
18	PROP ABSENT MT 2 DAYS	0.3389	0.00525	0.01549	1.7874	1.3369
19	PROP DID NOT WORK LAST WK	0.5975	0 00583	0.00975	2.0462	1.4305
20	PROP NOT LOOKING FOR WORK	0.7730	0.00447	0.00578	1.6375	1.2796
21	PROP WHOSE MOM FINISHED COLLEGE	0.1361	0 00516	0.03794	3.8684	1.9668
22	PROP- GOOD LUCK NOT IMPORTANT	0.8704	0.00419	0.00481	1.5398	1.2409
23	PROP FEEL PROUD	0.8587	0 00377	0 00439	1.2122	1.1010
24	PROP EXPECT TO FINISH COLLEGE	0.4237	0.00643	0.01517	2.4740	1.5729
25	PROP W/ HANDICAP	0.1416	0.00404	0.02851	2.1069	1.4515
26	PROP W/ VOCATIONAL PROGRAM	0.1907	0 00600	0.03146	3.4316	1.8525
27	AVE BOTH READING TEST- RIGHT	3.7631	0 02796	0.00743	2.4451	1.5637
28	AVE BOTH VOCAB TEST- RIGHT	3.8428	0.03000	0.00781	2.9906	1.7293
29	AVE BOTH MATH TEST- RIGHT	9.4836	0.06009	0.00634	2 5719	1 6037
30	AVE CIVICS TEST-RIGHT	5.9820	0 02893	0.00484	1.7752	1.3324
31	AVE READING TEST- RIGHT	9.1315	0.05595	0.00613	2.3851	1.5444
32	AVE SCIENCE TEST- RIGHT	10.6014	0.05945	0.00561	2.5084	1.5838
33	AVE VOCAB TEST- RIGHT	10.9093	0.07225	0.00662	2.9330	1.7126
34	AVE WRITING TEST- RIGHT	11.3177	0.06169	0.00545	2.3732	1.5405
35	AVE EARNING/HR	2.1822	0.01240	0.00568	1.6282	1.2760
MEAN				0.01655	2.0640	1 4169
MEDIAN				0.00781	2.0631	1.4363
STANDARD DEVIATION				0.02851	0.6826	0.2409

NOTE: SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 4 NAME=WHITE

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.6751	0.00467	0.00691	1 7144	1.3094
2	PROP EARNED LT $1000	0.5751	0.00554	0.00963	2 1739	1 4744
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1314	0.00283	0.02152	1.2414	1.1142
4	AVE ATT TO SELF	1.8491	0.00562	0.00304	0 8215	0.9063
5	AVE ATT TO PLANNING	3.0234	0.00764	0.00253	0.7548	0.8688
6	AVE IMPORTANCE OF PROX TO PARENT	1.9502	0.00647	0 00332	1.4019	1.1840
7	AVE 8OTH MATH NOT ATTEMPTED	0.2233	0.01086	0.04866	2.6647	1.6324
8	PROP MT 3 HRS ON HOMEWORK	0.5426	0.00624	0.01150	2 7356	1.6540
9	PROP LT B AVERAGE	0.4884	0 00562	0.01151	2.2069	1 4856
10	PROP MT 3.50 MIN WAGE	0.5888	0 00536	0.00911	2.0585	1.4347
11	PROP FATHER NOT US NATIVE	0.1040	0 00299	0.02878	1 7022	1.3047
12	AVE QUALITY OF INSTRUCTION	2.7471	0 01229	0.00447	2.0510	1.4321
13	AVE 'SOMEONE PREVENTS SUCCESS'	2 7884	0.00737	0.00264	0.7247	0.8513
14	PROP NEVER CUT CLASSES	0.7210	0.00597	0.00828	2.9487	1.7172
15	PROP HARD OF HEARING	0.0034	0 00048	0.14295	1.3240	1.1507
16	PROP W/ NO PLACE TO STUDY	0.5282	0.00501	0.00948	1.7514	1.3234
17	PROP NOT PLANNING ON COLLEGE	0.3525	0.00631	0.01790	3 1793	1.7831
18	PROP ABSENT MT 2 DAYS	0.3197	0.00474	0.01482	1.8045	1.3433
19	PROP DID NOT WORK LAST WK	0.5519	0.00512	0.00927	1 8454	1.3585
20	PROP NOT LOOKING FOR WORK	0.7724	0.00392	0.00508	1.5019	1.2255
21	PROP WHOSE MOM FINISHED COLLEGE	0.1551	0.00539	0 03478	4.4326	2.1054
22	PROP- GOOD LUCK NOT IMPORTANT	0 8904	0.00289	0.00325	0.9071	0.9524
23	PROP FEEL PROUD	0.8701	0 00291	0.00335	0 8819	0.9391
24	PROP EXPECT TO FINISH COLLEGE	0.4249	0.00665	0.01565	3.1726	1 7812
25	PROP W/ HANDICAP	0.1276	0 00329	0 02579	1.8292	1.3525
26	PROP W/ VOCATIONAL PROGRAM	0.1674	0.00552	0 03297	3.8440	1.9606
27	AVE 8OTH READING TEST- RIGHT	4.0815	0.02429	0.00595	2.1912	1.4803
28	AVE 8OTH VOCAB TEST- RIGHT	4.1591	0.02686	0.00646	2.9308	1 7120
29	AVE 8OTH MATH TEST- RIGHT	10.5118	0.05435	0.00517	2.4553	1.5669
30	AVE CIVICS TEST-RIGHT	6.1905	0.02583	0 00417	1.7702	1.3305
31	AVE READING TEST- RIGHT	9 9640	0 04814	0.00483	2.0917	1 4463
32	AVE SCIENCE TEST- RIGHT	11.9548	0.04503	0.00377	1.7629	1.3277
33	AVE VOCAB TEST- RIGHT	11 9948	0 05881	0 00490	2.5315	1.5911
34	AVE WRITING TEST- RIGHT	11.2431	0 05065	0.00450	2.0639	1.4366
35	AVE EARNING/HR	2.5036	0 01171	0.00468	1 5802	1.2571
MEAN				0 01519	2 0300	1.3941
MEDIAN				0 00691	1.8454	1.3585
STANDARD DEVIATION				0.02475	0.8519	0.2985

NOTE: SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 5 NAME=BLACK

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.6964	0 00938	0.01347	1.6489	1.2841
2	PROP EARNEO LT $1000	0.5256	0.01187	0.02259	2.2824	1.5107
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1075	0.00612	0.05690	1.6808	1.2965
4	AVE ATT TO SELF	1.5949	0.01482	0.00929	1.3082	1.1438
5	AVE ATT TO PLANNING	2.9160	0 02047	0.00702	0 9189	0.9586
6	AVE IMPORTANCE OF PROX TO PARENT	1.9354	0.01364	0.00705	1.0283	1.0141
7	AVE BOTH MATH NOT ATTEMPTEO	0.4336	0.02661	0 06137	1.9489	1.3960
8	PROP MT 3 HRS ON HOMEWORK	0.4829	0.01200	0.02485	2 3365	1.5286
9	PROP LT B AVERAGF	0.6330	0.01123	0.01774	2.1761	1.4752
10	PROP MT 3 50 MIN WAGE	0.6773	0.01001	0 01477	1.7885	1.3374
11	PROP FATHER NOT US NATIVE	0.3123	0.01084	0.03471	2.2843	1.5114
12	AVE QUALITY OF INSTRUCTION	2 6718	0.02789	0 01044	1.8329	1.3538
13	AVE 'SOMEONE PREVENTS SUCCESS'	2.6847	0.01852	0 00690	0 8508	0 9224
14	PROP NEVER CUT CLASSES	0.6932	0 01325	0.01911	3.0066	1.7339
15	PROP HARD OF HEARING	0 0029	0.00095	0.32639	1.3581	1.1654
16	PROP W/ NO PLACE TO STUOY	0.4911	0.01160	0.02362	2.2684	1.5061
17	PROP NOT PLANNING ON COLLEGE	0.2811	0 01106	0.03936	2.8162	1.6781
18	PROP ABSENT MT 2 OAYS	0.3633	0.01025	0.02822	1.8431	1.3576
19	PROP DIO NOT WORK LAST WK	0.6981	0 01013	0.01451	1.9376	1.3920
20	PROP NOT LOOKING FOR WORK	0.6878	0 01058	0 01538	2.0732	1.4399
21	PROP WHOSE MOM FINISHEO COLLEGE	0 1389	0.00840	0.06046	3.2643	1.8067
22	PROP- GOOO LUCK NOT IMPORTANT	0 7496	0 01083	0.01445	2.0090	1 4174
23	PROP FEEL PROUD	0.8157	0.00850	0.01042	1.3559	1.1644
24	PROP EXPECT TO FINISH COLLEGE	0 4493	0.01212	0.02697	2 4234	1.5567
25	PROP W/ HANDICAP	0.1984	0 00926	0.04670	2.3222	1.5239
26	PROP W/ VOCATIONAL PROGRAM	0.2962	0 01337	0.04512	3.5295	1 8787
27	AVE BOTH READING TEST- RIGHT	2.8224	0 05455	0.01933	3.1587	1.7773
28	AVE BOTH VOCAB TEST- RIGHT	2.8887	0.05010	0.01734	2 8592	1.6909
29	AVE BOTH MATH TEST- RIGHT	7.5501	0.10933	0 01448	2.6634	1 6320
30	AVE CIVICS TEST-RIGHT	5.1330	0 05837	0 01137	1 9079	1 3813
31	AVE REAOING TEST- RIGHT	7.2470	0.09748	0.01345	2.4058	1.5511
32	AVE SCIENCE TEST- RIGHT	8 4474	0 11593	0.01372	2.7566	1 6603
33	AVE VOCAB TEST- RIGHT	8 3015	0.13103	0 01578	3.0683	1.7517
34	AVE WRITING TEST- RIGHT	8.2518	0 12121	0.01469	2.7574	1.6605
35	AVE EARNING/HR	2.6401	0.01995	0.00756	0.8526	0.9233
MEAN				0.03102	2 1349	1 4395
MEOIAN				0.01578	2.1761	1 4752
STANDARO OEVIATION				0.05363	0.7073	0.2543

NOTE· SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 6 NAME=HISPANIC

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.6254	0.01193	0.01907	2.1170	1.4550
2	PROP EARNED LT $1000	0.5253	0.01205	0.02293	2.0413	1.4287
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1489	0.00966	0.06484	2.7084	1.6457
4	AVE ATT TO SELF	1.7827	0.01540	0.00864	1.0823	1.0403
5	AVE ATT TO PLANNING	2.7809	0.02156	0.00775	1.0316	1.0157
6	AVE IMPORTANCE OF PROX TO PARENT	2.0620	0.01668	0.00809	1.4261	1.1942
7	AVE BOTH MATH NOT ATTEMPTED	0.3655	0.02822	0.07723	2 2395	1.4965
8	PROP MT 3 HRS ON HOMEWORK	0.4279	0.01221	0.02853	2.1484	1.4657
9	PROP LT B AVERAGE	0.6736	0 01085	0 01611	1.8632	1.3650
10	PROP MT 3 50 MIN WAGE	0.6551	0.01116	0.01704	1.8984	1.3778
11	PROP FATHER NOT US NATIVE	0.3959	0.01583	0.03999	3.7325	1.9320
12	AVE QUALITY OF INSTRUCTION	2.6396	0.02336	0.00885	1.1906	1.0911
13	AVE 'SOMEONE PREVENTS SUCCESS'	2 6679	0.01979	0.00742	0.9219	0.9602
14	PROP NEVER CUT CLASSES	0.6472	0.01248	0.01928	2.2692	1.5064
15	PROP HARD OF HEARING	0.0103	0.00225	0.21948	1.9252	1.3875
16	PROP W/ NO PLACE TO STUDY	0.5565	0.01346	0.02419	2.5625	1 6008
17	PROP NOT PLANNING ON COLLEGE	0.3785	0 01306	0.03451	2.7787	1.6669
18	PROP ABSENT MT 2 DAYS	0.4439	0.01181	0.02660	1 9886	1.4102
19	PROP DID NOT WORK LAST WK	0 6354	0.01089	0.01714	1.7879	1.3371
20	PROP NOT LOOKING FOR WORK	0.7117	0.01045	0.01468	1 8516	1.3607
21	PROP WHOSE MOM FINISHED COLLEGE	0.0772	0.00690	0.08938	3.1284	1.7687
22	PROP- GOOD LUCK NOT IMPORTANT	0.7395	0.01157	0.01564	1.9859	1.4092
23	PROP FEEL PROUD	0.7719	0.01052	0.01362	1.7178	1.3106
24	PROP EXPECT TO FINISH COLLEGE	0.3278	0.01081	0.03298	1 9185	1.3851
25	PROP W/ HANDICAP	0.2041	0 01075	0.05265	2.6767	1.6361
26	PROP W/ VOCATIONAL PROGRAM	0.2875	0 01317	0.04582	3.0335	1 7417
27	AVE BOTH READING TEST- RIGHT	2 8347	0.05073	0.01790	2.4796	1.5747
28	AVE BOTH VOCAB TEST- RIGHT	3.0284	0 05090	0.01681	2.4654	1.5702
29	AVE BOTH MATH TEST- RIGHT	7.6305	0.09291	0.01218	1.7084	1.3071
30	AVE CIVICS TEST-RIGHT	5.0112	0 05250	0.01048	1.4423	1.2010
31	AVE READING TEST- RIGHT	7.1842	0.09168	0.01276	1.8839	1.3726
32	AVE SCIENCE TEST- RIGHT	8.8509	0.10070	0.01138	1.6854	1.2982
33	AVE VOCAB TEST- RIGHT	8 6993	0.12356	0.01420	2 3613	1 5366
34	AVE WRITING TEST- RIGHT	8 2767	0.10234	0 01236	1.7988	1.3412
35	AVE EARNING/HR	2 7141	0.02416	0.00890	1.1082	1 0527
MEAN				0 02998	2.0274	1.4070
MEDIAN				0.01704	1 9252	1 3875
STANDARD DEVIATION				0.03850	0.6279	0.2220

NOTE: SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 7 NAME=PUBLIC

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.6628	0 00404	0.00609	1.8873	1.3738
2	PROP EARNED LT $1000	0.5516	0 00470	0.00852	2.3253	1.5249
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1322	0 00253	0 01917	1.5231	1.2341
4	AVE ATT TO SELF	1.8035	0.00577	0.00320	1.1955	1.0934
5	AVE ATT TO PLANNING	2.9567	0 00735	0.00248	0.8924	0 9447
6	AVE IMPORTANCE OF PROX TO PARENT	1.9577	0.00529	0.00270	1.1898	1 0908
7	AVE BOTH MATH NOT ATTEMPTED	0.2927	0.01161	0.03967	3.2077	1 7910
8	PROP MT 3 HRS ON HOMEWORK	0.4879	0.00531	0.01089	2.9666	1.7224
9	PROP LT B AVERAGE	0.5616	0.00506	0.00901	2.7214	1.6497
10	PROP MT 3.50 MIN WAGE	0.6142	0.00465	0.00757	2.3596	1.5361
11	PROP FATHER NOT US NATIVE	0.1706	0.00433	0.02538	3.5677	1.8888
12	AVE QUALITY OF INSTRUCTION	2.6712	0 01107	0.00415	2.1931	1.4809
13	AVE 'SOMEONE PREVENTS SUCCESS'	2.7332	0.00629	0.00230	0.7136	0,8447
14	PROP NEVER CUT CLASSES	0.6850	0.00579	0.00846	3.8204	1.9546
15	PROP HARD OF HEARING	0.0050	0.00050	0.10039	1.4678	1.2115
16	PROP W/ NO PLACE TO STUDY	0 5349	0 00430	0 00805	1.9520	1.3971
17	PROP NOT PLANNING ON COLLEGE	0.3743	0.00548	0.01463	3 5875	1 8941
18	PROP ABSENT MT 2 DAYS	0.3618	0 00444	0.01226	2.2434	1.4978
19	PROP DID NOT WORK LAST WK	0.5792	0 00454	0.00784	2 2119	1.4873
20	PROP NOT LOOKING FOR WORK	0.7456	0 00369	0.00495	1.8502	1.3602
21	PROP WHOSE MOM FINISHED COLLEGE	0.1284	0 00408	0.03181	4.7888	2.1883
22	PROP- GOOD LUCK NOT IMPORTANT	0.8392	0.00348	0 00415	1.5918	1.2617
23	PROP FEEL PROUD	0 8399	0.00297	0.00353	1.1737	1.0834
24	PROP EXPECT TO FINISH COLLEGE	0.3833	0 00545	0.01422	3.3552	1.8317
25	PROP W/ HANDICAP	0.1558	0.00323	0.02071	2 2616	1.5039
26	PROP W/ VOCATIONAL PROGRAM	0.2261	0.00610	0.02697	5 6684	2.3808
27	AVE BOTH READING TEST- RIGHT	3.6028	0.02525	0.00701	3.5215	1.8766
28	AVE BOTH VOCAB TEST- RIGHT	3.6887	0.02588	0.00702	4.0438	2.0109
29	AVE BOTH MATH TEST- RIGHT	9.3954	0.05849	0.00622	4.0406	2.0101
30	AVE CIVICS TEST-RIGHT	5.7649	0.02659	0.00461	2 5625	1.6008
31	AVE READING TEST- RIGHT	8.9248	0.05134	0.00575	3 4607	1.8603
32	AVE SCIENCE TEST- RIGHT	10.8173	0.06024	0.00557	4.0521	2.0130
33	AVE VOCAB TEST- RIGHT	10.6821	0.06504	0.00609	4 2228	2 0549
34	AVE WRITING TEST- RIGHT	10.1145	0 05814	0.00575	3 6739	1 9167
35	AVE EARNING/HR	2.5597	0 00960	0.00375	1 4801	1.2166

	CV	DEFF	DEFT
MEAN	0.01288	2.6792	1.5939
MEDIAN	0 00702	2.3596	1.5361
STANDARD DEVIATION	0.01762	1.2064	0.3778

NOTE: SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 8 NAME=CATHOLIC

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.7656	0.01393	0.01819	2.9562	1.7194
2	PROP EARNED LT $1000	0.5961	0.01847	0.03098	3.9253	1.9812
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1180	0.00819	0.06942	1.8238	1.3505
4	AVE ATT TO SELF	1.8105	0.01711	0.00945	1.3743	1.1723
5	AVE ATT TO PLANNING	3.0709	0.02481	0.00808	1.4129	1.1887
6	AVE IMPORTANCE OF PROX TO PARENT	2.0401	0.02321	0.01138	3.0503	1 7465
7	AVE BOTH MATH NOT ATTEMPTED	0.2100	0.01929	0 09184	1.9954	1.4126
8	PROP MT 3 HRS ON HOMEWORK	0.7116	0 01916	0.02692	4.9860	2.2329
9	PROP LT B AVERAGE	0.4320	0.01986	0.04597	4.5156	2.1250
10	PROP MT 3.50 MIN WAGE	0.6158	0.01793	0.02911	3.7803	1.9443
11	PROP FATHER NOT US NATIVE	0.1404	0.01237	0 08808	3.5921	1.8953
12	AVE QUALITY OF INSTRUCTION	3.1017	0 04807	0.01550	6.2065	2 4913
13	AVE 'SOMEONE PREVENTS SUCCESS'	2.8703	0.02559	0.00892	1.4235	1.1931
14	PROP NEVER CUT CLASSES	0.8871	0 01384	0 01560	4.7442	2.1781
15	PROP HARD OF HEARING	0.0024	0.00111	0.45561	1.5844	1.2587
16	PROP W/ NO PLACE TO STUDY	0.4362	0.01726	0.03957	3.4663	1 8618
17	PROP NOT PLANNING ON COLLEGE	0.1811	0.01765	0.09748	6.3073	2.5114
18	PROP ABSENT MT 2 DAYS	0.1905	0.01172	0 06153	2.5034	1.5822
19	PROP DID NOT WORK LAST WK	0.5518	0.01855	0.03361	3.9005	1.9750
20	PROP NOT LOOKING FOR WORK	0.7883	0.01116	0.01416	2.0657	1.4373
21	PROP WHOSE MOM FINISHED COLLEGE	0 2367	0.02091	0.08833	7.7121	2.777[illegible]
22	PROP- GOOD LUCK NOT IMPORTANT	0.9065	0.00955	0.01054	1.7331	1.3165
23	PROP FEEL PROUD	0.8720	0.00998	0.01145	1.7682	1.3297
24	PROP EXPECT TO FINISH COLLEGE	0.6305	0.02337	0.03705	6.4812	2.5458
25	PROP W/ HANDICAP	0.1093	0.00952	0 0[illegible]	2.8647	1.6925
26	PROP W/ VOCATIONAL PROGRAM	0.0583	0 00841	0 1[illegible]4	3.6388	1.9076
27	AVE BOTH READING TEST- RIGHT	4.3352	0.07829	0.01806	4.0141	2.0035
28	AVE BOTH VOCAB TEST- RIGHT	4 5887	0.08090	0 01763	4.5012	2 1216
29	AVE BOTH MATH TEST- RIGHT	11.0485	0.16317	0 01477	4.4099	2.1000
30	AVE CIVICS TEST-RIGHT	6.52[illegible]9	0.07561	0.01158	3.1628	1.7784
31	AVE READING TEST- RIGHT	10.4995	0.15400	0 01467	3.9589	1.9897
32	AVE SCIENCE TEST- RIGHT	11 8844	0.15125	0.01273	4.0[illegible]54	2.0138
33	AVE VOCAB TEST- RIGHT	12.8937	0.18285	0.01418	4.3878	2 0947
34	AVE WRITING TEST- RIGHT	11.9078	0.14944	0 01255	3.6582	1 9126
35	AVE EARNING/HR	2.5189	0.04922	0 01954	4.0304	2.0076

	CV	DEFF	DEFT
MEAN	0 04816	3.5997	1.8528
MEDIAN	0 01819	3 6582	1 9126
STANDARD DEVIATION	0 07846	1 5582	0 4144

NOTE SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 9 NAME=PRIVATE

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.6773	0.02947	0.04351	3.8094	1.9518
2	PROP EARNED LT $1000	0.5830	0.04177	0.07164	6.9376	2.6339
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1470	0.01220	0.08297	1.1959	1.0936
4	AVE ATT TO SELF	1.7811	0.03282	0.01843	1.4922	1.2215
5	AVE ATT TO PLANNING	3.0886	0.04536	0.01469	1.4367	1.1986
6	AVE IMPORTANCE OF PROX TO PARENT	1.8726	0.04595	0.02454	3.5438	1.8825
7	AVE BOTH MATH NOT ATTEMPTED	0.3043	0.06860	0.22541	4.7649	2.1829
8	PROP MT 3 HRS ON HOMEWORK	0.7231	0.04162	0.05756	8.2742	2.8765
9	PROP LT B AVERAGE	0.4355	0.04063	0.09329	6.6031	2.5696
10	PROP MT 3.50 MIN WAGE	0.5799	0.03531	0.06090	4.9643	2.2281
11	PROP FATHER NOT US NATIVE	0.1540	0.02131	0.13836	3.4529	1.8582
12	AVE QUALITY OF INSTRUCTION	3.0556	0.10784	0.03529	8.5705	2.9275
13	AVE 'SOMEONE PREVENTS SUCCESS'	2.3260	0.03807	0.01301	0.9118	0.9549
14	PROP NEVER CUT CLASSES	0.7118	0.02758	0.03875	3.4173	1.8486
15	PROP HARD OF HEARING	0.0	0.0	0.0	0.0	0.0
16	PROP W/ NO PLACE TO STUDY	0.3647	0.03704	0.10158	6.0434	2.4583
17	PROP NOT PLANNING ON COLLEGE	0.2124	0.04835	0.22763	******	3.8446
18	PROP ABSENT MT 2 DAYS	0.3053	0.03095	0.10137	4.4444	2.1082
19	PROP DID NOT WORK LAST WK	0.6170	0.03919	0.06352	6.3532	2.5206
20	PROP NOT LOOKING FOR WORK	0.8013	0.01730	0.02158	1.8069	1.3442
21	PROP WHOSE MOM FINISHED COLLEGE	0.3730	0.05673	0.15211	******	3.8598
22	PROP- GOOD LUCK NOT IMPORTANT	0.9082	0.01012	0.01115	0.6168	0.7854
23	PROP FEEL PROUD	0.9160	0.01297	0.01416	1.0234	1.0116
24	PROP EXPECT TO FINISH COLLEGE	0.6071	0.06120	0.10081	******	3.8797
25	PROP W/ HANDICAP	0.1499	0.02523	0.16830	5.3103	2.3044
26	PROP W/ VOCATIONAL PROGRAM	0.0549	0.02735	0.49777	******	3.7762
27	AVE BOTH READING TEST- RIGHT	4.3384	0.19177	0.04420	5.7446	2.3968
28	AVE BOTH VOCAB TEST- RIGHT	4.8014	0.32359	0.06739	******	3.8813
29	AVE BOTH MATH TEST- RIGHT	11.3156	0.52234	0.04616	8.0313	2.8340
30	AVE CIVICS TEST-RIGHT	6.4079	0.20103	0.03137	4.2292	2.0565
31	AVE READING TEST- RIGHT	10.5586	0.39667	0.03757	5.2444	2.2901
32	AVE SCIENCE TEST- RIGHT	12.4438	0.43521	0.03497	5.5519	2.3562
33	AVE VOCAB TEST- RIGHT	13.1728	0.72728	0.05521	******	3.4989
34	AVE WRITING TEST- RIGHT	11.5511	0.50979	0.04413	7.9174	2.8138
35	AVE EARNING/HR	2.6583	0.07889	0.02968	3.6198	1.9026
MEAN				0.08144	6.2238	2.3339
MEDIAN				0.05069	5.2774	2.2972
STANDARD DEVIATION				0.09259	4.4292	0.8947

NOTE. SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 10 NAME=LOW SES

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.6511	0.00704	0.01081	1.7767	1 3329
2	PROP EARNED LT $1000	0.5867	0.00770	0.01312	1.9855	1.4091
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1603	0 00523	0.03262	1.7325	1.3163
4	AVE ATT TO SELF	1.8199	0.01047	0 00575	1.1071	1.0522
5	AVE ATT TO PLANNING	2.8050	0.01210	0 00431	0.7473	0.8645
6	AVE IMPORTANCE OF PROX TO PARENT	1.9743	0.00911	0 00461	1.0777	1.0381
7	AVE BOTH MATH NOT ATTEMPTED	0.3353	0 02042	0.06090	2.5787	1.6058
8	PROP MT 3 HRS ON HOMEWORK	0.4131	0.00752	0.01821	1.9295	1.3891
9	PROP LT B AVERAGE	0.6616	0.00768	0.01161	2.1538	1.4676
10	PROP MT 3.50 MIN WAGE	0.6036	0.00716	0.01186	1.7450	1 3210
11	PROP FATHER NOT US NATIVE	0.2302	0.00784	0.03406	2.9328	1.7125
12	AVE QUALITY OF INSTRUCTION	2.5832	0.01601	0.00620	1.3118	1.1453
13	AVE 'SOMEONE PREVENTS SUCCESS'	2.6016	0.01099	0.00423	0.6784	0.8236
14	PROP NEVER CUT CLASSES	0.6960	0.00759	0.01090	2.0801	1 4422
15	PROP HARD OF HEARING	0.0059	0.00099	0.16782	1.5381	1.2402
16	PROP W/ NO PLACE TO STUDY	0.6467	0.00703	0.01087	1.65?3	1.2854
17	PROP NOT PLANNING ON COLLEGE	0.5341	0.00838	0.01570	2.3366	1.5285
18	PROP ABSENT MT 2 DAYS	0.4190	0.00697	0.01663	1.6454	1.2827
19	PROP DID NOT WORK LAST WK	0.6287	0 00690	0 01097	1.6689	1 2919
20	PROP NOT LOOKING FOR WORK	0.7183	0.00649	0.00904	1.6927	1.3010
21	PROP WHOSE MOM FINISHED COLLEGE	0.0034	0.00087	0.26021	.4036	1.5504
22	PROP- GOOD LUCK NOT IMPORTANT	0.7810	0 00622	0 00796	1.4197	1.1915
23	PROP FEEL PROUD	0.7864	0.00624	0 00794	1.4550	1.2062
24	PROP EXPECT TO FINISH COLLEGE	0.2246	0.00620	0.02761	1 8731	1 3686
25	PROP W/ HANDICAP	0.1993	0.00621	0.03117	2.1586	1.4692
26	PROP W/ VOCATIONAL PROGRAM	0.2919	0 00847	0.02903	2.9121	1.7065
27	AVE BOTH READING TEST- RIGHT	2.9844	0.02833	0.00949	1.7659	1.3289
28	AVE BOTH VOCAB TEST- RIGHT	3.0043	0.02752	0.00916	1.8681	1.3668
29	AVE BOTH MATH TEST- RIGHT	7.8948	0.06181	0.00783	1.7938	1.3393
30	AVE CIVICS TEST-RIGHT	5.2305	0.03174	0.00607	1.2767	1.1299
31	AVE READING TEST- RIGHT	7.5609	0.05520	0.00730	1 6361	1.2791
32	AVE SCIENCE TEST- RIGHT	9.3905	0.07351	0 00783	2.2177	1.4892
33	AVE VOCAB TEST- RIGHT	8.8446	0.07034	0.00795	1.9551	1.3983
34	AVE WRITING TEST- RIGHT	8.8084	0.06807	0.00773	1.8484	1.3596
35	AVE EARNING/HR	2.5069	0.01458	0 00581	1.1010	1 0493
MEAN				0 02552	1.7730	1.3167
MEDIAN				0.01081	1.7659	1 3289
STANDARD DEVIATION				0.04978	0.5190	0.2015

NOTE· SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 11 NAME=MIDDLE SES

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.6609	0.00535	0.00810	1.7194	1.3113
2	PROP EARNED LT $1000	0.5435	0.00595	0.01094	1.9286	1.3888
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1305	0.00332	0.02547	1.3526	1.1630
4	AVE ATT TO SELF	1.8148	0.00692	0.00381	0.9558	0.9776
5	AVE ATT TO PLANNING	2.9794	0.00890	0.00299	0.7574	0.8703
6	AVE IMPORTANCE OF PROX TO PARENT	1.9683	0.00732	0.00372	1.3087	1.1440
7	AVE BOTH MATH NOT ATTEMPTED	0.2773	0.01351	0.04871	2.3781	1.5421
8	PROP MT 3 HRS ON HOMEWORK	0.5059	0.00617	0.01220	2.0711	1.4391
9	PROP LT B AVERAGE	0.5492	0.00573	0.01043	1.7971	1.3406
10	PROP MT 3.50 MIN WAGE	0.6098	0.00590	0.00968	1.9697	1.4035
11	PROP FATHER NOT US NATIVE	0.1387	0.00423	0.03052	2.0717	1.4394
12	AVE QUALITY OF INSTRUCTION	2.7031	0.01185	0.00438	1.4420	1.2008
13	AVE 'SOMEONE PREVENTS SUCCESS'	2.7496	0.00761	0.00277	0.5860	0.7655
14	PROP NEVER CUT CLASSES	0.6978	0.00670	0.00960	2.7464	1.6572
15	PROP HARD OF HEARING	0.0047	0.00069	0.14592	1.5088	1.2283
16	PROP W/ NO PLACE TO STUDY	0.5364	0.00521	0.00971	1.4743	1.2142
17	PROP NOT PLANNING ON COLLEGE	0.3619	0.00558	0.01542	1.9254	1.3876
18	PROP ABSENT MT 2 DAYS	0.3330	0.00559	0.01678	1.9160	1.3842
19	PROP DID NOT WORK LAST WK	0.5559	0.00576	0.01035	1.8206	1.3493
20	PROP NOT LOOKING FOR WORK	0.7544	0.00477	0.00633	1.6485	1.2840
21	PROP WHOSE MOM FINISHED COLLEGE	0.0554	0.00258	0.04659	2.0225	1.4221
22	PROP- GOOD LUCK NOT IMPORTANT	0.8581	0.00396	0.00461	1.1684	1.0809
23	PROP FEEL PROUD	0.8526	0.00385	0.00451	1.1095	1.0533
24	PROP EXPECT TO FINISH COLLEGE	0.3733	0.00561	0.01502	1.8476	1.3593
25	PROP W/ HANDICAP	0.1395	0.00413	0.02963	2.1033	1.4503
26	PROP W/ VOCATIONAL PROGRAM	0.2094	0.00647	0.03087	3.4717	1.8632
27	AVE BOTH READING TEST- RIGHT	3.7309	0.02381	0.00638	1.6862	1.2985
28	AVE BOTH VOCAB TEST- RIGHT	3.8165	0.02287	0.00599	1.7403	1.3192
29	AVE BOTH MATH TEST- RIGHT	9.6991	0.05242	0.00540	1.7794	1.3339
30	AVE CIVICS TEST-RIGHT	5.8885	0.02688	0.00456	1.4292	1.1955
31	AVE READING TEST- RIGHT	9.1955	0.04563	0.00496	1.5173	1.2318
32	AVE SCIENCE TEST- RIGHT	11.1473	0.04932	0.00442	1.5352	1.2390
33	AVE VOCAB TEST- RIGHT	11.0966	0.05464	0.00492	1.6886	1.2995
34	AVE WRITING TEST- RIGHT	10.4693	0.05372	0.00513	1.6941	1.3016
35	AVE EARNING/HR	2.5356	0.01200	0.00473	1.2348	1.1112
	MEAN			0.01616	1.6973	1.2871
	MEDIAN			0.00810	1.6941	1.3016
	STANDARD DEVIATION			0.02548	0.5316	0.2044

NOTE: SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 12 NAME=HIGH SES

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.7072	0 00705	0.00997	1.6021	1 2657
2	PROP EARNED LT $1000	0.5473	0.00832	0.01520	1.8904	1 3749
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.0981	0.00411	0.04189	1.3167	1 1475
4	AVE ATT TO SELF	1.7680	0.00890	0.00503	0.9488	0.9741
5	AVE ATT TO PLANNING	3.1530	0.01100	0.00349	0 6407	0.8004
6	AVE IMPORTANCE OF PROX TO PARENT	1.9233	0.01113	0.00579	1.5974	1.2639
7	AVE BOTH MATH NOT ATTEMPTED	0.2013	0.01202	0.05973	1.8240	1.3506
8	PROP MT 3 HRS ON HOMEWORK	0.6529	0,00951	0.01456	2.6913	1.6405
9	PROP LT B AVERAGE	0.3842	0.00822	0.02140	1.9492	1.3961
10	PROP MT 3.50 MIN WAGE	0.6261	0.00763	0.01218	1.6691	1.2919
11	PROP FATHER NOT US NATIVE	0.1217	0 00493	0.04051	1.5623	1.2499
12	AVE QUALITY OF INSTRUCTION	2.8802	0.01994	0.00692	2.4488	1.5649
13	AVE 'SOMEONE PREVENTS SUCCESS'	2 9205	0.01030	0.00353	0 5674	0 7532
14	PROP NEVER CUT CLASSES	0.7116	0.00877	0.01232	2.4310	1.5592
15	PROP HARD OF HEARING	0.0022	0.00057	0.25763	1.0996	1.0486
16	PROP W/ NO PLACE TO STUDY	0.3649	0.00742	0.02033	1.6700	1.2923
17	PROP NOT PLANNING ON COLLEGE	0.1381	0.00580	0.04201	2.0571	1.4343
18	PROP ABSENT MT 2 DAYS	0.2875	0.00676	0.02352	1.5229	1.2341
19	PROP DID NOT WORK LAST WK	0.5615	0.00821	0.01462	1.8570	1 3627
20	PROP NOT LOOKING FOR WORK	0.7890	0 00558	0.00707	1 2433	1.1150
21	PROP WHOSE MOM FINISHED COLLEGE	0.4722	0.00944	0.01999	2.5237	1 5886
22	PROP- GOOD LUCK NOT IMPORTANT	0.9099	0 00457	0.00502	0.9787	0.9893
23	PROP FEEL PROUD	0.9005	0.00421	0.00467	0.8305	0.9113
24	PROP EXPECT TO FINISH COLLEGE	0.7018	0.00761	0.01084	1.8194	1.3488
25	PROP W/ HANDICAP	0.1233	0.00510	0.04138	1.7693	1.3301
26	PROP W/ VOCATIONAL PROGRAM	0.0915	0 00457	0.04990	1.7190	1.3111
27	AVE BOTH READING TEST- RIGHT	4.5331	0.03561	0.00786	1.6321	1.2775
28	AVE BOTH VOCAB TEST- RIGHT	4.7718	0.04310	0 00903	2.5535	1.5980
29	AVE BOTH MATH TEST- RIGHT	11.6251	0.07363	0.00633	1.5591	1 2486
30	AVE CIVICS TEST-RIGHT	6.6265	0 03707	0.00559	1.2336	1.1107
31	AVE READING TEST- RIGHT	10.9980	0.07112	0.00647	1.4974	1.2237
32	AVE SCIENCE TEST- RIGHT	12.7586	0.07075	0.00555	1 4180	1.1908
33	AVE VOCAB TEST- RIGHT	13.3798	0 08901	0.00665	1.9301	1.3893
34	AVE WRITING TEST- RIGHT	12 0878	0.06766	0.00560	1.2903	1 1359
35	AVE EARNING/HR	2.6456	0 01785	0 00675	1.2871	1.1345
	MEAN			0.02312	1.6180	1.2545
	MEDIAN			0.00997	1.6021	1.2657
	STANDARD DEVIATION			0.04346	0.5236	0.2133

NOTE: SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO 13 , NAME=NORTHEAST

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0 7125	0 00790	0.01108	1.8662	1 3661
2	PROP EARNED LT $1000	0.6029	0 01084	0.01798	3.0161	1.7367
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1209	0.00508	0.04202	1.5565	1 2476
4	AVE ATT TO SELF	1.8094	0.01288	0.00712	1.4240	1.1933
5	AVE ATT TO PLANNING	2.9311	0.01509	0.00515	0.9391	0 9691
6	AVE IMPORTANCE OF PROX TO PARENT	1.9701	0 01188	0.00603	1.5107	1 2291
7	AVE BOTH MATH NOT ATTEMPTED	0.2542	0 01750	0.06884	2.2168	1 4889
8	PROP MT 3 HRS ON HOMEWORK	0.5702	0.01207	0.02116	3.7000	1 9235
9	PROP LT B AVERAGE	0.5064	0.01106	0.02185	3.0584	1.7488
10	PROP MT 3 50 MIN WAGE	0.6127	0.00973	0.01588	2 4583	1.5679
11	PROP FATHER NOT US NATIVE	0.1832	0.01112	0.06070	5.2846	2.2988
12	AVE QUALITY OF INSTRUCTION	2.7715	0 02469	0 00891	2.6760	1.6358
13	AVE 'SOMEONE PREVENTS SUCCESS'	2.7885	0.01319	0.00473	0.7628	0.8734
14	PROP NEVER CUT CLASSES	0 6804	0.01144	0.01681	3.5959	1.8963
15	PROP HARD OF HEARING	0.0029	0 00068	0.22991	1.0849	1.0416
16	PROP W/ NO PLACE TO STUDY	0.5040	0.00845	0 01676	1.7980	1.3409
17	PROP NOT PLANNING ON COLLEGE	0.3400	0.01374	0.04041	5.5921	2.3648
18	PROP ABSENT MT 2 DAYS	0.3516	0.00957	0.02723	2.5204	1.5876
19	PROP DID NOT WORK LAST WK	0.5771	0 01064	0 01844	2.8907	1.7002
20	PROP NOT LOOKING FOR WORK	0.7415	0.00782	0.01055	1.9625	1.4009
21	PROP WHOSE MOM FINISHED COLLEGE	0.1717	0 01045	0.06087	5.8090	2.4102
22	PROP- GOOD LUCK NOT IMPORTANT	0.8422	0 00771	0.00916	1.8861	1.3733
23	PROP FEEL PROUD	0.8475	0.00630	0 00743	1.3037	1.1418
24	PROP EXPECT TO FINISH COLLEGE	0.4462	0.01378	0.03089	4.8538	2.2031
25	PROP W/ HANDICAP	0.1522	0.00766	0.05037	3.1109	1.7638
26	PROP W/ VOCATIONAL PROGRAM	0.2231	0 01475	0.06609	7.9330	2 8166
27	AVE BOTH READING TEST- RIGHT	3.8691	0.06078	0 01571	4.5658	2.1368
28	AVE BOTH VOCAB TEST- RIGHT	4.1033	0.07089	0.01728	6.3026	2 5105
29	AVE BOTH MATH TEST- RIGHT	10.0356	0.14742	0 01469	5.6325	2.3733
30	AVE CIVICS TEST-RIGHT	6.0606	0.06275	0.01035	3.0035	1 7331
31	AVE READING TEST- RIGHT	9.4823	0.12605	0.01329	4.5663	2.1369
32	AVE SCIENCE TEST- RIGHT	11.1913	0.15473	0.01383	5.8000	2.4083
33	AVE VOCAB TEST- RIGHT	11.6828	0.16789	0.01437	6.0025	2.4500
34	AVE WRITING TEST- RIGHT	10.4872	0.14987	0.01429	5 4487	2 3342
35	AVE EARNING/HR	2.4690	0.02042	0.00827	1.6450	1 2826
MEAN				0.02853	3 3651	1.7624
MEDIAN				0 01588	3 0035	1.7331
STANDARD DEVIATION				0.03956	1.8795	0 5162

NOTE: SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 14 NAME=SOUTH

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0 6627	0.00753	0 01137	2.4272	1.5579
2	PROP EARNED LT $1000	0.5511	0 00824	0 01496	2 6395	1.6246
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1259	0.00390	0 03096	1.3926	1.1801
4	AVE ATT TO SELF	1.7682	0 01003	0.00567	1.3205	1.1491
5	AVE ATT TO PLANNING	2 9203	0 01318	0.00451	1.0301	1.0149
6	AVE IMPORTANCE OF PROX TO PARENT	1.9580	0 00907	0.00463	1.2432	1.1150
7	AVE BOTH MATH NOT ATTEMPTED	0.3384	0.02037	0.06020	3.0463	1.7454
8	PROP MT 3 HRS ON HOMEWORK	0.4569	0 00913	0.01997	3.2551	1.8042
9	PROP LT B AVERAGE	0.5687	0 00940	0.01653	3.4786	1 8651
10	PROP MT 3.50 MIN WAGE	0.5969	0.00798	0.01337	2.5332	1.5916
11	PROP FATHER NOT US NATIVE	0.1786	0.00628	0.03515	2.6581	1.6304
12	AVE QUALITY OF INSTRUCTION	2.6818	0.01922	0 00717	2.3043	1.5180
13	AVE 'SOMEONE PREVENTS SUCCESS'	2.6745	0.01093	0.00409	0.7815	0.8840
14	PROP NEVER CUT CLASSES	0.7495	0.00841	0.01122	3.2231	1.7953
15	PROP HARD OF HEARING	0.0055	0 00091	0.16707	1.6347	1.2785
16	PROP W/ NO PLACE TO STUDY	0.5250	0 00800	0 01523	2.5044	1 5825
17	PROP NOT PLANNING ON COLLEGE	0.3678	0 00900	0.02446	3.6588	1 9128
18	PROP ABSENT MT 2 DAYS	0.3398	0 00699	0 02058	2 1176	1 4552
19	PROP DID NOT WORK LAST WK	0.6155	0.00767	0.01246	2.3947	1.5475
20	PROP NOT LOOKING FOR WORK	0.7585	0 00611	0.00805	1.9301	1 3893
21	PROP WHOSE MOM FINISHED COLLEGE	0.1198	0 00716	0.05973	5.8142	2.4113
22	PROP- GOOD LUCK NOT IMPORTANT	0.8131	0 00641	0.00788	1.8858	1.3732
23	PROP FEEL PROUD	0.8349	0.00519	0 00621	1.3033	1.1416
24	PROP EXPECT TO FINISH COLLEGE	0.3917	0 00964	0.02462	3.8390	1.9593
25	PROP W/ HANDICAP	0.1652	0.00579	0.03502	2.5452	1.5954
26	PROP W/ VOCATIONAL PROGRAM	0.2425	0.01046	0.04313	5.8669	2.4222
27	AVE BOTH READING TEST- RIGHT	3 3410	0 04226	0.01265	3.8423	1 9602
28	AVE BOTH VOCAB TEST- RIGHT	3.3860	0 04187	0.01237	4.2389	2.0589
29	AVE BOTH MATH TEST- RIGHT	8.6167	0.09336	0.01084	4.1850	2 0457
30	AVE CIVICS TEST-RIGHT	5.5199	0 04354	0 00789	2.6699	1.6340
31	AVE READING TEST- RIGHT	8.3412	0.08555	0.01026	3.7855	1 9456
32	AVE SCIENCE TEST- RIGHT	10.0825	0 09613	0.00953	4.1045	2.0260
33	AVE VOCAB TEST- RIGHT	9.7862	0.11325	0.01157	4.9614	2 2274
34	AVE WRITING TEST- RIGHT	9 5638	0.09779	0.01023	3.9741	1 9935
35	AVE EARNING/HR	2.6179	0.01766	0.00675	1.7046	1.3056
MEAN				0.02161	2.8655	1 6498
MEDIAN				0 01237	2.6395	1 6246
STANDARD DEVIATION				0 02904	1.2874	0 3848

NOTE: SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 15 NAME=N CENTRAL

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS /WK	0.6467	0.00658	0.01018	1 6035	1 2663
2	PROP EARNED LT $1000	0.5488	0.00806	0.01469	2.2364	1.4955
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1447	0.00482	0.03331	1.6736	1.2937
4	AVE ATT TO SELF	1.8478	0.00911	0 00493	0.9738	0.9868
5	AVE ATT TO PLANNING	2.9940	0.01213	0.00405	0.8040	0.8966
6	AVE IMPORTANCE OF PROX TO PARENT	1.9470	0.00899	0.00462	1.1425	1.0689
7	AVE BOTH MATH NOT ATTEMPTED	0.2275	0.01357	0.05963	2.1831	1.4775
8	PROP MT 3 HRS ON HOMEWORK	0 5158	0.00855	0.01658	2.5094	1.5841
9	PROP LT B AVERAGE	0.5673	0.00787	0.01388	2.1576	1.4689
10	PROP MT 3.50 MIN WAGE	0.6042	0 00850	0.01406	2.5582	1.5994
11.	PROP FATHER NOT US NATIVE	0.1166	0.00627	0.05376	3.3630	1.8338
12	AVE QUALITY OF INSTRUCTION	2.7032	0.02024	0.00749	2.4350	1.5605
13	AVE 'SOMEONE PREVENTS SUCCESS'	2.7519	0.01046	0.00380	0.6396	0.7997
14	PROP NEVER CUT CLASSES	0.7225	0.01121	0.01552	4.8643	2.2055
15.	PROP HARD OF HEARING	0.0053	0.00097	0.18116	1.6992	1.3036
16	PROP W/ NO PLACE TO STUDY	0.5570	0.00778	0.01397	2.0771	1.4412
17	PROP NOT PLANNING ON COLLEGE	0.3988	0.00948	0.02379	3.4117	1.8471
18	PROP ABSENT MT 2 DAYS	0 3179	0.00774	0.02434	2.3788	1.5423
19	PROP DID NOT WORK LAST WK	0.5491	0.00771	0.01403	2.0526	1.4327
20	PROP NOT LOOKING FOR WORK	0.7471	0.00673	0.00901	2.0151	1.4195
21	PROP WHOSE MOM FINISHED COLLEGE	0.1254	0.00694	0.05539	4.4613	2.1122
22	PROP- GOOD LUCK NOT IMPORTANT	0 8750	0.00464	0.00530	0 9941	0.9971
23	PROP FEEL PROUD	0.8485	0.00468	0.00552	0.9301	0.9798
24	PROP EXPECT TO FINISH COLLEGE	0.3713	0.00886	0.02387	2.9268	1.7108
25	PROP W/ HANDICAP	0.1460	0.00514	0.03517	2,0010	1.4146
26	PROP W/ VOCATIONAL PROGRAM	0.1973	0 00896	0.04542	4.4197	2.1023
27	AVE BOTH READING TEST- RIGHT	3.8477	0.03914	0.01017	2.8141	1.6775
28	AVE BOTH VOCAB TEST- RIGHT	3.8237	0.03929	0.01028	3.1484	1.7744
29	AVE BOTH MATH TEST- RIGHT	10.0906	0.08970	0.00889	3.2187	1.7941
30	AVE CIVICS TEST-RIGHT	6.0061	0.04152	0.00691	2 3191	1.5228
31	AVE READING TEST- RIGHT	9.4206	0.07646	0.00812	2.6009	1.6127
32	AVE SCIENCE TEST- RIGHT	11.5050	0.09059	0 00787	3.3436	1.8285
33	AVE VOCAB TEST- RIGHT	11 1637	0.09454	0.00847	3.1834	1.7842
34	AVE WRITING TEST- RIGHT	10.7147	0.07971	0.00744	2.5348	1.5921
35	AVE EARNING/HR	2.4744	0.01581	0.00639	1.4733	1.2158
MEAN				0.02194	2.3766	1.5041
MEDIAN				0.01028	2 3191	1.5228
STANDARD DEVIATION				0.03169	1,0304	0.3432

NOTE. SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 16 NAME=WEST

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.6620	0.00950	0.01435	2.1961	1.4819
2	PROP EARNED LT $1000	0.5117	0.01072	0.02095	2 5415	1 5942
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1367	0.00560	0.04100	1.5088	1.2283
4	AVE ATT TO SELF	1.7896	0.01160	0 00648	1 1086	1.0529
5	AVE ATT TO PLANNING	3.0613	0.01497	0.00489	0.8486	0.9212
6	AVE IMPORTANCE OF PROX TO PARENT	1.9708	0.01403	0.00712	1.8540	1.3616
7	AVE BOTH MATH NOT ATTEMPTED	0.3363	0.03854	0.11462	5 9514	2.4395
8	PROP MT 3 HRS ON HOMEWORK	0.5154	0.01386	0.02689	4.2485	2.0612
9	PROP LT B AVERAGE	0.5426	0.01063	0.01960	2.5121	1.5850
10	PROP MT 3.50 MIN WAGE	0.6573	0.01005	0.01529	2.4260	1.5576
11	PROP FATHER NOT US NATIVE	0.2106	0.00983	0.04668	3.2885	1.8134
12	AVE QUALITY OF INSTRUCTION	2.7117	0.02943	0.01085	3.3721	1.8363
13	AVE 'SOMEONE PREVENTS SUCCESS'	2.8193	0.01469	0.00521	0.8610	0.9279
14	PROP NEVER CUT CLASSES	0.5956	0.01217	0.02043	3.3352	1.8263
15	PROP HARD OF HEARING	0.0044	0.00098	0.22356	1.3211	1.1494
16	PROP W/ NO PLACE TO STUDY	0.4916	0.01026	0.02087	2.3526	1.5338
17	PROP NOT PLANNING ON COLLEGE	0.2956	0.00988	0.03344	2.7450	1.6568
18	PROP ABSENT MT 2 DAYS	0.4143	0.01044	0.02521	2.4899	1.5779
19	PROP DID NOT WORK LAST WK	0.5604	0.01068	0.01906	2.5553	1.5985
20	PROP NOT LOOKING FOR WORK	0.7502	0.00693	0.00924	1.3923	1.1800
21	PROP WHOSE MOM FINISHED COLLEGE	0 1802	0.01279	0.07096	7 5005	2.7387
22	PROP- GOOD LUCK NOT IMPORTANT	0.8638	0.00680	0.00787	1.4074	1.1863
23	PROP FEEL PROUD	0.8515	0.00674	0.00792	1.3661	1 1688
24	PROP EXPECT TO FINISH COLLEGE	0.4340	0.01284	0.02959	3.7568	1.9382
25	PROP W/ HANDICAP	0.1417	0.00607	0.04283	1 7957	1.3400
26	PROP W/ VOCATIONAL PROGRAM	0.1545	0.00903	0.05846	3.5159	1.8751
27	AVE BOTH READING TEST- RIGHT	3.7353	0.05779	0.01547	3.6760	1.9173
28	AVE BOTH VOCAB TEST- RIGHT	4.0061	0.06574	0.01641	5 0392	2.2448
29	AVE BOTH MATH TEST- RIGHT	9.8065	0.13651	0.01392	4.2814	2.0691
30	AVE CIVICS TEST-RIGHT	5 8429	0 06345	0.01086	2 8693	1.6939
31	AVE READING TEST- RIGHT	9.3267	0.11558	0.01239	3.4155	1 8481
32	AVE SCIENCE TEST- RIGHT	11.2473	0 12489	0.01110	3.3898	1 8411
33	AVE VOCAB TEST- RIGHT	11.4850	0 15322	0.01334	4.5162	2.1251
34	AVE WRITING TEST- RIGHT	10.5919	0 13053	0.01232	3 4787	1.8651
35	AVE EARNING/HR	2.7142	0.02400	0.00884	1.8433	1.3577
MEAN				0 02909	2 8789	1 6455
MEDIAN				0.01547	2.5553	1 5985
STANDARD DEVIATION				0 04039	1.4592	0 4197

NOTE· SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 17 NAME=GENERAL

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.6462	0 00553	0.00855	1.7713	1.3309
2	PROP EARNED LT $1000	0.5484	0.00632	0.01152	2.1476	1 4655
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1517	0.00363	0.02394	1.4197	1 1915
4	AVE ATT TO SELF	1.8384	0.00720	0.00392	0.9183	0.9583
5	AVE ATT TO PLANNING	2.9008	0.00929	0.00320	0.7418	0.8613
6	AVE IMPORTANCE OF PROX TO PARENT	1.9512	0.00715	0.00366	1.1488	1 0718
7	AVE BOTH MATH NOT ATTEMPTED	0.2934	0.01639	0.05588	3.1656	1.7792
8	PROP MT 3 HRS ON HOMEWORK	0.4334	0.00654	0.01510	2.3453	1.5315
9	PROP LT B AVERAGE	0.6336	0.00628	0.00992	2.2638	1 5046
10	PROP MT 3.50 MIN WAGE	0.6076	0.00610	0.01003	2.0665	1 4375
11	PROP FATHER NOT US NATIVE	0.1577	0 00486	0 03082	2.4438	1 5633
12	AVE QUALITY OF INSTRUCTION	2.5843	0.01282	0.00496	1.5317	1 2376
13	AVE 'SOMEONE PREVENTS SUCCESS'	2.6916	0.00793	0.00295	0.5849	0 7648
14	PROP NEVER CUT CLASSES	0.6576	0.00698	0.01062	2.7653	1.6629
15	PROP HARD OF HEARING	0.0044	0.00064	0.14548	1.3896	1 1788
16	PROP W/ NO PLACE TO STUDY	0.5576	0.00557	0.00999	1.6649	1.2903
17	PROP NOT PLANNING ON COLLEGE	0.4374	0.00697	0.01557	2.7386	1 6549
18	PROP ABSENT MT 2 DAYS	0.3862	0.00560	0.01451	1.7816	1.3348
19	PROP DID NOT WORK LAST WK	0.5745	0.00574	0.00999	1.8030	1.3428
20	PROP NOT LOOKING FOR WORK	0.7439	0.00507	0.00681	1.7787	1.3337
21	PROP WHOSE MOM FINISHED COLLEGE	0.1129	0.00461	0.04083	3.5116	1.8739
22	PROP- GOOD LUCK NOT IMPORTANT	0.8379	0.00419	0.00500	1.1578	1 0760
23	PROP FEEL PROUD	0.8295	0.00404	0.00487	1.0748	1.0367
24	PROP EXPECT TO FINISH COLLEGE	0.3003	0.00593	0.01975	2.2936	1.5145
25	PROP W/ HANDICAP	0.1517	0.00414	0.02730	1.9421	1.3936
26	PROP W/ VOCATIONAL PROGRAM	0.0	0.0	0.0	0.0	0.0
27	AVE BOTH READING TEST- RIGHT	3.4279	0.02417	0.00705	1.8373	1.3555
28	AVE BOTH VOCAB TEST- RIGHT	3.5149	0.02497	0.00710	2.1500	1 4663
29	AVE BOTH MATH TEST- RIGHT	8.3911	0.05721	0.00636	2.2326	1.4942
30	AVE CIVICS TEST-RIGHT	5.6263	0.02708	0.00481	1.4818	1.2173
31	AVE READING TEST- RIGHT	8.5855	0 04784	0.00557	1.7739	1 3319
32	AVE SCIENCE TEST- RIGHT	10.5992	0 05475	0.00517	1.8971	1.3774
33	AVE VOCAB TEST- RIGHT	10.3371	0.06130	0 00593	2.1699	1.4731
34	AVE WRITING TEST- RIGHT	9.8054	0.05820	0.00594	2.0608	1.4355
35	AVE EARNING/HR	2.5770	0.01264	0 00490	1.3413	1 1581

MEAN				0.01612	1.8646	1 3441
MEDIAN				0 00783	1.8202	1.3491
STANDARD DEVIATION				0.02562	0.6473	0 2443

NOTE. SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 18 NAME=ACADEMIC

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.7223	0 00573	0.00794	1.6036	1.2663
2	PROP EARNED LT $1000	0.5923	0 00695	0 01173	1.9695	1.4034
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.0960	0 00345	0.03592	1 3832	1.1761
4	AVE ATT TO SELF	1.7731	0 00830	0.00468	1.1626	1.0782
5	AVE ATT TO PLANNING	3.1554	0 00943	0.00299	0.7193	0 8481
6	AVE IMPORTANCE OF PROX TO PARENT	1.9554	0 00892	0.00456	1.5098	1.2288
7	AVE BOTH MATH NOT ATTEMPTED	0.2291	0.01320	0.05760	2.5430	1.5947
8	PROP MT 3 HRS ON HOMEWORK	0.6927	0 00708	0.01022	2.3186	1.5227
9	PROP LT B AVERAGE	0.3388	0.00814	0.02404	2.9525	1.7183
10	PROP MT 3.50 MIN WAGE	0.6076	0.00658	0 01084	1.7907	1 3382
11	PROP FATHER NOT US NATIVE	0.1489	0.00563	0.03780	2.5227	1.5883
12	AVE QUALITY OF INSTRUCTION	2.9342	0.01654	0.00564	2.5602	1.6000
13	AVE 'SOMEONE PREVENTS SUCCESS'	2.9057	0.00946	0.00326	0.7212	0.8492
14	PROP NEVER CUT CLASSES	0.7788	0.00691	0.00887	2.5574	1.5992
15	PROP HARD OF HEARING	0.0026	0 00058	0.22873	1.4656	1 2106
16	PROP W/ NO PLACE TO STUDY	0.4578	0.00717	0.01567	2.0917	1 4463
17	PROP NOT PLANNING ON COLLEGE	0.1268	0 00477	0 03755	2.1969	1.4822
18	PROP ABSENT MT 2 DAYS	0.2536	0.00562	0.02215	1.6621	1.2892
19	PROP DID NOT WORK LAST WK	0.5964	0.00745	0.01250	2.2901	1.5133
20	PROP NOT LOOKING FOR WORK	0.7930	0.00482	0.00608	1.3832	1 1761
21	PROP WHOSE MOM FINISHED COLLEGE	0.2298	0 00813	0.03537	4 1582	2 0392
22	PROP- GOOD LUCK NOT IMPORTANT	0.9111	0 00406	0 00446	1 1860	1 0891
23	PROP FEEL PROUD	0.8984	0.00360	0.00400	0.9183	0.9583
24	PROP EXPECT TO FINISH COLLEGE	0.6936	0.00685	0.00987	2.1328	1.4604
25	PROP W/ HANDICAP	0.1163	0.00435	0 03738	1 9877	1.4099
26	PROP W/ VOCATIONAL PROGRAM	0.0	0.0	0.0	0 0	0.0
27	AVE BOTH READING TEST- RIGHT	4 5439	0.03365	0 00741	2.2202	1 4900
28	AVE BOTH VOCAB TEST- RIGHT	4.6669	0.03764	0 00807	3.0277	1.7400
29	AVE BOTH MATH TEST- RIGHT	11.6386	0.07151	0.00614	2 3000	1 5166
30	AVE CIVICS TEST-RIGHT	6.6658	0.03396	0.00509	1.6039	1.2664
31	AVE READING TEST- RIGHT	10.9340	0.06823	0.00624	2.1395	1.4627
32	AVE SCIENCE TEST- RIGHT	12.5135	0 06941	0.00555	2.1250	1 4577
33	AVE VOCAB TEST- RIGHT	13.0992	0.08332	0 00636	2.6001	1 6125
34	AVE WRITING TEST- RIGHT	12.1602	0.06481	0 00533	1 8481	1 3594
35	AVE EARNING/HR	2.5022	0.01598	0.00639	1 5326	1 2380
MEAN				0 02049	1 9760	1 3832
MEDIAN				0 00800	2.0397	1.4281
STANDARD DEVIATION				0 03922	0 7047	0.2542

NOTE SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 19 NAME=VOCATIONAL

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.6421	0.00786	0.01223	1.5885	1.2604
2	PROP EARNED LT $1000	0.5140	0.00868	0 01688	1.8063	1.3440
3	PROP 'SUCCESS IN WORK VERY IMPOR	0.1432	0.00562	0.03926	1.6341	1.2783
4	AVE ATT TO SELF	1.7771	0 01105	0 00622	0.9149	0 9565
5	AVE ATT TO PLANNING	2 8170	0.01500	0.00533	0.7757	0.8808
6	AVE IMPORTANCE OF PROX TO PARENT	1 9860	0.01139	0.00574	1.0713	1.0351
7	AVE BOTH MATH NOT ATTEMPTED	0.3428	0.01937	0.05652	1.7909	1 3383
8	PROP MT 3 HRS ON HOMEWORK	0.4014	0 00859	0.02141	1.8517	1.3608
9	PROP LT B AVERAGE	0.6780	0.00702	0.01035	1.3387	1.1570
10	PROP MT 3.50 MIN WAGE	0 6251	0 00862	0.01379	1.8666	1 3663
11	PROP FATHER NOT US NATIVE	0.2063	0.00747	0.03621	2.1073	1.4517
12	AVE QUALITY OF INSTRUCTION	2 6198	0.01643	0.00627	0.9727	0.9863
13	AVE 'SOMEONE PREVENTS SUCCESS'	2.6202	0.01362	0.00520	0.7124	0.8441
14	PROP NEVER CUT CLASSES	0 6630	0.00998	0.01505	2.4911	1.5783
15	PROP HARD OF HEARING	0.0075	0.00134	0.17795	1.6132	1.2701
16	PROP W/ NO PLACE TO STUDY	0.5557	0.00807	0.01452	1.5737	1.2545
17	PROP NOT PLANNING ON COLLEGE	0.5366	0.01021	0.01903	2.5405	1.5939
18	PROP ABSENT MT 2 DAYS	0.4061	0.00841	0.02070	1.7605	1.3268
19	PROP DID NOT WORK LAST WK	0.5573	0 00817	0.01466	1.6174	1.2718
20	PROP NOT LOOKING FOR WORK	0.7016	0.00800	0.01141	1.8056	1.3437
21	PROP WHOSE MOM FINISHED COLLEGE	0 0640	0.00450	0.07025	2.6770	1 6362
22	PROP- GOOD LUCK NOT IMPORTANT	0.7651	0.00787	0.01029	1.6010	1.2653
23	PROP FEEL PROUD	0.7950	0 00701	0.00882	1.3151	1 1468
24	PROP EXPECT TO FINISH COLLEGE	0 1853	0.00749	0.04039	2.3427	1.5306
25	PROP W/ HANDICAP	0.2056	0.00743	0 03615	2.2101	1.4866
26	PROP W/ VOCATIONAL PROGRAM	1.0000	0.0	0.0	0.0	0 0
27	AVE BOTH READING TEST- RIGHT	2.8677	0.03474	0.01212	2.0205	1.4215
28	AVE BOTH VOCAB TEST- RIGHT	2.9928	0.03454	0.01154	2.1278	1.4587
29	AVE BOTH MATH TEST- RIGHT	7.6284	0.07632	0.01000	2.0295	1.4246
30	AVE CIVICS TEST-RIGHT	5.0222	0.03976	0.00792	1.4580	1.2075
31	AVE READING TEST- RIGHT	7.3156	0.06786	0.00928	1.8507	1.3604
32	AVE SCIENCE TEST- RIGHT	9.2943	0.08474	0.00912	2.0258	1.4233
33	AVE VOCAB TEST- RIGHT	8.7795	0.08702	0.00991	2.1525	1.4671
34	AVE WRITING TEST- RIGHT	8.4361	0.08468	0.01004	2.0521	1.4325
35	AVE EARNING/HR	2.6018	0.01747	0.00672	1.1031	1.0503

MEAN	0.02239	1.7294	1.3003
MEDIAN	0.01183	1 7983	1 3410
STANDARD DEVIATION	0 03139	0.4971	0 1995

NOTE: SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SENIOR ESTIMATES

SUMMARY TABLE FOR SUBCLASS NO. 1 NAME=ALL

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.3344	0.00448	0 01340	2 5616	1 6005
2	PROP EARNED LT $1000	0.2036	0.00380	0 01868	2 6671	1 6331
3	PROP W/ LT $1000 EXPENSES	0.4174	0.00414	0 00993	2.0447	1 4299
4	PROP ACCEPTED IN ARMED FORCES	0 0465	0.00166	0 03565	1 7913	1 3384
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.8834	0.00233	0.00264	1.2946	1 1378
6	AVE ATT TO SELF	1.7545	0 00559	0.00319	1.4765	1.2151
7	AVE ATT TO PLANNING	3.0589	0.00680	0 00222	0 9945	0.9973
8	AVE IMPORTANCE OF PROX TO PARENT	1.8167	0.00526	0 00289	1 5146	1.2307
9	AVE SEN VOCAB NOT ATTEMPTED	0.7657	0.02337	0 02974	5 8777	2.4244
10	AVE BOTH MATH NOT ATTEMPTED	0.2972	0.01006	0.03383	2.7671	1 6635
11	PROP MT 3 HRS ON HOMEWORK	0.4564	0.00576	0.01262	3.7785	1 9438
12	PROP LT B AVERAGE	0.4657	0.00510	0.01095	2 9569	1.7196
13	PROP MT 3.50 MIN WAGE	0.6155	0 00503	0 00817	2 9870	1 7283
14	AVE ATT TO SCHOOL COUNSELING	2.5746	0.01175	0.00456	2.2348	1 4949
15	PROP FATHER NOT US NATIVE	0.1295	0.00348	0 02686	3 1111	1.7638
16	AVE QUALITY OF INSTRUCTION	2.7235	0.01106	0 00406	3.0742	1 7533
17	AVE 'SOMEONE PREVENTS SUCCESS'	2.8579	0.00657	0.00230	0 9793	0.9896
18	PROP NEVER CUT CLASSES	0.5517	0.00617	0 01119	4.3209	2 0787
19	PROP HARD OF HEARING	0.0038	0.00044	0.11394	1.5220	1.2337
20	PROP W/ NO PLACE TO STUDY	0.5116	0.00437	0 00854	2.1647	1 4713
21	PROP NOT PLANNING ON COLLEGE	0.3012	0.00535	0.01776	4 0954	2.0237
22	PROP ABSENT MT 2 DAYS	0 4227	0.00444	0.01051	2.2904	1 5134
23	PROP DID NOT WORK LAST WK	0.3680	0 00468	0 01272	2.6687	1.6336
24	PROP NOT LOOKING FOR WORK	0.7788	0.00316	0.00406	1.6071	1 2677
25	PROP WHOSE MOM FINISHED COLLEGE	0.1471	0.00460	0.03130	5 3871	2 3210
26	PROP- GOOD LUCK NOT IMPORTANT	0.8773	0 00278	0.00317	1.3767	1 1733
27	PROP FEEL PROUD	0.8822	0.00244	0.00277	1.1070	1.0521
28	PROP EXPECT TO FINISH COLLEGE	0.4550	0 00615	0.01352	4.3300	2.0809
29	PROP W/ HANDICAP	0.1050	0.00234	0.02229	1 7554	1 3249
30	PROP W/ VOCATIONAL PROGRAM	0.2476	0.00521	0.02102	4.1530	2 0379
31	AVE BOTH READING TEST- RIGHT	4.5395	0.02479	0.00546	2.8412	1.6856
32	AVE BOTH VOCAB TEST- RIGHT	4 5769	0.02693	0 00588	3.6038	1.8984
33	AVE BOTH MATH TEST- RIGHT	10.8029	0.05722	0.00530	3 2162	1 7934
34	AVE MOSAIC(1) TEST- RIGHT	27.0102	0.17071	0.00632	4 7728	2.1847
35	AVE PICTURE TEST- RIGHT	11.3399	0.04222	0.00372	1 8187	1 3486
36	AVE READING TEST- RIGHT	10 9087	0.05383	0 00493	2.8573	1 6904
37	AVE VISUAL TEST- RIGHT	7 6781	0.03607	0 00470	2 2819	1 5106
38	AVE EARNING/HR	3.1427	0.00833	0.00265	1.7726	1.3314
MEAN				0 01404	2 6856	1 5979
MEDIAN				0 00835	2 6144	1 6168
STANDARD DEVIATION				0.01923	1 2299	0 3688

NOTE: SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 2 NAME=MALES

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.2786	0.00546	0.01961	1.9255	1.3876
2	PROP EARNED LT $1000	0.1377	0.00404	0.02936	1.8365	1.3552
3	PROP W/ LT $1000 EXPENSES	0.3996	0.00546	0.01368	1.6303	1.2768
4	PROP ACCEPTED IN ARMED FORCES	0.0647	0.00278	0.04288	1.6807	1.2964
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.8907	0.00347	0.00389	1.4786	1.2160
6	AVE ATT TO SELF	1.6593	0.00702	0.00423	1.2608	1.1228
7	AVE ATT TO PLANNING	3.0104	0.00879	0.00292	0.7809	0.8837
8	AVE IMPORTANCE OF PROX TO PARENT	1.7923	0.00699	0.00390	1.3228	1.1501
9	AVE SEN VOCAB NOT ATTEMPTED	0.7938	0.02588	0.03261	3.2777	1.8104
10	AVE BOTH MATH NOT ATTEMPTED	0.2333	0.01170	0.05015	2.1455	1.4648
11	PROP MT 3 HRS ON HOMEWORK	0.3905	0.00705	0.01804	2.6972	1.6423
12	PROP LT B AVERAGE	0.5367	0.00634	0.01182	2.0856	1.4442
13	PROP MT 3 50 MIN WAGE	0.7148	0.00585	0.00818	2.1291	1.4591
14	AVE ATT TO SCHOOL COUNSELING	2.5729	0.01488	0.00578	1.6045	1.2667
15	PROP FATHER NOT US NATIVE	0.1241	0.00432	0.03481	2.2594	1.5031
16	AVE QUALITY OF INSTRUCTION	2.7477	0.01382	0.00503	2.4192	1.5554
17	AVE 'SOMEONE PREVENTS SUCCESS'	2.8133	0.00890	0.00316	0.8509	0.9224
18	PROP NEVER CUT CLASSES	0.5079	0.00713	0.01405	2.6280	1.6211
19	PROP HARD OF HEARING	0.0051	0.00069	0.13502	1.3073	1.1434
20	PROP W/ NO PLACE TO STUDY	0.4775	0.00617	0.01293	1.9856	1.4091
21	PROP NOT PLANNING ON COLLEGE	0.3347	0.00706	0.02110	3.0045	1.7333
22	PROP ABSENT MT 2 DAYS	0.4281	0.00625	0.01461	2.0650	1.4370
23	PROP DID NOT WORK LAST WK	0.3448	0.00606	0.01758	2.1017	1.4497
24	PROP NOT LOOKING FOR WORK	0.7711	0.00466	0.00604	1.5691	1.2526
25	PROP WHOSE MOM FINISHED COLLEGE	0.1623	0.00611	0.03763	4.0283	2.0071
26	PROP- GOOD LUCK NOT IMPORTANT	0.8562	0.00403	0.00471	1.2522	1.1190
27	PROP FEEL PROUD	0.8787	0.00358	0.00407	1.1124	1.0547
28	PROP EXPECT TO FINISH COLLEGE	0.4724	0.00781	0.01653	3.1680	1.7799
29	PROP W/ HANDICAP	0.1124	0.00331	0.02950	1.5143	1.2306
30	PROP W/ VOCATIONAL PROGRAM	0.2298	0.00668	0.02908	3.2882	1.8134
31	AVE BOTH READING TEST- RIGHT	4.5914	0.03004	0.00654	1.8432	1.3577
32	AVE BOTH VOCAB TEST- RIGHT	4.6383	0.03230	0.00696	2.3020	1.5172
33	AVE BOTH MATH TEST- RIGHT	11.4057	0.06669	0.00585	1.8651	1.3657
34	AVE MOSAIC(1) TEST- RIGHT	26.5981	0.18813	0.00707	2.6819	1.6376
35	AVE PICTURE TEST- RIGHT	11.0467	0.05156	0.00467	1.2468	1.1166
36	AVE READING TEST- RIGHT	11.0237	0.06501	0.00590	1.8204	1.3492
37	AVE VISUAL TEST- RIGHT	8.1162	0.04727	0.00582	1.6139	1.2704
38	AVE EARNING/HR	3.3446	0.00911	0.00272	1.1700	1.0817
MEAN				0.01785	1.9725	1.3817
MEDIAN				0.01000	1.8542	1.3617
STANDARD DEVIATION				0.02321	0.7302	0.2551

NOTE SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 3 , NAME=FEMALES

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.3867	0.00598	0 01546	2 1295	1.4593
2	PROP EARNED LT $1000	0 2654	0 00537	0.02023	2 1461	1.4650
3	PROP W/ LT $1000 EXPENSES	0.4346	0.00560	0.01288	1.8169	1.3479
4	PROP ACCEPTED IN ARMED FORCES	0.0274	0.00165	0 06028	1.4608	1.2086
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.8786	0.00329	0.00375	1.3732	1.1719
6	AVE ATT TO SELF	1.8444	0.00740	0.00401	1.2903	1.1359
7	AVE ATT TO PLANNING	3.1120	0.00881	0.00283	1.0101	1.0051
8	AVE IMPORTANCE OF PROX TO PARENT	1.8373	0 00731	0.00398	1 6172	1.2717
9	AVE SEN VOCAB NOT ATTEMPTED	0.7454	0.02764	0.03708	4.4419	2.1076
10	AVE BOTH MATH NOT ATTEMPTED	0.3256	0.01309	0.04020	2.2489	1.4996
11	PROP MT 3 HRS ON HOMEWORK	0.5252	0.00684	0.01302	2.6417	1.6253
12	PROP LT B AVERAGE	0.3833	0.00634	0.01654	2.4000	1.5492
13	PROP MT 3 50 MIN WAGE	0.5191	0 00674	0.01298	2.5602	1 6001
14	AVE ATT TO SCHOOL COUNSELING	2.5957	0.01442	0.00555	1.7523	1.3237
15	PROP FATHER NOT US NATIVE	0.1303	0.00420	0.03226	2 2393	1.4964
16	AVE QUALITY OF INSTRUCTION	2.7075	0.01248	0.00461	2.0755	1 4406
17	AVE 'SOMEONE PREVENTS SUCCESS'	2.9050	0 00849	0 00292	0 9495	0.9744
18	PROP NEVER CUT CLASSES	0.5922	0.00756	0 01276	3 3157	1.8209
19	PROP HARD OF HEARING	0.0021	0.00045	0.21397	1.4420	1.2008
20	PROP W/ NO PLACE TO STUDY	0.5426	0.00568	0.01047	1.8232	1.3503
21	PROP NOT PLANNING ON COLLEGE	0.2698	0.00586	0.02170	2.5541	1.5982
22	PROP ABSENT MT 2 DAYS	0.4138	0.00551	0.01332	1 7660	1.3289
23	PROP DID NOT WORK LAST WK	0.3892	0.00619	0.01592	2.2747	1.5082
24	PROP NOT LOOKING FOR WORK	0.7877	0.00438	0.00555	1.5989	1 2645
25	PROP WHOSE MOM FINISHED COLLEGE	0.1358	0.00514	0.03783	3 5064	1.8725
26	PROP- GOOD LUCK NOT IMPORTANT	0.9011	0.00327	0.00363	1.1787	1.0857
27	PROP FEEL PROUD	0.8890	0.00318	0.00358	1.0695	1.0342
28	PROP EXPECT TO FINISH COLLEGE	0.4487	0.00709	0.01579	2.8670	1.6932
29	PROP W/ HANDICAP	0.0958	0 00305	0.03184	1.6095	1.2687
30	PROP W/ VOCATIONAL PROGRAM	0.2567	0.00621	0.02419	2.8751	1 6956
31	AVE BOTH READING TEST- RIGHT	4.5757	0 02915	0.00637	2 0697	1 4386
32	AVE BOTH VOCAB TEST- RIGHT	4.6128	0.03129	0.00678	2 5722	1.6038
33	AVE BOTH MATH TEST- RIGHT	10.4394	0.06428	0.00616	2.2588	1.5029
34	AVE MOSAIC(1) TEST- RIGHT	27.7085	0 19205	0.00693	3.1235	1 7673
35	AVE PICTURE TEST- RIGHT	11.6947	0 05131	0.00439	1.4145	1.1893
36	AVE READING TEST- RIGHT	11.0121	0.06127	0 00556	1 9984	1 4136
37	AVE VISUAL TEST- RIGHT	7.3419	0.04118	0.00561	1.7122	1.3085
38	AVE EARNING/HR	2 9455	0.01101	0.00374	1.5389	1.2405
	MEAN			0 01960	2 0716	1 4176
	MEDIAN			0 01162	2.0340	1 4261
	STANDARD DEVIATION			0.03494	0 7494	0.2525

NOTE: SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO 4 NAME=WHITE

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.3226	0.00491	0.01521	1 9053	1.3803
2	PROP EARNED LT $1000	0.2022	0 00444	0.02194	2.1827	1.4774
3	PROP W/ LT $1000 EXPENSES	0.4089	0.00509	0.01246	1 8784	1.3706
4	PROP ACCEPTED IN ARMED FORCES	0.0342	0 00172	0.05027	1.5634	1.2503
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.8844	0.00271	0.00307	1 1538	1.0742
6	AVE ATT TO SELF	1.7942	0 00604	0 00337	1 1201	1.0584
7	AVE ATT TO PLANNING	3.1193	0.00742	0.00238	0 8525	0.9233
8	AVE IMPORTANCE OF PROX TO PARENT	1.8004	0.00625	0.00347	1.4564	1 2068
9	AVE SEN VOCAB NOT ATTEMPTED	0.7742	0 02448	0.03161	4.2067	2 0510
10	AVE BOTH MATH NOT ATTEMPTED	0.2387	0 00963	0.04035	2 0293	1.4245
11	PROP MT 3 HRS ON HOMEWORK	0 4702	0 00673	0 01432	3.1319	1.7697
12	PROP LT B AVERAGE	0.4087	0.00559	0.01368	2 2303	1.4934
13	PROP MT 3.50 MIN WAGE	0.5960	0.00601	0.01009	2.5712	1.6035
14	AVE ATT TO SCHOOL COUNSELING	2.6511	0 01351	0.00510	1.7645	1.3283
15	PROP FATHER NOT US NATIVE	0.0816	0 00286	0.03504	1.9118	1.3827
16	AVE QUALITY OF INSTRUCTION	2.7583	0.01226	0 00445	2.6652	1.6325
17	AVE 'SOMEONE PREVENTS SUCCESS'	2.9065	0.00710	0.00244	0 7956	0.8920
18	PROP NEVER CUT CLASSES	0.5558	0.00711	0 01279	3.5073	1.8728
19	PROP HARD OF HEARING	0.0029	0.00045	0.15619	1.2748	1.1291
20	PROP W/ NO PLACE TO STUDY	0.5203	0 00518	0.00996	1 8504	1.3603
21	PROP NOT PLANNING ON COLLEGE	0.2937	0.00597	0.02033	3 0942	1.7590
22	PROP ABSENT MT 2 DAYS	0 4055	0 00533	0.01313	2.0270	1.4237
23	PROP DID NOT WORK LAST WK	0.3424	0 00552	0.01612	2.3317	1.5270
24	PROP NOT LOOKING FOR WORK	0 7949	0.00369	0.00464	1.4153	1.1897
25	PROP WHOSE MOM FINISHED COLLEGE	0 1568	0 00543	0 03461	4 1845	2.0456
26	PROP- GOOD LUCK NOT IMPORTANT	0.9092	0 00261	0.00287	0.9291	0 9639
27	PROP FEEL PROUD	0.8994	0 00277	0 00308	1 0287	1 0143
28	PROP EXPECT TO FINISH COLLEGE	0.4702	0.00703	0 01496	3.4239	1.8504
29	PROP W/ HANDICAP	0.0908	0.00265	0.02917	1.5419	1.2418
30	PROP W/ VOCATIONAL PROGRAM	0.2238	0 00555	0.02480	3.0734	1 7531
31	AVE BOTH READING TEST- RIGHT	4 9366	0 02356	0.00477	1 6296	1.2765
32	AVE BOTH VOCAB TEST- RIGHT	4 9436	0 02646	0.00535	2 2271	1 4924
33	AVE BOTH MATH TEST- RIGHT	11.6225	0.05462	0.00470	1.8823	1.3720
34	AVE MOSAIC(1) TEST- RIGHT	27.9890	0.18590	0 00664	3.8265	1 9561
35	AVE PICTURE TEST- RIGHT	11.6273	0 04372	0 00376	1.3026	1 1413
36	AVE READING TEST- RIGHT	11.7891	0.05028	0.00426	1.5887	1 2604
37	AVE VISUAL TEST- RIGHT	8.0740	0.03699	0 00458	1.4934	1 2220
38	AVE EARNING/HR	3 1378	0 00975	0.00311	1 6165	1 2714
MEAN				0 01708	2.0702	1 4064
MEDIAN				0 01003	1.8804	1 3713
STANDARD DEVIATION				0 02618	0 9149	0 3080

NOTE SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 5 NAME=BLACK

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.3997	0.01114	0.02786	2.0361	1.4269
2	PROP EARNED LT $1000	0.2385	0 00892	0 03739	1 8498	1 3601
3	PROP W/ LT $1000 EXPENSES	0.3952	0.01021	0 02584	1 7882	1 3372
4	PROP ACCEPTED IN ARMED FORCES	0 0795	0.00567	0.07126	1.7878	1 3371
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.9147	0.00600	0 00656	1.2593	1.1222
6	AVE ATT TO SELF	1 5400	0.01435	0 00932	1.4302	1.1959
7	AVE ATT TO PLANNING	2 9582	0.01981	0 00670	0 9496	0.3745
8	AVE IMPORTANCE OF PROX TO PARENT	1.8129	0.01453	0.00801	1 3702	1 1706
9	AVE SEN VOCAB NOT ATTEMPTED	0.9215	0.06174	0.06700	4 4404	2 1072
10	AVE BOTH MATH NOT ATTEMPTED	0 5159	0.03497	0.06778	2.5347	1 5921
11	PROP MT 3 HRS ON HOMEWORK	0.4986	0.01205	0.02418	2.2777	1 5092
12	PROP LT B AVERAGE	0.5642	0.01174	0.02081	2.1908	1.4801
13	PROP MT 3.50 MIN WAGE	0.6750	0.01013	0.01501	1.8041	1.3432
14	AVE ATT TO SCHOOL COUNSELING	2.3825	0.02605	0.01093	1.6573	1.2874
15	PROP FATHER NOT US NATIVE	0.2634	0.01064	0.04039	2.3839	1.5440
16	AVE QUALITY OF INSTRUCTION	2.6719	0.02287	0.00856	1.4675	1 2114
17	AVE 'SOMEONE PREVENTS SUCCESS'	2.7416	0.01877	0.00685	0.9283	0.9635
18	PROP NEVER CUT CLASSES	0.5972	0.01421	0 02380	3.2103	1 7917
19	PROP HARD OF HEARING	0.0032	0.00117	0.37235	1.8432	1.3577
20	PROP W/ NO PLACE TO STUDY	0.4706	0.01090	0.02316	1.9257	1 3877
21	PROP NOT PLANNING ON COLLEGE	0.2481	0.01114	0.04492	2.9450	1.7161
22	PROP ABSENT MT 2 DAYS	0.4235	0 01061	0 02506	1 8125	1.3463
23	PROP DID NOT WORK LAST WK	0.5020	0.01051	0.02094	1 7306	1.3155
24	PROP NOT LOOKING FOR WORK	0 7176	0 00907	0.01264	1 5728	1 2541
25	PROP WHOSE MOM FINISHED COLLEGE	0.1363	0.00835	0 06129	2 8430	1 6861
26	PROP- GOOD LUCK NOT IMPORTANT	0.7952	0 00943	0.01186	1.6404	1 2808
27	PROP FEEL PROUD	0.8542	0.00737	0.00863	1.1939	1 0927
28	PROP EXPECT TO FINISH COLLEGE	0.5263	0.01168	0.02219	2.1364	1.4616
29	PROP W/ HANDICAP	0.1203	0 00663	0.05514	1 7297	1.3152
30	PROP W/ VOCATIONAL PROGRAM	0.2859	0 01147	0 04011	2.5528	1 5978
31	AVE BOTH READING TEST- RIGHT	3.5616	0 05406	0.01518	2.2072	1.4857
32	AVE BOTH VOCAB TEST- RIGHT	3.5121	0 05095	0.01451	2.2240	1 4913
33	AVE BOTH MATH TEST- RIGHT	8.6794	0.12700	0.01463	2.5757	1.6049
34	AVE MOSAIC(1) TEST- RIGHT	23.3797	0.34276	0.01466	2.5556	1 5986
35	AVE PICTURE TEST- RIGHT	10.5536	0.11768	0 01115	1.7827	1 3352
36	AVE READING TEST- RIGHT	8.7659	0.10739	0 01225	1.9306	1 3895
37	AVE VISUAL TEST- RIGHT	6.4664	0 09476	0.01465	2.4679	1.5710
38	AVE EARNING/HR	3 0836	0.01754	0 00569	0.9066	0 9522
MEAN				0.03366	1.9985	1.3946
MEDIAN				0.01799	1.8465	1 3589
STANDARD DEVIATION				0 05945	0 6846	0 2347

NOTE SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 6 NAME=HISPANIC

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.3368	0 01320	0 03919	2 4945	1.5794
2	PROP EARNED LT $1000	0.2012	0 01019	0.05063	2.2049	1.4849
3	PROP W/ LT $1000 EXPENSES	0.4881	0 01276	0.02615	2.0997	1 4490
4	PROP ACCEPTEO IN ARMED FORCES	0.0883	0 00681	0.07715	1.8883	1 3742
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.8640	0 00907	0.01050	1.8362	1.3551
6	AVE ATT TO SELF	1.7315	0 01678	0.00969	1.4251	1.1938
7	AVE ATT TO PLANNING	2 8511	0.02317	0.00813	1 1397	1.0676
8	AVE IMPORTANCE OF PROX TO PARENT	1.9709	0.01772	0 00899	1.5616	1.2496
9	AVE SEN VOCAB NOT ATTEMPTED	0.7315	0.05455	0.07458	3.3445	1.8288
10	AVE BOTH MATH NOT ATTEMPTED	0.3740	0 03186	0.08520	2.4930	1.5789
11	PROP MT 3 HRS ON HOMEWORK	0.4003	0 01423	0.03555	2 6864	1.6390
12	PROP LT B AVERAGE	0.6143	0.01315	0.02141	2 3065	1.5187
13	PROP MT 3 50 MIN WAGE	0.6436	0.01442	0 02241	2.8373	1.6844
14	AVE ATT TO SCHOOL COUNSELING	2.3908	0.02820	0.01179	1.7181	1.3108
15	PROP FATHER NOT US NATIVE	0.3784	0.01439	0.03802	2.8468	1.6872
16	AVE QUALITY OF INSTRUCTION	2.6414	0 02455	0.00929	1.4028	1.1844
17	AVE 'SOMEONE PREVENTS SUCCESS'	2.7563	0.02135	0.00775	1 0392	1.0194
18	PROP NEVER CUT CLASSES	0.5345	0.01423	0.02662	2.5717	1.6036
19	PROP HARO OF HEARING	0.0068	0 00202	0.29852	2.1022	1.4499
20	PROP W/ NO PLACE TO STUOY	0.5305	0.01293	0 02438	2.1323	1.4602
21	PROP NOT PLANNING ON COLLEGE	0.3435	0 01382	0 04024	2.8976	1.7022
22	PROP ABSENT MT 2 OAYS	0.4719	0.01336	0.02831	2 2781	1 5093
23	PROP OIO NOT WORK LAST WK	0.4005	0.01340	0.03346	2.3819	1 5433
24	PROP NOT LOOKING FOR WORK	0.7642	0.01050	0 01374	1 9023	1.3792
25	PROP WHOSE MOM FINISHEO COLLEGE	0 0632	0 00793	0 12544	4.1449	2 0359
26	PROP- GOOD LUCK NOT IMPORTANT	0 8022	0.01093	0 01363	1.8493	1.3599
27	PROP FEEL PROUO	0.8266	0 00987	0.01194	1.5665	1.2516
28	PROP EXPECT TO FINISH COLLEGE	0.3591	0.01450	0.04038	2.9313	1.7121
29	PROP W/ HANOICAP	0.1422	0.00887	0.06239	2 2006	1 4834
30	PROP W/ VOCATIONAL PROGRAM	0 3152	0.01352	0.04290	2.7294	1.6521
31	AVE BOTH REAOING TEST- RIGHT	3.3513	0.05893	0.01758	2.3092	1.5196
32	AVE BOTH VOCAB TEST- RIGHT	3 5673	0.05659	0.01586	2.1732	1.4742
33	AVE BOTH MATH TEST- RIGHT	8 4359	0 12219	0.01448	1 9570	1.3989
34	AVE MOSAIC(1) TEST- RIGHT	25.4227	0.34911	0 01373	1.9012	1.3789
35	AVE PICTURE TEST- RIGHT	10.5933	0 12163	0.01148	1.5241	1 2345
36	AVE REAOING TEST- RIGHT	8 2361	0 11090	0.01347	1 8428	1 3575
37	AVE VISUAL TEST- RIGHT	6 7175	0.08480	0 01262	1.6416	1 2813
38	AVE EARNING/HR	3 1814	0 01912	0 00601	0 9495	0 9744
MEAN				0 03694	2 1398	1.4465
MEDIAN				0.02191	2.1173	1.4551
STANDARD OEVIATION				0 05069	0 6475	0 2206

NOTE SUMMARY STATISTICS ABOVE EXCLUOE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO 7 NAME=PUBLIC

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0 3302	0.00464	0 01405	2.4181	1 5550
2	PROP EARNED LT $1000	0.1982	0 00364	0 01834	2.1788	1 4761
3	PROP W/ LT $1000 EXPENSES	0 4186	0.00421	0.01006	1 8460	1 3587
4	PROP ACCEPTED IN ARMED FORCES	0.0495	0.00179	0.03622	1.7238	1.3129
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.8840	0 00239	0.00270	1.1816	1.0870
6	AVE ATT TO SELF	1.7526	0 00568	0.00324	1.3235	1.1504
7	AVE ATT TO PLANNING	3.0477	0.00710	0 00233	0 9410	0.9700
8	AVE IMPORTANCE OF PROX TO PARENT	1.8126	0 00532	0 00294	1 3479	1.1610
9	AVE SEN VOCAB NOT ATTEMPTED	0.7829	0.02495	0.03186	5 7154	2 3907
10	AVE BOTH MATH NOT ATTEMPTED	0.3032	0.01069	0.03525	2 6610	1.6313
11	PROP MT 3 HRS ON HOMEWORK	0 4350	0 00548	0.01260	3 0237	1 7389
12	PROP LT B AVERAGE	0.4776	0.00524	0.01097	2.7150	1.6477
13	PROP MT 3 50 MIN WAGE	0.6131	0.00518	0.00845	2.7689	1 6640
14	AVE ATT TO SCHOOL COUNSELING	2.5500	0.01191	0.00467	2.0370	1 4272
15	PROP FATHER NOT US NATIVE	0.1283	0.00363	0.02832	2 9925	1.7299
16	AVE QUALITY OF INSTRUCTION	2.6864	0 01061	0 00395	2.4772	1 5739
17	AVE 'SOMEONE PREVENTS SUCCESS'	2 8455	0 00666	0.00234	0.8772	0.9366
18	PROP NEVER CUT CLASSES	0 5356	0.00643	0.01201	4.0908	2.0226
19	PROP HARD OF HEARING	0.0039	0 00047	0.11922	1 4857	1 2189
20	PROP W/ NO PLACE TO STUDY	0.5204	0.00448	0.00860	1.9815	1 4077
21	PROP NOT PLANNING ON COLLEGE	0 3161	0.00556	0 01758	3 7518	1 9370
22	PROP ABSENT MT 2 DAYS	0.4382	0.00466	0.01065	2.1854	1.4783
23	PROP DID NOT WORK LAST WK	0 3619	0 00456	0.01259	2.2243	1.4914
24	PROP NOT LOOKING FOR WORK	0.7794	0 00325	0.00417	1.4859	1.2190
25	PROP WHOSE MOM FINISHED COLLEGE	0.1352	0.00414	0 03063	4.1080	2.0268
26	PROP- GOOD LUCK NOT IMPORTANT	0.8741	0 00299	0.00342	1 3699	1 1704
27	PROP FEEL PROUD	0.8795	0 00255	0.00290	1.0406	1 0201
28	PROP EXPECT TO FINISH COLLEGE	0.4320	0 00601	0 01391	3 6576	1.9125
29	PROP W/ HANDICAP	0.1072	0 00250	0.02334	1.7157	1 3098
30	PROP W/ VOCATIONAL PROGRAM	0.2654	0.00555	0.02091	3.9419	1.9854
31	AVE BOTH READING TEST- RIGHT	4.4758	0 02544	0.00568	2.6392	1 6246
32	AVE BOTH VOCAB TEST- RIGHT	4.4826	0.02716	0 00606	3.2670	1 8075
33	AVE BOTH MATH TEST- RIGHT	10 6337	0.05880	0 00553	3 0072	1.7341
34	AVE MOSAIC(1) TEST- RIGHT	26 8458	0.17712	0.00660	4.4768	2 1158
35	AVE PICTURE TEST- RIGHT	11.2614	0 04479	0.00398	1.7820	1.3349
36	AVE READING TEST- RIGHT	10.7543	0 05534	0.00515	2.6730	1.6349
37	AVE VISUAL TEST- RIGHT	7 6567	0.03771	0 00493	2 1745	1 4746
38	AVE EARNING/HR	3.1381	0 00855	0 00272	1 6471	1 2834
MEAN				0 01444	2 4456	1 5269
MEDIAN				0 00853	2.2048	1.4849
STANDARD DEVIATION				0 02006	1 0971	0 3426

NOTE SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 8 NAME=CATHOLIC

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKEO LT 15 HRS./WK	0.3373	0 01669	0.04947	3 3654	1.8345
2	PROP EARNED LT $1000	0.2220	0 01609	0.07248	4 1583	2 0392
3	PROP W/ LT $1000 EXPENSES	0.4236	0.01877	0.04430	3.9329	1.9831
4	PROP ACCEPTEO IN ARMEO FORCES	0.0168	0 00308	0.18324	1.5599	1 2489
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.8886	0.00911	0.01025	2.0153	1.4196
6	AVE ATT TO SELF	1.7849	0.02229	0.01249	2.3452	1.5314
7	AVE ATT TO PLANNING	3 1264	0.02292	0.00733	1 2105	1.1002
8	AVE IMPORTANCE OF PROX TO PARENT	1 8847	0.01915	0.01016	2 1007	1.4494
9	AVE SEN VOCAB NOT ATTEMPTEO	0 6902	0.06002	0.08696	5.3753	2 3185
10	AVE 8OTH MATH NOT ATTEMPTEO	0.2351	0.02203	0.09369	1.9367	1.3917
11	PROP MT 3 HRS ON HOMEWORK	0 6234	0.02683	0.04304	8.2136	2 8659
12	PROP LT B AVERAGE	0.3784	0.02205	0 05828	5 5675	2.3596
13	PROP MT 3 50 MIN WAGE	0.6598	0 01999	0.03029	4 7080	2.1698
14	AVE ATT TO SCHOOL COUNSELING	2 7981	0.05442	0.01945	4.2677	2.0658
15	PROP FATHER NOT US NATIVE	0 1347	0 01275	0 09460	3.7833	1 9451
16	AVE QUALITY OF INSTRUCTION	2.9928	0.04903	0.01638	6 8889	2.6247
17	AVE 'SOMEONE PREVENTS SUCCESS'	2.9469	0 02002	0 00679	0.9811	0.9905
18	PROP NEVER CUT CLASSES	0.7462	0 02555	0.03425	8 8816	2 9802
19	PROP HARO OF HEARING	0.0046	0.00174	0.38150	2 0534	1 4330
20	PROP W/ NO PLACE TO STUOY	0.4635	0.01693	0.03652	3.1237	1.7674
21	PROP NOT PL'NNING ON COLLEGE	0.1616	0.01629	0 10080	5.6645	2 3800
22	PROP ABSENT MT 2 OAYS	0.2450	0.01284	0.05241	2.4038	1 5504
23	PROP OIO NOT WORK LAST WK	0.3610	0.01927	0.05337	4 3310	2 0811
24	PROP NOT LOOKING FOR WORK	0.7746	0 01333	0.01720	2.6842	1.6383
25	PROP WHOSE MOM FINISHEO COLLEGE	0.1800	0.01530	0.08504	4 6205	2.1495
26	PROP- GOOO LUCK NOT IMPORTANT	0 9027	0.00861	0 00954	1.5169	1.2316
27	PROP FEEL PROUO	0 9072	0 00780	0.00860	1.3255	1.1513
28	PROP EXPECT TO FINISH COLLEGE	0 6441	0.02582	0 04008	7.7029	2.7754
29	PROP W/ HANOICAP	0.0786	0.00707	0 08991	2 1019	1 4498
30	PROP W/ VOCATIONAL PROGRAM	0.0952	0.01364	0.14321	5.8450	2 4176
31	AVE BOTH REAOING TEST- RIGHT	4 9957	0.07209	0.01443	2.5379	1 5931
32	AVE 8OTH VOCAB TEST- RIGHT	5 3542	0.07738	0 01445	3 1804	1 7834
33	AVE BOTH MATH TEST- RIGHT	12.1008	0.14924	0 01233	2.3886	1 5455
34	AVE MOSAIC(1) TEST- RIGHT	27.7544	0.52850	0.01904	5 7268	2 3931
35	AVE PICTURE TEST- RIGHT	12 0788	0.11046	0 00914	1.4919	1 2214
36	AVE READING TEST- RIGHT	11.9522	0 13487	0.01128	1 9658	1 4021
37	AVE VISUAL TEST- RIGHT	7.5327	0.09040	0 01200	1 6852	1 2982
38	AVE EARNING/HR	3.2045	0.03073	0 00959	2.4318	1.5594
MEAN				0 05247	3 5809	1 8195
MEOIAN				0 03227	2 9040	1 7029
STANDARO OEVIATION				0 06863	2 0718	0 5270

NOTE SUMMARY STATISTICS ABOVE EXCLUOE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO 9 NAME=PRIVATE

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKEO LT 15 HRS /WK	0.4368	0 03594	0 08227	4 6012	2.1450
2	PROP EARNEO LT $1000	0.3058	0 04670	0.15270	9.3148	3 0520
3	PROP W/ LT $1000 EXPENSES	0.3741	0.02974	0.07948	3 4155	1 8481
4	PROP ACCEPTEO IN ARMEO FORCES	0.0271	0 01046	0.38617	3.7409	1 9341
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.8584	0 01955	0.02277	2.5866	1 6083
6	AVE ATT TO SELF	1.7431	0.05009	0.02874	3.8383	1.9592
7	AVE ATT TO PLANNING	3.2181	0.04742	0.01474	1.5534	1.2464
8	AVE IMPORTANCE OF PROX TO PARENT	1.7928	0 04898	0.02732	4.1493	2.0370
9	AVE SEN VOCAB NOT ATTEMPTEO	1.0728	0 14867	0.13858	7.7135	2 7773
10	AVE BOTH MATH NOT ATTEMPTEO	0.2637	0.07830	0 29689	5.3827	2 3201
11	PROP MT 3 HRS ON HOMEWORK	0.6958	0.05402	0.07763	******	3 4469
12	PROP LT B AVERAGE	0.3218	0 03354	0.10420	4.5391	2 1305
13	PROP MT 3.50 MIN WAGE	0.5936	0.03968	0.06685	5.6457	2.3761
14	AVE ATT TO SCHOOL COUNSELING	2.8117	0.09718	0.03456	3.8709	1 9675
15	PROP FATHER NOT US NATIVE	0.1502	0 02403	0.15997	4.0695	2 0173
16	AVE QUALITY OF INSTRUCTION	3.1251	0.10748	0.03439	******	3.2752
17	AVE 'SOMEONE PREVENTS SUCCESS'	3.0060	0.06372	0 02120	2.6666	1.6330
18	PROP NEVER CUT CLASSES	0.5936	0.03348	0.05639	4.0276	2.0069
19	PROP HARO OF HEARING	0.0001	0.00005	0.66157	0.0333	0.1824
20	PROP W/ NO PLACE TO STUOY	0 3843	0.03498	0.09102	4.5929	2 1431
21	PROP NOT PLANNING ON COLLEGE	0.1867	0.04130	0.22116	******	3.2578
22	PROP ABSENT MT 2 OAYS	0 3568	0.03257	0.09130	4.0518	2.0129
23	PROP OID NOT WORK LAST WK	0 5417	0.05397	0 09963	******	3.2003
24	PROP NOT LOOKING FOR WORK	0.7715	0.02348	0.03043	2.6897	1.6400
25	PROP WHOSE MOM FINISHEO COLLEGE	0.3893	0 05961	0.15311	******	3.7218
26	PROP- GOOO LUCK NOT IMPORTANT	0.9129	0.01147	0.01256	0.8760	0.9360
27	PROP FEEL PROUO	0.9044	0 01717	0.01898	1 9326	1.3902
28	PROP EXPECT TO FINISH COLLEGE	0.6924	0.06591	0 09520	******	4 1439
29	PROP W/ HANOICAP	0.0926	0 01166	0.12593	1.5017	1.2254
30	PROP W/ VOCATIONAL PROGRAM	0.0785	0.04003	0 50993	******	4.4182
31	AVE BOTH READING TEST- RIGHT	5.3543	0.21802	0.04072	5.3183	2 3061
32	AVE BOTH VOCAB TEST- RIGHT	5.5737	0 28290	0.05076	8.8595	2.9765
33	AVE BOTH MATH TEST- RIGHT	12.7686	0 51959	0.04069	6.0343	2 4565
34	AVE MOSAIC(1) TEST- RIGHT	30.0006	1 50342	0 05011	8.6788	2.9460
35	AVE PICTURE TEST- RIGHT	11.9225	0 27925	0 02342	2 0924	1 4465
36	AVE READING TEST- RIGHT	13.0217	0.46532	0 03573	4 6836	2.1642
37	AVE VISUAL TEST- RIGHT	8.5966	0 29402	0 03420	3.6656	1 9146
38	AVE EARNING/HR	3.1427	0 07270	0.02313	3.1410	1.7723

	CV	DEFF	DEFT
MEAN	0 11038	5.8757	2 2641
MEOIAN	0.06162	4 3442	2 0838
STANDARO OEVIATION	0.13951	4.4107	0 8774

NOTE SUMMARY STATISTICS ABOVE EXCLUOE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO 10 NAME=LOW SES

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.3570	0.00739	0 02070	2.0125	1.4186
2	PROP EARNED LT $1000	0.1855	0.00590	0.03183	2.0713	1.4392
3	PROP W/ LT $1000 EXPENSES	0.4596	0.00705	0.01534	1.7117	1 3083
4	PROP ACCEPTED IN ARMED FORCES	0.0665	0.00348	0.05231	1.6770	1.2950
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.8617	0.00465	0.00539	1.3421	1 1585
6	AVE ATT TO SELF	1.7775	0.00972	0.00547	1.1993	1.0951
7	AVE ATT TO PLANNING	2.8805	0.01'65	0.00404	0.8233	0.9074
8	AVE IMPORTANCE OF PROX TO PARENT	1.8375	0.00895	0.00487	1 2465	1 1165
9	AVE SEN VOCAB NOT ATTEMPTED	0.7607	0 04113	0.05407	4.7266	2 1741
10	AVE BOTH MATH NOT ATTEMPTED	0 3712	0 01910	0.05145	2 2773	1 5091
11	PROP MT 3 HRS ON HOMEWORK	0.3859	0 00793	0.02056	2 2376	1.4958
12	PROP LT B AVERAGE	0.5675	0 00837	0.01475	2 3915	1 5464
13	PROP MT 3.50 MIN WAGE	0.5959	0.00769	0.01290	2.0510	1 4321
14	AVE ATT TO SCHOOL COUNSELING	2.3597	0.01570	0 00665	1 3790	1.1743
15	PROP FATHER NOT US NATIVE	0.1789	0.00648	0.03622	2 4838	1.5760
16	AVE QUALITY OF INSTRUCTION	2 5877	0 01479	0.00572	1.4021	1.1841
17	AVE 'SOMEONE PREVENTS SUCCESS'	2.6873	0.01102	0.00410	0.7988	0.8938
18	PROP NEVER CUT CLASSES	0 5912	0.00829	0.01402	2.3520	1.5336
19	PROP HARD OF HEARING	0.0052	0.00095	0.18175	1.5861	1.2594
20	PROP W/ NO PLACE TO STUDY	0 6304	0.00683	0 01084	1.6001	1.2649
21	PROP NOT PLANNING ON COLLEGE	0.4681	0.00880	0.01880	2.6890	1.6398
22	PROP ABSENT MT 2 DAYS	0.4665	0 00678	0 01454	1.5563	1.2475
23	PROP DID NOT WORK LAST WK	0.4086	0 00786	0 01923	2 1519	1.4669
24	PROP NOT LOOKING FOR WORK	0.7615	0 00590	0.00775	1 5870	1 2597
25	PROP WHOSE MOM FINISHED COLLEGE	0.0033	0 00078	0.23632	1.8666	1.3662
26	PROP- GOOD LUCK NOT IMPORTANT	0 8336	0.00552	0.00663	1.3574	1.1651
27	PROP FEEL PROUD	0 8364	0.00502	0 00600	1.1446	1.0699
28	PROP EXPECT TO FINISH COLLEGE	0 2612	0 00703	0.02691	2.1898	1 4798
29	PROP W/ HANDICAP	0.1348	0 00507	0.03763	1 9846	1.4088
30	PROP W/ VOCATIONAL PROGRAM	0 3547	0.00862	0.02430	2 7556	1.6600
31	AVE BOTH READING TEST- RIGHT	3.7576	0 03466	0.00922	1.9851	1 4089
32	AVE BOTH VOCAB TEST- RIGHT	3.7201	0 03255	0 00875	1.9668	1 4024
33	AVE BOTH MATH TEST- RIGHT	8.8559	0.07034	0.00794	1.8366	1.3552
34	AVE MOSAIC(1) TEST- RIGHT	24.8302	0.21947	0.00884	2 4334	1.5599
35	AVE PICTURE TEST- RIGHT	10.6588	0 06815	0.00639	1 4036	1.1848
36	AVE READING TEST- RIGHT	9 1650	0 07112	0 00776	1.8506	1 3604
37	AVE VISUAL TEST- RIGHT	6.8234	0 05302	0 00777	1.7417	1 3197
38	AVE EARNING/HR	3.0308	0 01324	0.00437	1.3186	1 1483
MEAN				0 02664	1.8734	1 3496
MEDIAN				0 01187	1 8436	1 3578
STANDARD DEVIATION				0 04615	0 6772	0 2309

NOTE SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 11 NAME=MIDDLE SES

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKEO LT 15 HRS./WK	0.3082	0.00563	0.01828	1.9143	1.3836
2	PROP EARNEO LT $1000	0.1760	0.00430	0 02441	1 7091	1.3073
3	PROP W/ LT $1000 EXPENSES	0.4218	0.00566	0.01341	1.7114	1.3082
4	PROP ACCEPTEO IN ARMEO FORCES	0.0442	0 00210	0.04749	1.3577	1.1652
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.8902	0.00313	0.00352	1 1540	1.0742
6	AVE ATT TO SELF	1.7687	0.00747	0.00422	1 2544	1 1200
7	AVE ATT TO PLANNING	3.0753	0.00827	0.00269	0 7400	0.8602
8	AVE IMPORTANCE OF PROX TO PARENT	1.8318	0.00678	0.00370	1.2167	1.1030
9	AVE SEN VOCAB NOT ATTEMPTED	0 7783	0 02703	0.03473	3.6140	1.9010
10	AVE BOTH MATH NOT ATTEMPTED	0.2794	0.01166	0.04174	1.8904	1.3749
11	PROP MT 3 HRS ON HOMEWORK	0.4358	0 00654	0.01502	2.2314	1 4938
12	PROP LT B AVERAGE	0.4629	0.00648	0.01400	2 1629	1.4707
13	PROP MT 3.50 MIN WAGE	0 6195	0 00649	0.01047	2.2676	1.5058
14	AVE ATT TO SCHOOL COUNSELING	2 6079	0 01392	0.00534	1.4519	1.2050
15	PROP FATHER NOT US NATIVE	0.1064	0.00374	0 03517	1 9176	1.3848
16	AVE QUALITY OF INSTRUCTION	2.7222	0.01145	0.00421	1.6877	1.2991
17	AVE 'SOMEONE PREVENTS SUCCESS'	2.8595	0.00794	0.00278	0.7121	0 8439
18	PROP NEVER CUT CLASSES	0.5467	0.00739	0.01352	2.8096	1.6762
19	PROP HARO OF HEARING	0.0040	0.00064	0 15915	1.3955	1.1813
20	PROP W/ NO PLACE TO STUOY	0.5251	0.00527	0 01004	1.4239	1 1933
21	PROP NOT PLANNING ON COLLEGE	0.3058	0.00563	0.01840	2.0050	1.4160
22	PROP ABSENT MT 2 DAYS	0.4156	0.00596	0.01433	1.8726	1.3684
23	PROP OID NOT WORK LAST WK	0.3393	0.00566	0.01669	1 8339	1 3542
24	PROP NOT LOOKING FOR WORK	0.7856	0.00424	0.00539	1.3444	1.1595
25	PROP WHOSE MOM FINISHED COLLEGE	0 0586	0.00278	0.04741	1 9695	1.4034
26	PROP- GOOD LUCK NOT IMPORTANT	0.8861	0.00346	0.00390	1.0537	1.0265
27	PROP FEEL PROUO	0.8936	0.00323	0.00361	0 9843	0.9921
28	PROP EXPECT TO FINISH COLLEGE	0.4186	0.00592	0.01414	1 8523	1.3610
29	PROP W/ HANDICAP	0.1000	0.00311	0.03113	1 4626	1.2094
30	PROP W/ VOCATIONAL PROGRAM	0.2527	0.00610	0.02416	2 5464	1.5957
31	AVE BOTH REAOING TEST- RIGHT	4.6303	0.02468	0.00533	1 3436	1.1591
32	AVE BOTH VOCAB TEST- RIGHT	4 6263	0 02558	0.00553	1.6054	1.2671
33	AVE BOTH MATH TEST- RIGHT	10.9628	0.05391	0.00492	1.4034	1.1846
34	AVE MOSAIC(1) TEST- RIGHT	27.4246	0.18225	0.00665	2.5984	1.6120
35	AVE PICTURE TEST- RIGHT	11 4732	0.04780	0.00417	1.1181	1 0574
36	AVE READING TEST- RIGHT	11.1035	0.05108	0.00460	1 2525	1.1192
37	AVE VISUAL TEST- RIGHT	7.7359	0.03950	0 00511	1 2986	1.1396
38	AVE EARNING/HR	3.1550	0 00989	0.00313	1.2109	1.1004

MEAN	0.01796	1 6678	1 2731
MEDIAN	0 01026	1 5340	1.2382
STANDARD DEVIATION	0 02682	0 5885	0 2199

NOTE SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO 12 NAME=HIGH SES

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.3566	0.00844	0 02368	1.9253	1.3876
2	PROP EARNED LT $1000	0.2781	0.00859	0.03090	2.3466	1 5319
3	PROP W/ LT $1000 EXPENSES	0.3575	0.00847	0.02370	1.9760	1.4057
4	PROP ACCEPTED IN ARMED FORCES	0 0222	0.00220	0.09899	1.3987	1.1827
5	PROP 'SUCCESS IN WORK VERY IMPOR	0 8988	0.00495	0 00551	1.5086	1 2283
6	AVE ATT TO SELF	1.7099	0.00997	0 00583	1.1933	1 0924
7	AVE ATT TO PLANNING	3.2454	0.01179	0.00363	0.7710	0.8781
8	AVE IMPORTANCE OF PROX TO PARENT	1.7552	0.01097	0 00625	1.5692	1.2527
9	AVE SEN VOCAB NOT ATTEMPTED	0.8022	0.02814	0 03508	2.3203	1.5233
10	AVE BOTH MATH NOT ATTEMPTED	0.2017	0.01439	0 07134	2.0844	1.4438
11	PROP MT 3 HRS ON HOMEWORK	0.5914	0 01034	0 01748	2.7254	1.6509
12	PROP LT B AVERAGE	0.3343	0.00854	0.02554	2 0277	1.4240
13	PROP MT 3.50 MIN WAGE	0.6209	0.00826	0 01331	1.7749	1.3323
14	AVE ATT TO SCHOOL COUNSELING	2.7891	0 02194	0.00787	1.4772	1 2154
15	PROP FATHER NOT US NATIVE	0.1034	0 00528	0.05102	1.8775	1.3702
16	AVE QUALITY OF INSTRUCTION	2 8796	0.02045	0.00710	3.0940	1.7590
17	AVE 'SOMEONE PREVENTS SUCCESS'	3.0586	0.01177	0.00385	0 7622	0 8731
18	PROP NEVER CUT CLASSES	0.5183	0.01002	0 01933	2.4801	1.5748
19	PROP HARD OF HEARING	0 0019	0 00057	0 30938	1.1719	1 0825
20	PROP W/ NO PLACE TO STUDY	0.3608	0.00773	0.02143	1.6357	1.2790
21	PROP NOT PLANNING ON COLLEGE	0.1020	0.00549	0.05388	2.1908	1.4801
22	PROP ABSENT MT 2 DAYS	0 3815	0.00825	0 02163	1.7862	1.3365
23	PROP DID NOT WORK LAST WK	0 3749	0 00919	0 02452	2.2309	1.4936
24	PROP NOT LOOKING FOR WORK	0.7913	0.00623	0.00787	1.4230	1.1929
25	PROP WHOSE MOM FINISHED COLLEGE	0.4675	0.00923	0.01975	2.1520	1.4670
26	PROP- GOOD LUCK NOT IMPORTANT	0.9204	0.00422	0.00459	0.9418	0.9705
27	PROP FEEL PROUD	0 9182	0.00413	0.00450	0.9106	0 9543
28	PROP EXPECT TO FINISH COLLEGE	0.7574	0.00810	0 01069	2.1208	1.4563
29	PROP W/ HANDICAP	0 0779	0.00424	0 05444	1 6396	1 2805
30	PROP W/ VOCATIONAL PROGRAM	0 1054	0 00502	0.04767	1.6645	1.2901
31	AVE BOTH READING TEST- RIGHT	5.3826	0 03893	0.00723	1 4117	1 1881
32	AVE BOTH VOCAB TEST- RIGHT	5.5988	0.04013	0.00717	1.5680	1.2522
33	AVE BOTH MATH TEST- RIGHT	12.9889	0.07715	0.00594	1.1435	1.0693
34	AVE MOSAIC(1) TEST- RIGHT	28.9386	0.27906	0.00964	2.7036	1.6443
35	AVE PICTURE TEST- RIGHT	11.9375	0 06521	0 00546	0.9381	0.9685
36	AVE READING TEST- RIGHT	12 8413	0 08254	0 00643	1.2975	1 1391
37	AVE VISUAL TEST- RIGHT	8 6071	0 06169	0.00717	1 2738	1 1286
38	AVE EARNING/HR	3 2406	0 01375	0.00424	1.0827	1 0405
MEAN				0 02853	1 7000	1 2853
MEDIAN				0 01200	1.6377	1 2797
STANDARD DEVIATION				0 05146	0.5746	0 2223

NOTE SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 13 NAME=NORTHEAST

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.3646	0.01004	0 02753	2.4881	1.5774
2	PROP EARNED LT $1000	0.2588	0.01025	0 03061	3.2488	1 8024
3	PROP W/ LT $1000 EXPENSES	0.4203	0.00935	0.02224	2.0795	1 4421
4	PROP ACCEPTED IN ARMED FORCES	0.0494	0.00382	0.07745	1.8161	1.3476
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.8535	0.00555	0.00628	1 5570	1 2478
6	AVE ATT TO SELF	1.7794	0.01316	0.00739	1 6298	1.2766
7	AVE ATT TO PLANNING	3.0256	0.01466	0.00484	0 9798	0.9899
8	AVE IMPORTANCE OF PROX TO PARENT	1 8171	0.01145	0.00630	1.5355	1.2391
9	AVE SEN VOCAB NOT ATTEMPTED	0.7486	0.04048	0.05408	4.1177	2.0292
10	AVE BOTH MATH NOT ATTEMPTED	0 2870	0.01743	0.06075	1.9113	1 3825
11	PROP MT 3 HRS ON HOMEWORK	0.5096	0 01257	0.02467	3 5955	1.8962
12	PROP LT B AVERAGE	0.4061	0.01133	0.02791	3.0409	1.7438
13	PROP MT 3.50 MIN WAGE	0.6245	0.01087	0.01741	2.8372	1 6844
14	AVE ATT TO SCHOOL COUNSELING	2.6695	0.02954	0.01107	2.6153	1.6172
15	PROP FATHER NOT US NATIVE	0.1414	0.00838	0 05925	3.3701	1 8358
16	AVE QUALITY OF INSTRUCTION	2.7979	0.02383	0.00852	2.9922	1 7298
17	AVE 'SOMEONE PREVENTS SUCCESS'	2.9004	0.01573	0.00542	1 1750	1 0840
18	PROP NEVER CUT CLASSES	0.5604	0.01398	0.02494	1.4874	2.1184
19	PROP HARD OF HEARING	0.0035	0.00084	0.23815	1.2454	1.1160
20	PROP W/ NO PLACE TO STUDY	0.4855	0 00995	0 02050	2.2714	1 5071
21	PROP NOT PLANNING ON COLLEGE	0 2878	0.01237	0.04299	4.4936	2.1198
22	PROP ABSENT MT 2 DAYS	0 4090	0.00894	0.02187	1.8865	1.3735
23	PROP DID NOT WORK LAST WK	0.3683	0.01110	0 03014	3.0194	1 7377
24	PROP NOT LOOKING FOR WORK	0.7461	0 00717	0 00961	1.5213	1 2334
25	PROP WHOSE MOM FINISHED COLLEGE	0.1627	0.01068	0.06563	5.3479	2.3125
26	PROP- GOOD LUCK NOT IMPORTANT	0.8806	0 00526	0 00598	1.0518	1.0256
27	PROP FEEL PROUD	0.8896	0.00525	0.00590	1 1038	1 0506
28	PROP EXPECT TO FINISH COLLEGE	0 5047	0.01598	0 03166	5 8093	2 4102
29	PROP W/ HANDICAP	0.1043	0 00523	0 05017	1.7980	1.3409
30	PROP W/ VOCATIONAL PROGRAM	0 2492	0.01380	0.05536	5 8638	2.4215
31	AVE BOTH READING TEST- RIGHT	4 8343	0.05258	0.01088	2 4701	1.5717
32	AVE BOTH VOCAB TEST- RIGHT	5.0216	0.06259	0.01246	3 6461	1.9095
33	AVE BOTH MATH TEST- RIGHT	11.5794	0.12980	0.01121	3 1001	1.7607
34	AVE MOSAIC(1) TEST- RIGHT	28.3156	0.43037	0.01520	5 4776	2.3404
35	AVE PICTURE TEST- RIGHT	11 6470	0.09270	0.00796	1.6974	1 3029
36	AVE READING TEST- RIGHT	11.5430	0 11321	0.00981	2 4401	1.5621
37	AVE VISUAL TEST- RIGHT	7.7048	0 07796	0.01012	2.0868	1.4446
38	AVE EARNING/HR	3.1013	0.01652	0.00533	1.4012	1 1837
MEAN				0 03017	2.7160	1 5992
MEDIAN				0.01896	2.4551	1.5669
STANDARD DEVIATION				0 04006	1 3784	0.4037

NOTE: SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO 14 . NAME=SOUTH

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.3392	0.00806	0 02375	2.7098	1.6462
2	PROP EARNED LT $1000	0.2077	0.00666	0.03205	2.6801	1 6371
3	PROP W/ LT $1000 EXPENSES	0.4319	0 00667	0.01544	1.7352	1.3173
4	PROP ACCEPTED IN ARMED FORCES	0.0573	0 00329	0.05753	1.9193	1 3854
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.8904	0.00373	0.00419	1.0819	1.0401
6	AVE ATT TO SELF	1.6993	0.00955	0 00562	1.3991	1 1828
7	AVE ATT TO PLANNING	3.0033	0.01219	0.00406	0.9698	0 9848
8	AVE IMPORTANCE OF PROX TO PARENT	1.8367	0.00884	0.00481	1.3117	1.1453
9	AVE SEN VOCAB NOT ATTEMPTED	0.8528	0.05102	0.05983	7.9904	2 8267
10	AVE BOTH MATH NOT ATTEMPTED	0.3791	0.02216	0.05844	3.5209	1.8764
11	PROP MT 3 HRS ON HOMEWORK	0.4139	0.00978	0.02362	3.6744	1.9169
12	PROP LT B AVERAGE	0.4762	0.00958	0.02011	3 4264	1 8511
13	PROP MT 3.50 MIN WAGE	0.5892	0.00865	0.01467	2.8549	1.6896
14	AVE ATT TO SCHOOL COUNSELING	2.4287	0.01792	0.00738	1.8010	1 3420
15	PROP FATHER NOT US NATIVE	0.1422	0.00601	0.04229	2.8321	1.6829
16	AVE QUALITY OF INSTRUCTION	2.6790	0.01945	0 00726	2.8308	1.6825
17	AVE 'SOMEONE PREVENTS SUCCESS'	2.7997	0.01110	0 00396	0 8666	0.9309
18	PROP NEVER CUT CLASSES	0.5967	0.00997	0 01670	3.7699	1 9416
19	PROP HARD OF HEARING	0.0042	0.00080	0.18933	1.5417	1.2417
20	PROP W/ NO PLACE TO STUDY	0.5157	0.00757	0 01469	2.1488	1 4659
21	PROP NOT PLANNING ON COLLEGE	0.3287	0.00943	0.02870	4.0632	2.0157
22	PROP ABSENT MT 2 DAYS	0.4055	0.00771	0.01901	2.2999	1.5165
23	PROP DID NOT WORK LAST WK	0.4094	0.00804	0.01965	2.4948	1 5795
24	PROP NOT LOOKING FOR WORK	0.7905	0.00532	0 00673	1.5595	1.2488
25	PROP WHOSE MOM FINISHED COLLEGE	0.1294	0.00728	0.05624	5 0216	2.2409
26	PROP GOOD LUCK NOT IMPORTANT	0 8514	0.00570	0 00670	1 7010	1 3042
27	PROP FEEL PROUD	0.8719	0 00436	0 00500	1.0770	1.0378
28	PROP EXPECT TO FINISH COLLEGE	0.4353	0 01017	0.02337	3 9462	1 9865
29	PROP W/ HANDICAP	0.1093	0.00428	0 03911	1.8784	1.3705
30	PROP W/ VOCATIONAL PROGRAM	0.2781	0.00897	0.03226	3 7721	1 9422
31	AVE BOTH READING TEST- RIGHT	4 1209	0.04917	0.01193	3 8718	1.9677
32	AVE BOTH VOCAB TEST- RIGHT	4 0804	0 05068	0.01242	4.6213	2.1497
33	AVE BOTH MATH TEST- RIGHT	9 7629	0 11148	0.01142	4 4374	2 1065
34	AVE MOSAIC(1) TEST- RIGHT	24.7676	0 29296	0 01183	4.9769	2 2309
35	AVE PICTURE TEST- RIGHT	11 0460	0 08447	0 00765	2 3538	1 5342
36	AVE READING TEST- RIGHT	10 0699	0.10888	0 01081	4 0066	2 0017
37	AVE VISUAL TEST- RIGHT	6 9910	0 06746	0.00965	2 9527	1 7184
38	AVE EARNING/HR	3 0829	0 01528	0.00496	1 8241	1 3506
MEAN				0 02429	2 8401	1 6339
MEDIAN				0 01468	2 6950	1 6416
STANDARD DEVIATION				0.03207	1.4600	0 4183

NOTE SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 15 NAME=N CENTRAL

STAT NO.	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0 3069	0.00800	0.02606	2.4538	1.5665
2	PROP EARNED LT $1000	0.1766	0.00567	0.03214	1.8983	1.3778
3	PROP W/ LT $1000 EXPENSES	0.3991	0.00764	0.01914	2.0224	1.4221
4	PROP ACCEPTED IN ARMED FORCES	0.0356	0 00250	0.07028	1.5042	1.2265
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.8836	0.00413	0.00468	1.1743	1.0837
6	AVE ATT TO SELF	1.7947	0.00959	0.00534	1.2454	1.1160
7	AVE ATT TO PLANNING	3.0841	0.01112	0.00361	0.8006	0.8948
8	AVE IMPORTANCE OF PROX TO PARENT	1.7976	0 00899	0.00500	1.3193	1.1486
9	AVE SEN VOCAB NOT ATTEMPTED	0.7097	0.04032	0.05681	5.5348	2.3526
10	AVE BOTH MATH NOT ATTEMPTED	0.2268	0.01513	0.06672	2.1904	1.4800
11	PROP MT 3 HRS ON HOMEWORK	0.4644	0 00985	0.02122	3 1656	1.7792
12	PROP LT B AVERAGE	0.4956	0 00828	0.01671	2.2226	1.4908
13	PROP MT 3.50 MIN WAGE	0.6117	0.00932	0.01524	2 9400	1.7146
14	AVE ATT TO SCHOOL COUNSELING	2.6247	0.02111	0.00804	2.1014	1 4496
15	PROP FATHER NOT US NATIVE	0.0803	0.00467	0.05813	2.4514	1.5657
16	AVE QUALITY OF INSTRUCTION	2.7027	0.01963	0.00726	2.9925	1.7299
17	AVE 'SOMEONE PPEVENTS SUCCESS'	2.8451	0.01099	0.00386	0 8072	0.8984
18	PROP NEVER CUT CLASSES	0 5775	0.01202	0 02081	4 7458	2.1785
19	PROP HARD OF HEARING	0.0037	0.00073	0.19791	1.2559	1 1207
20	PROP W/ NO PLACE TO STUDY	0.5377	0 00797	0.01483	2.0594	1 4351
21	PROP NOT PLANNING ON COLLEGE	0.3266	0.00994	0.03044	3 8462	1.9612
22	PROP ABSENT MT 2 DAYS	0.3920	0 00850	0 02168	2.4613	1.5689
23	PROP DID NOT WORK LAST WK	0.3221	0.00778	0 02414	2 2503	1.5001
24	PROP NOT LOOKING FOR WORK	0.7922	0 00587	0 00741	1.6638	1.2899
25	PROP WHOSE MOM FINISHED COLLEGE	0.1368	0.00686	0.05013	3.5779	1.8915
26	PROP- GOOD LUCK NOT IMPORTANT	0 8969	0 00441	0.00492	1.0703	1.0346
27	PROP FEEL PROUD	0.8819	0.00443	0 00502	1.0600	1.0295
28	PROP EXPECT TO FINISH COLLEGE	0.4300	0.01017	0 02366	3.4393	1 8545
29	PROP W/ HANDICAP	0.1026	0.00418	0.04073	1.6294	1.2765
30	PROP W/ VOCATIONAL PROGRAM	0 2435	0 00876	0 03599	3 4047	1.8452
31	AVE BOTH READING TEST- RIGHT	4.7221	0 03838	0.00813	2 0790	1.4419
32	AVE BOTH VOCAB TEST- RIGHT	4 6455	0 03769	0 00811	2 2099	1 4866
33	AVE BOTH MATH TEST- RIGHT	11 1851	0 08262	0 00739	2 0862	1.4444
34	AVE MOSAIC(1) TEST- RIGHT	27.9055	0.27453	0 00984	4.0818	2.0204
35	AVE PICTURE TEST- RIGHT	11 5393	0.06650	0.00576	1.4735	1 2139
36	AVE READING TEST- RIGHT	11.2160	0 07914	0.00706	1 9246	1 3873
37	AVE VISUAL TEST- RIGHT	8 0455	0 05575	0.00693	1 6640	1 2900
38	AVE EARNING/HR	3 1381	0.01500	0.00478	1.8436	1 3578
	MEAN			0 02516	2.2803	1.4717
	MEDIAN			0.01503	2 0826	1 4431
	STANDARD DEVIATION			0 03402	1.0805	0 3427

NOTE: SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO 16 NAME=WEST

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS /WK	0.3314	0 01068	0 03223	2.6643	1.6323
2	PROP EARNED LT $1000	0.1685	0 00788	0.04678	2 4271	1 5579
3	PROP W/ LT $1000 EXPENSES	0.4190	0.01028	0.02454	2.2853	1 5117
4	PROP ACCEPTED IN ARMED FORCES	0.0423	0 00381	0 09010	1 8824	1 3720
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.8716	C.00610	0.00700	1.5102	1.2289
6	AVE ATT TO SELF	1.7507	0.01260	0 00720	1.4499	1 2041
	AVE ATT TO PLANNING	3.1521	0.01756	0.00557	1.2451	1.1158
8	AVE IMPORTANCE OF PROX TO PARENT	1.8131	0 01474	0 00813	2.1594	1 4695
9	AVE SEN VOCAB NOT ATTEMPTED	0.8468	0 05076	0.05994	4 7848	2 1874
10	AVE BOTH MATH NOT ATTEMPTED	0.2871	0 02465	0 08587	3.0489	1 7461
11	PROP MT 3 HRS ON HOMEWORK	0.4477	0.01383	0.03090	3.9823	1.9956
12	PROP LT B AVERAGE	0.4761	0.01128	0.02370	2 6254	1.6203
13	PROP MT 3 50 MIN WAGE	0 6543	0 01205	0 01842	3.2546	1 8040
14	AVE ATT TO SCHOOL COUNSELING	2.6214	0.02870	0.01095	2 5017	1 5817
15	PROP FATHER NOT US NATIVE	0.1712	0.00954	0.05572	3.3962	1.8429
16	AVE QUALITY OF INSTRUCTION	2.7344	0.02630	0 00962	3 3025	1.8173
17	AVE 'SOMEONE PREVENTS SUCCESS'	2.9188	0 01543	0.00529	1 0303	1.0150
18	PROP NEVER CUT CLASSES	0.4254	0.01319	0.03100	3.6869	1.9201
19	PROP HARD OF HEARING	0.0038	0.00125	0.32572	2.2063	1.4854
20	PROP W/ NO PLACE TO STUDY	0.4977	0 00980	0.01970	1.9849	1.4089
21	PROP NOT PLANNING ON COLLEGE	0.2351	0 01102	0 04688	3.6926	1 9216
22	PROP ABSENT MT 2 DAYS	0.5178	0 01113	0 02150	2.5485	1 5964
23	PROP DID NOT WORK LAST WK	0.3706	0 01113	0 03004	2.7379	1.6547
24	PROP NOT LOOKING FOR WORK	0.7792	0 00713	0 00916	1.4853	1.2187
25	PROP WHOSE MOM FINISHED COLLEGE	0.1734	0.01315	0 07585	7.0784	2 6605
26	PROP- GOOD LUCK NOT IMPORTANT	0.8852	0.00706	0.00797	1.6951	1 3019
27	PROP FEEL PROUD	0.8902	0.00539	0.00606	1.0225	1.0112
28	PROP EXPECT TO FINISH COLLEGE	0.4654	0.01392	0.02990	4 0238	2.0059
29	PROP W/ HANDICAP	0.1023	0 00538	0 05261	1.6990	1 3035
30	PROP W/ VOCATIONAL PROGRAM	0 2012	0 01037	0.05154	3.4828	1 8662
31	AVE BOTH READING TEST- RIGHT	4.5724	0 05951	0 01301	2.8425	1 6860
32	AVE BOTH VOCAB TEST- RIGHT	4.7390	0.06904	0 01457	3.9807	1 9952
33	AVE BOTH MATH TEST- RIGHT	10.9527	0.14006	0.01279	3 2149	1 7930
34	AVE MOSAIC(1) TEST- RIGHT	27.6622	0 40372	0.01459	4.4155	2.1013
35	AVE PICTURE TEST- RIGHT	11.1101	0.09678	0 00871	1 6258	1 2751
36	AVE READING TEST- RIGHT	11.0191	0 13100	0.01189	2 8763	1 6960
37	AVE VISUAL TEST- RIGHT	8 2003	0.09340	0 01139	2.4058	1.5511
38	AVE EARNING/HR	3.2996	0 02009	0 00609	1.9194	1 3854
MEAN				0 03481	2.7415	1 6195
MEDIAN				0 01906	2 5870	1 6084
STANDARD DEVIATION				0 05369	1 2043	0 3492

NOTE SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 17 NAME=GENERAL

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.3194	0 00622	0.01946	1.8406	1 3567
2	PROP EARNED LT $1000	0.1644	0.00447	0.02719	1 6079	1.2680
3	PROP W/ LT $1000 EXPENSES	0.4579	0 00631	0 01377	1 6811	1.2966
4	PROP ACCEPTED IN ARMED FORCES	0 0538	0 00266	0.04942	1.4575	1 2073
5	PROP 'SUCCESS IN WORK VERY IMPOR	0 8648	0 00400	0 00463	1.2415	1 1142
6	AVE ATT TO SELF	1.7864	0 00796	0.00446	1.0305	1.0151
7	AVE ATT TO PLANNING	2.9700	0.00994	0 00335	0.7492	0 8656
8	AVE IMPORTANCE OF PROX TO PARENT	1.8061	0.00787	0.00436	1 2136	1 1016
9	AVE SEN VOCAB NOT ATTEMPTED	0.7729	0.03527	0.04563	4.3230	2.0792
10	AVE BOTH MATH NOT ATTEMPTED	0.3441	0 01684	0.04894	2.2365	1.4955
11	PROP MT 3 HRS ON HOMEWORK	0.3444	0 00694	0 02016	2.2027	1.4842
12	PROP LT B AVERAGE	0 5969	0 00751	0 01258	2 4033	1.5503
13	PROP MT 3.50 MIN WAGE	0.6193	0.00679	0.01097	1 9947	1.4123
14	AVE ATT TO SCHOOL COUNSELING	2.6161	0 01546	0.00591	1 4369	1 1987
15	PROP FATHER NOT US NATIVE	0.1237	0.00448	0 03619	1.9602	1 4001
16	AVE QUALITY OF INSTRUCTION	2.5489	0.01346	0.00528	1 6478	1.2837
17	AVE 'SOMEONE PREVENTS SUCCESS'	2.7801	0 00855	0.00308	0.5994	0.7742
18	PROP NEVER CUT CLASSES	0.4895	0 00807	0 01648	2 6872	1.6393
19	PROP HARD OF HEARING	0.0042	0 00075	0.17925	1.4890	1.2202
20	PROP W/ NO PLACE TO STUDY	0 5530	0.00614	0 01110	1.5494	1 2448
21	PROP NOT PLANNING ON COLLEGE	0 4007	0.00781	0.01949	2 7333	1.6533
22	PROP ABSENT MT 2 DAYS	0 4849	0 00646	0 01333	1 7215	1.3121
23	PROP DID NOT WORK LAST WK	0.3763	0.00642	0.01705	1.8093	1.3451
24	PROP NOT LOOKING FOR WORK	0.7738	0.00487	0 00629	1.3710	1 1709
25	PROP WHOSE MOM FINISHED COLLEGE	0.1083	0.00469	0 04331	2.7141	1.6475
26	PROP- GOOD LUCK NOT IMPORTANT	0.8613	0 00446	0.00518	1 1853	1.0887
27	PROP FEEL PROUD	0.8608	0 00420	0.00488	1.0763	1.0375
28	PROP EXPECT TO FINISH COLLEGE	0 3219	0 00705	0.02190	2 3796	1 5426
29	PROP W/ HANDICAP	0 1169	0.00371	0 03175	1 4587	1 2078
30	PROP W/ VOCATIONAL PROGRAM	0.0	0 0	0 0	0.0	0.0
31	AVE BOTH READING TEST- RIGHT	4 1094	0.03001	0 00730	1.7297	1.3152
32	AVE BOTH VOCAB TEST- RIGHT	4 1475	0.02836	0.00684	1 7241	1 3131
33	AVE BOTH MATH TEST- RIGHT	9.6897	0.06818	0 00704	2 0003	1.4143
34	AVE MOSAIC(1) TEST- RIGHT	26.3999	0.18859	0 00714	2.1459	1.4649
35	AVE PICTURE TEST- RIGHT	10 9484	0.05900	0.00539	1.3062	1.1429
36	AVE READING TEST- RIGHT	9.9953	0.06057	0.00606	1.5412	1.2415
37	AVE VISUAL TEST- RIGHT	7.3368	0 04670	0 00637	1 5213	1 2334
38	AVE EARNING/HR	3 1347	0 01138	0.00363	1.2341	1 1109

	CV	DEFF	DEFT
MEAN	0 01987	1.7569	1 3040
MEDIAN	0 01097	1 6478	1 2837
STANDARD DEVIATION	0 03023	0 6723	0.2407

NOTE SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO. 18 NAME=ACADEMIC

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0 3759	0 00683	0.01816	2.0995	1.4490
2	PROP EARNED LT $1000	0 2956	0.00683	0 02310	2.4234	1 5567
3	PROP W/ LT $1000 EXPENSES	0.3601	0 00647	0 01796	1.9540	1 3979
4	PROP ACCEPTED IN ARMED FORCES	0.0286	0 00208	0.07269	1.6665	1 2909
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.9065	0 00377	0.00416	1.5913	1.2615
6	AVE ATT TO SELF	1.7059	0.00868	0 00509	1.5544	1 2468
7	AVE ATT TO PLANNING	3.2285	0.00989	0.00306	0.9574	0 9785
8	AVE IMPORTANCE OF PROX TO PARENT	1.8011	0 00810	0.00450	1 4929	1.2218
9	AVE SEN VOCAB NOT ATTEMPTED	0.8394	0.02544	0.03031	3.1245	1 7676
10	AVE BOTH MATH NOT ATTEMPTED	0.2054	0 01044	0.05083	2.1815	1 4770
11	PROP MT 3 HRS ON HOMEWORK	0.6458	0.00776	0.01202	2.7645	1 6627
12	PROP LT B AVERAGE	0 2670	0 00690	0 02586	2.5718	1 6037
13	PROP MT 3 50 MIN WAGE	0.5840	0.00729	0.01248	2.2890	1.5129
14	AVE ATT TO SCHOOL COUNSELING	2.7395	0 01770	0.00646	1.7291	1.3150
15	PROP FATHER NOT US NATIVE	0.1235	0 00483	0.03906	2.3062	1 5186
16	AVE QUALITY OF INSTRUCTION	2.9392	0.01502	0.00511	3.0245	1 7391
17	AVE 'SOMEONE PREVENTS SUCCESS'	3 0198	0 00980	0.00324	0 9483	0 9738
18	PROP NEVER CUT CLASSES	0.6142	0 00850	0 01385	3 1808	1.7835
19	PROP HARD OF HEARING	0 0031	0.00060	0 19138	1 2916	1.1365
20	PROP W/ NO PLACE TO STUDY	0 4433	0 00679	0.01532	1 9908	1.4110
21	PROP NOT PLANNING ON COLLEGE	0.0809	0.00382	0 04722	2.2191	1.4897
22	PROP ABSENT MT 2 DAYS	0.3334	0.00615	0.01843	1 7927	1 3389
23	PROP DID NOT WORK LAST WK	0.3938	0 00760	0.01929	2 5497	1.5968
24	PROP NOT LOOKING FOR WORK	0.7871	0 00507	0 00644	1.5866	1 2596
25	PROP WHOSE MOM FINISHED COLLEGE	0 2323	0 00811	0 03492	4 1481	2 0367
26	PROP- GOOD LUCK NOT IMPORTANT	0.9215	0 00311	0.00337	0 8969	0 9470
27	PROP FEEL PROUD	0.9254	0.00302	0.00326	0.9034	0.9505
28	PROP EXPECT TO FINISH COLLEGE	0 7732	0 00673	0.00870	2.6168	1 6176
29	PROP W/ HANDICAP	0.0769	0 00315	0.04101	1 5672	1 2519
30	PROP W/ VOCATIONAL PROGRAM	0 0	0 0	0 0	0 0	0 0
31	AVE BOTH READING TEST- RIGHT	5.4551	0.03228	0.00592	1.7345	1 3170
32	AVE BOTH VOCAB TEST- RIGHT	5.5198	0.03621	0 00656	2.2821	1 5107
33	AVE BOTH MATH TEST- RIGHT	13.1708	0.06892	0.00523	1.6824	1 2971
34	AVE MOSAIC(1) TEST- RIGHT	28.4413	0 22813	0 00802	3 3210	1 8224
35	AVE PICTURE TEST- RIGHT	12.1026	0.05057	0.00418	1 0328	1.0163
36	AVE READING TEST- RIGHT	12.9203	0 06943	0 00537	1 6687	1.2918
37	AVE VISUAL TEST- RIGHT	[illegible] 4213	0.05243	0.00623	1.6658	1 2907
38	AVE EARNING/HR	3 1317	0 01177	0 00376	1 3289	1 1528
MEAN				0 02115	[illegible] 0037	1 3917
MEDIAN				0 00870	1 7927	1 3389
STANDARD DEVIATION				0 03307	0 7508	0 2624

NOTE SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES

SUMMARY TABLE FOR SUBCLASS NO t9 NAME=VOCATIONAL

STAT NO	STATISTIC	VALUE	SE	CV	DEFF	DEFT
1	PROP WORKED LT 15 HRS./WK	0.2928	0 00703	0.02401	1.6740	1 2938
2	PROP EARNED LT $1000	0.1170	0.00487	0 04163	1 7302	1 3154
3	PROP W/ LT $1000 EXPENSES	0 4470	0 00720	0.01611	1 4936	1 2221
4	PROP ACCEPTED IN ARMED FORCES	0.0631	0 00356	0.05637	1 5304	1 2371
5	PROP 'SUCCESS IN WORK VERY IMPOR	0.8768	0 00450	0.00513	1 0914	1.0447
6	AVE ATT TO SELF	1.7874	0 01025	0 00574	1.1042	1 0508
7	AVE ATT TO PLANNING	2 9311	0 01248	0.00426	0.7653	0 8748
8	AVE IMPORTANCE OF PROX TO PARENT	1 8524	0 00909	0.00490	1 .0233	1.0116
9	AVE SEN VOCAB NOT ATTEMPTED	0 7104	0 03240	0.04561	2 6828	1 6379
10	AVE BOTH MATH NOT ATTEMPTED	0.3585	0.01906	0.05316	1 8714	1 3680
11	PROP MT 3 HRS ON HOMEWORK	0 3401	0 00868	0 02553	2 3457	1.5316
12	PROP LT B AVERAGE	0 5665	0.00820	0 01447	1.8984	1.3778
13	PROP MT 3 50 MIN WAGE	0.6554	0 00793	0.01210	1 9127	1.3830
14	AVE ATT TO SCHOOL COUNSELING	2.2864	0 01693	0.00741	1 3413	1 1582
15	PROP FATHER NOT US NATIVE	0 1425	0 00568	0 03984	1 8876	1.3739
16	AVE QUALITY OF INSTRUCTION	2.6309	0.01399	0 00532	1 0540	1 0266
17	AVE 'SOMEONE PREVENTS SUCCESS'	2 7202	0 01148	0 00422	0 6966	0 8346
18	PROP NEVER CUT CLASSES	0.5511	0.00935	0 01696	2 4370	1 5611
19	PROP HARD OF HEARING	0 0047	0 00110	0 23601	1.9622	1 4008
20	PROP W/ NO PLACE TO STUDY	0 5584	0 00754	0 01350	1 5806	1 2572
21	PROP NOT PLANNING ON COLLEGE	0 4999	0 00863	0.01727	2.1077	1 4518
22	PROP ABSENT MT 2 DAYS	0 4609	0 00783	0 01700	1 7203	1 3116
23	PROP DID NOT WORK LAST WK	0.3178	0.00713	0.02244	1 6380	1.2798
24	PROP NOT LOOKING FOR WORK	0 7745	0 00619	0.00799	1 4926	1 2217
25	PROP WHOSE MOM FINISHED COLLEGE	0.0671	0.00396	0.05903	2.0762	1 4409
26	PROP- GOOD LUCK NOT IMPORTANT	0 8346	0 00574	0 00687	1.2177	1.1035
27	PROP FEEL PROUD	0 8474	0.00526	0 00620	1.0631	1.0311
28	PROP EXPECT TO FINISH COLLEGE	0 1672	0.00608	0.03638	1.9035	1.3797
29	PROP W/ HANDICAP	0 1279	0 00512	0 04007	1 7556	1.3250
30	PROP W/ VOCATIONAL PROGRAM	1.0000	0 0	0 0	0 0	0 0
31	AVE BOTH READING TEST- RIGHT	3 8208	0.03603	0 00943	1 7828	1 3352
32	AVE BOTH VOCAB TEST- RIGHT	3.8079	0.03283	0 00862	1.6830	1 2973
33	AVE BOTH MATH TEST- RIGHT	8 8909	0 07428	0.00835	1 7624	1.3275
34	AVE MOSAIC(1) TEST- RIGHT	25 7482	0 22588	0 00877	2 0425	1.4292
35	AVE PICTURE TEST- RIGHT	10 8014	0.07127	0 00660	1 2595	1.1223
36	AVE READING TEST- RIGHT	9.2779	0.07481	0.00806	1 6921	1 3008
37	AVE VISUAL TEST- RIGHT	7 0404	0 05216	0.00741	1 3116	1 1453
38	AVE EARNING/HR	3 1676	0.01214	0 00383	0 9257	0 9621

	CV	DEFF	DEFT
MEAN	0 02450	1 6086	1 2548
MEDIAN	0 01210	1 6830	1 2973
STANDARD DEVIATION	0 03928	0 4607	0 1874

NOTE SUMMARY STATISTICS ABOVE EXCLUDE ZERO VALUES