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ABSTRACT
*Assessment; Florida

This report, part of the Florida Department of Education Educational Needs Assessment Study, identifies eight critical learner needs and the target population most associated with each need. A first section is a selected statistical abstract that describes the Florida population, with a wide variety of information gathered from public and private agencies being provided. The next section sets forth the statistical results of an assessment made of seven perennial objectives -- cardinal principles enumerated by the NEA -- based on strategies developed by the ENAS task force. Following this section is tabulated data from a survey analysis of educational practices in all 67 Florida school districts. The data reveal that Florida education appears to be most relevant for whites, is lodged in the larger community's values and beliefs, and that nonconventional outcomes of education (delinquency, divorce, illegitimacy) have their origins in the community rather than in the schools. The eight critical learner needs are identified in a final section. A related document is EA 004 092. (Author/MLF)

> Copies of this document and the companion publication, Florida Educational Opinion Survey, 1970 , are available from the Bureau of Research, Florida Department of Education, Tallahassee, 32304 .

This public document was promulgated at an annual cost of $\$ 4,069.00$ or $\$ 2.80$ per copy to report the results of Florida's Educational Needs Assessment Study.

# an assessment of educational needs for learners in florida 

1970


The ultimate goal of education in Florida is to provide educational programs and activities necessary to meet the needs of every learner in the State.

In an effort to determine the exterit of these needs, the Department of Education conducted a comprehensive needs assessiment study. As a result of this study, eight critical learner needs, and the target populations most associated with each need, were identified. I feel that these identified critical learner needs will provide educators with a sound basis for planning educational programs and activities. As such, I am pleased to present this document as a descrintion of the status of Florida's learner population. I hope that ie information provided will be utilized to further improve our education system.

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## LIST OF SOURCES AND SOURCE CODES

SOURCE CODE
BOC-1 United States Department of Commerce, Bureau of the Census, Number of Inhabitants, PC(1)-A11, Florida

BOC-2 United States Department of Commerce, Bureau of the Census, General Population Characteristics, PC(1)-B11, Florida

BOC-3 United States Department of Commerce, Bureau of the Census, General Social and Economic Characteristics, $\mathrm{PC}(1)-\mathrm{C} 11$, Florida

BOC-4 . United States Cepartment of Commerce, Bureau of the Census, Housing Characteristics for States, Cities, and Counties, HC(1)-A, Florida

BOC-5 United States Department of Commerce, Bureau of the Census, Statistical Abstract of ti? United States

DHRS-1 Department of Health and Rehabilitative Services, Division of Health, Florida Vital Statistics

DHRS-2 Department of Healith and Rehabilitative Services, Division of Health, Florida Morbidity Statistics

DHRS-3 Department of Health and Rehabilitative Services, Division of Youth Services, Florida Juvenile Court Statistics

DHRS-4 Department of Health and Rehabilitative Ser-- vices, Division of Family Services, Annual Statistical Report

DOE-1 Department of Education Reports
DOE-2 Department of Education, Bureau of Curriculum and Instruction

| DOE-3 | Department of Education, Division of Vocational, <br> Technical and Adult Education |
| :---: | :--- |
| DOE-4 | Department of Education, Bureau of Planning <br> and Evaluation, Accreditation Section |
| DOE-5 | Department of Education, Division of Elementary <br> and Secondary Education, Bureau of Research, <br> Research Report No. 89 |
| DOE-6 | Department of Education, Division of Elementary <br> and Secondary Education, Bureau of Research, <br> Research Report No. 90 |
| DOE-7 | Department of Education, Division of Elementary <br> and Secondary Education, Bureau of Research, <br> Research Report No. 99 |
| ETS | University of Florida, Cooperative Test Division, <br> Educational Testing Service, Technical Report <br> No. 150-00-9. |
| FBI | Federal Bureau of Investigation, Uniform Crime <br> Reports, Crime in the United States |
| FCC | Florida Council of Churches |
| FSA | Bureau of Economic and Business Research, <br> University of Florida, Florida Statistical Abstract |
| NGTS | Florida State University, College of Education, <br> Ninth Grade Testing Service, Technical Report <br> No. 5-68 |
| ROS | National Education Association, Research <br> Division, Rankings of the States |
| OSS | State of Florida, Office of the Secretary of State <br> State of Florida, Department of Law Enforce- <br> ment, Crime in Florida |
| DLE |  |

## CHAPTER I

PROLOGUE


#### Abstract

"The State Plan shall identify the critical educational needs of the State as a whole and the critical educational needs of the various geographic areas and population groups within the state, and shall describe the process by which such needs were identified. The process shall be based upon the use of objective criteria and measurements and shall include procedures for collecting, analyzing and validating relevant data and translating such data into determinations of critical educational needs."


Z Section 118.8, U.S. Office of Education regulations for ESEA Title III Programs.

This requirement to prepare a state plan to meet identified needs was given the Florida Department of Education in 1968 when the responsibility for administering Title III at the state level was transferred from the U.S. Office of Education to the individual state departments of education. It was immediately realized that this plan would be basic to the proper implementation of the Title III program-indeed, to the proper understanding of the direction the entire educational effort of the state should take. The purpose of the Elementary and Secondary Education Act is clear. Public Law 90-247 spells this out in Section 303 where it is stated that assistance will be made available to states for:
"(1) planning for and taking other steps leading to the development of programs or projects designed to provide supplementary educational activities and services described in paragraphs (2) and (3) including pilot projects designed to test the effectiveness of plans so developed; (2) the establishment or expansion of exemplary and innovative educational programs . . . for the purpose of stimulating the adoption of new educational programs. . . in the schools of the State; and
(3) the establishment, maintenance, operation and


#### Abstract

expansion of programs or projects . . . designed to enrich the programs of local elementary and secondary schools and to offer a diverse range of educational experience to persons of varying talents and needs by providing, especially through new and improved approaches, supplementary educational services and activities . . ."


Public Law 90-247, Section 303.

It is obvious that a program of this scope must be based on a thorough knowledge and understanding not only of what is actually going on in the educational enterprise but what one would like to see derived from it. In short, what is needed is what Dr. Roger Kaufman has described in such deceptively simple terms as the discrepancy that exists between "what is" and "what ought to be'. ${ }^{1}$ Accepting this concept, the Department of Education set about the task of establishing the "what is" of needs assessment.

However, this presented a formidable challenge to those responsible for the needs assessment activity. Florida is unique; its tremendous and continuing growth, a national phenomenon, has resulted in a heterogenous population, a considerable variation in the quality of education at the local level, as well as in the ability and willingness of local districts to support their schools adequately. How has this diversity affected the output of the educational system as measured by its adult product? Even firiding the answers to this question presented difficulties. Florida has a highly mobile population. As of 1970, 21 percent of its residents had moved in from other states since 1965. Another 41 percent had changed their place of residence within the state in the same fiveyear period. ${ }^{2}$ Such extreme and characteristic mobility not only underscored the importance of the needs assessment but led to some basic decisions about the study itself. The most important was that for the purpose of determining needs, Florida must be considered a closed system. That is, what are the educational problems and unmet needs in Florida as it exists today to which the school system could direct its energies most meaningfully?

Equally important, a position was taken that whatever strategies were chosen for the assessment, they must be based not only on the most current educational thinking in the area but must as well incorporate the thinking of the wide variety of formal

[^0] Schools, 31 (November-December 1968), pp 6-8.
${ }^{2}$ Florida State Chamber of Commerce report in the Florida Times Union, July 30, 1972.
educational interests in the state. At the same time, however, it was also felt that the Florida Department of Education should assume as much responsibility for implementing the actual processes of assessment as its resources would permit. With these preliminary decisions made, actual planning for the needs assessment could proceed.

## STRATEGY

It was obvious that the scope of the undertaking called for outside counsel and guidance. Early in 1968, the Florida Educational Research and Development Council (FERDC) was asked to assemble and supervise a special task force to provide this assistance. It consisted of representatives of the full spectrum of educational interests in the state whose responsibility was to prepare a detailed plan for a study of educational needs of Florida. In response to this request, 19 outstanding educators were recruited by FERDC. They were experienced, professional educators, many widely known in the fields of educational theory and research representing both public and private schools, public and private universities, the U.S. Office of Education and the Florida Department of Education.

This task force held two lengthy sessions from which emerged the outline for a comprehensive, multi-strategy survey, entitled Plan for Study of the Educational Needs of Florida. (A copy of the plan may be found in Appendix A; a list of task force members in Appendix B.) The plan was accepted by the State Board of Education in June, 1968. Shortly afterward, it was initiated by the Department of Education and from that point on has served as the primary guide for the state's assessment effort.

The plan suggested three strategies to produce the necessary information that the task force considered essential to an understanding of the educational needs of the state. These were:
(1) A review and secondary analysis of state and distre: socioeconomic, ethnic, and educational data already accessible to the Department of Education from a variety of public and private
agencies;
(2) An original survey of educational practices and learner characteristics of a random sample of Florida schools; and
(3) An original sampling of the opinions of certain specified sub-populations within the state.

To give direction to these data collection activities, three
sets of sixty to seventy similariy worded questions were formulated covering the seven broad areas of behavior listed below:

Communication and Learning Skills
Citizenship
Vocational Interests
Mente: and Physical Health
Home and Family Relationships
Cultural and Aesthetic Appreciation
Moral and Ethical values
These broad areas, identified by tine task force as perennial objectives, corresponded very closely to the Seven Cardinal Principles of Education authored by the National Education Association in 1918.

The questions ranged over a wide variety of topics-demographic, sociai, and economic, as well as educational, with the greatest emphasis on the first three areas. Few of the questions were actually focused on school achievement per se. The members of the task force made a special effort, in formulating questions with this emphasis, to insure thiat the assessment would be particularly sensiti e to the nonacademic needs of learners. Too often, it was felt, this kind of need tends to be overlooked by the school system in its concern for more strictly academic problems of students.

Five types of information were to be produced as a result of implementing the three research strategies previously mentioned:
(1) A description of the status of Florida learners in seven broad areas of behavior pertinent to the state's educational interests.
(2) A statement of the critical educational needs of Florida learners in the context of these behavioral areas.
(3) A description of population characteristics most highly correlated with the incidence of each critical need.
(4) An evaluation of the effect which certain selected system inputs have on each critical need.
(5) An analysis of the attitudes and opinions which certain "educationally relevant" subpopulations hold toward education.

All five types of information were seen by the task force as necessary to place the Department on firm ground in future efforts to deal with identified needs.

## IMPLEMENTATION

Shortly after implementing the plan, an administrative decision was made in the Department of Education to replace temporarily the survey of educational practice and learner characteristics of Florida schools with a more limited one of district practices. Among the reasons was that the substitute activity could be organized around existing data, eliminating the need for a field survey. Care was taken, however, that the new activity, although at a different level of analysis, would serve essentialiy the original purpose. It became a pilot activity on which the more extensive and complex state school practices survey could be implemented later. A further decision was made, because of the magnitude of the undertaking, to limit the target of assessment to public school students, K-12.

The overall effort, however, did meet with better than average success. The result was an overwhelming amount of raw data pertaining to the Florida school system. The question of analysis of this data, therefore, was crucial. The task force had foreseen this contingency and had set general guidelines, including the creation of an evaluation panel to determine the areas of critical needs and the degree of their criticality.

When the panel was organized, it accepted the guidelines of the task force with only minor changes. (A list of the evaluation panel members can be found in Appendix C.) It did, however, establish its own criteria for determining criticality. A need was to be considered critical hen:
(1) The diifference between goal and status was too great to be attributable to chance;
$\therefore$ (2) The amelioration of the need was seen as vital to the achievement of any one of the Department of Education's longrange objectives (goals); and
(3) The need was selective, i.e., it was found to be more highly associated with certain segments of the learner population than otivers.

The initial identification of a need was generally based upon the evidence of an observed difference between the distribution of a certain learner characteristic in the state's population (or in some subpopulation) and a "norm." This norm was usually a comparable national, state or subpopulation value seen by the panel as applicable.

Two types of data entered into the panel's specification of need-susceptible target populations: first, observed excessive differentials between status and goal for specific subpopulations
and, second, the results of a special correlation analysis carried out in conjunction with the survey of district practices (see Chapter IV).

The method of evaluating the effectiveness of district practices was based largely on a partial correlation analysis. Here the panel decided whether or not a meaningfui amount of variance in learner performance could still be attributed to systems inputs after the effect of non-educational factors had been removed. Using these techiniques, the panel identified critical needs in the broad behavioral areas establishec by the task force, and 11 needsusceptible target populations.

## CHAPER II

## SELECTED CHARACTEmSTICS OF FLORIDA'S POPULATION

Florida is a many-faceted state. A land of sunshine, beaches, palms and leisure. Northern counties with a plantation background. subtropical south that is one of the fastest-growing arefis in the country. Great agricultural resources. Metropolitan centers with all the urban problems. Florida is a state of diversity and contrasts. Filorida is also people. This sectiven presents a selection of data about the people of Flonita and their characteristics.

## GROWTH

The rapid growth exhibited by Florida's population for the past three decades has beem little stort of explosive. Table 2.1 shows that in 30 years Florida has:misen from the nation's 27th largest state to its ninth. During thisperiod the rate of population growth has consistently exceeded twat of the nation as a whole and in 1960, Florida ranked first in the rate of growth with an increse of 78.7 percent in the 1950 60 decade.

During the 1960-70 decaderthe absolute increase was $1,637,883$. This was less than the 2180,255 of the $p$ eceding decarde and, with a larger base, the nate of increase fell to 37.1

Table 2.1. POPULATION GROWTh, 1940-1970

|  |  | Florida <br> Ranking <br> Among <br> States | Florida <br> Percent <br> Increase | Florida <br> Percent <br> Pancrease <br> Rtates | U.S. <br> Percent <br> Increase |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1970 | $5,789,443$ | 9 | 37.1 | 2 | 13.3 |
| 1960 | $4,951,560$ | 10 | 78.7 | 1 | 21.9 |
| 1950 | $2,771,305$ | 20 | 46.1 | 5 | 21.5 |
| 1940 | $11,897,414$ | 27 | - | - | 20.8 |

[^1]percent-second in the nation. However, the Bureau of Population Studies of the University of Florida foresees a continued population growth for the state while a national study ${ }^{1}$ places Florida's estimated population at $7,101,000$ in 1972. The study also predicts that the state's population will have grown to some $8,135,000$ persons by 1977 and to 9,447,200 persons by 1982.

As Florida grows, it is rapidly becoming one of the nation's more densely populated states. During tine period 1940-70, it moved from 32 nd in population density to 14th. The 1970 census showed Florida had over twice as many residents per square mile as the national average. Table 2.2 shows these 30 -year comparisons.

Table 2.2. POPULATION DENSITY, 1940-1970

| Year | Florida <br> Person/Sq.Mi. | Ranking <br> Among States | U.S. <br> Person/Sq.Mi. |
| :---: | :---: | :---: | :---: |
| 1970 | 123.0 | 14 | 57.0 |
| 1960 | 91.5 | 18 | 50.5 |
| 1950 | 31.5 | 28 | 42.9 |
| 1940 | 35.0 | 32 | 44.5 |

Source Code: BOC-1 1970, FSA 1968, ROS 1970

Florida's growth has not been uniform. As the state was experiencing its greatest overall rate of population expansion (1950-60), twelve of its more rural counties lost population. In the following decade (1960-70), while the state as a whole continued substantial growth, six counties exhibited a decrease in population. These counties, with their urban/rural percent, are shown in Table 2.3.

For the state as a whole, however, rapid growth has been more than matched by a spectacular expansion in school enrollment. Table 2.4 shows enrollment and rate of increase by three grade-level combinations at ten-year intervais from 1939-40 to 1969-70. Note that in two of these decades increases in school enrollment exceeded the general population increases shown in Table 2.1.

[^2]$\begin{array}{ll}\text { Table 2.3. } & \text { FLORIDA COUNTIES EXHIBITING A DECREASE in } \\ \text { POPULATION } 1960-1970\end{array}$

| County | Percent <br> Decrease | Percent <br> Urban |
| :--- | :---: | :---: |
| Flagler | -2.5 | 0.0 |
| Gadsden | -6.7 | 41.5 |
| Holmes | -1.1 | 0.0 |
| Jackson | -4.9 | 27.0 |
| Jefferson | -8.0 | 0.0 |
| Madison | -4.8 | 27.7 |

Scurce Code: BOC-1, 1970

## RESIDENCE

Florida's increasing and rapid urbanization is illustrated in Table 2.5 which describes the urban/rural distribution of the state's population. Figures for the nation as a whole are given for 1970 as a basis for comparison. In 1970, approximately four out of five Florida residents were in urban areas, somewhat above the national average.

## RACE

The distribution of Florida's population by race is given in Table 2.6. This shows that the percent of minority races other than black is fractional. While the percent of blacks to whites in Florida exceeds the national average, this difference is diminishing as the percent of blacks in the national population increased between 1940 and 1970 while the percent of blacks in the Florida population decreased from 27.1 percent in 1940 to 15.5 percent in 1970.
Table 2.4. SCHOOL ENROLLMENT, 1940-1970

| School Year | K-6 |  | Grade Level $7-12$ |  | K-12 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent Increase fram Previous Decade | Number | Percent Increase From Previous Decade | Number | Percent Increase From Previous Decad |
| 1969-1970 | 863,549 | 40.82 | 687,790 | 68.89 | 1,551,339 | 52.02 |
| 1959-1960 | 613,226 | 101.92 | 407.235 | 131.91 | 1,020,461 | 112.91 |
| 1949-1950 | 303,686 | 25.00 | 175,593 | 20.98 | 479,279 | 23.50 |
| 1939-1940 | 242,936 | - | 145,131 | - | 388,067 | - |

Source Code: DOE-1

ERIC

Table 2.5. $\quad \begin{aligned} & \text { POPULATION DISTRIBUTED BY URBAN AND RURAL, } \\ & 1940-1970 \text { ( } \mathrm{In}_{\mathrm{i}} \text { Percent) }\end{aligned}$

|  |  | Rural |  |
| :--- | :---: | :---: | ---: |
| Year | Urban | Nonfarm | Farm |
| Florida |  |  |  |
| 1970 | 80.5 | 17.3 | 2.2 |
| 1960 | 74.0 | 23.9 | 2.1 |
| 1950 | 65.5 | 26.1 | 8.4 |
| 1940 | 55.1 | 29.0 | 15.9 |
| United States |  |  |  |
| $\quad 1970$ | 73.5 |  | 26.5 |

Source Code: BOC-2 1970

Table 2.6. POPULATION DISTRIBUTED BY RACE, 1940-1970 (In Percent)

| Year | White |  | Negro |  | Other |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U. S. | Fla. | U. S. | Fla. | U. S. | Fla. |
| 1970 | 87.4 | 84.1 | 11.2 | 15.5 | 1.4 | 0.4 |
| 1960 | 88.6 | 82.1 | 10.5 | 17.8 | 0.9 | 0.1 |
| 1950 | 89.3 | 78.1 | 9.9 | 21.8 | 0.8 | 0.1 |
| 1940 | 89.6 | 72.9 | 9.7 | 27.1 | 0.7 | (1) |

Source Code: BOC-3 1970
${ }^{1}$ Rounded to less than one-tenth of one percent

The marked urbanization of Florida illustrated by Table 2.5 shows some significant variations when race is considered. The following three tables (Tables 2.7, 2.8 and 2.9) combine racial and urban-rural trends to bring out these variations.

Table 2.7 shows that Florida's white and Negro residents were not being urbanized at the same rate. Negroes tend to move from rural to urban areas more rapidly than whites. The second table (Table 2.8) shows, however, that while Negroes were concentrating in urban areas at a faster rate, they were less likely than whites to select the larger metropolitan centers.

| Year | White |  | Negro |  | Indian |  | Other |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural |
| 1970 | 80.2 | 19.8 | 82.5 | 17.5 | 65.7 | 33.3 | 85.8 | 14.2 |
| 1960 | 73.4 | 26.6 | 76.4 | 23.6 | 40.9 | 59.1 | 73.5 | 26.5 |
| 1950 | 65.4 | 34.6 | 65.6 | 34.4 | 18.5 | 81.5 | 72.1 | 27.9 |
| 1940 | 54.9 | 45.1 | 55.8 | 44.2 | 5.2 | 94.8 | 71.1 | 28.9 |
| 1930 | 53.1 | 46.9 | 48.7 | 51.3 | 4.1 | 95.9 | 65.3 | 34.7 |

Table 2.8. DISTRIBUTION OF POPULATION BY RACE AND SMSA', 1940-1970 (In Percent)

|  | White |  |  | Negro |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Year | Inside | Outside |  | Inside | Outside |
| 1970 | 85.7 | 14.3 |  | 68.0 | 32.0 |
| 1960 | 66.8 | 33.2 |  | 60.1 | 39.9 |
| 1940 | 36.7 | 63.3 | 28.7 | 71.3 |  |

Source Code: BOC-3 1970
'Standard Metropolitan Statistical Area
The third table (Table 2.9) shows that despite more rapid urbanization of Negroes in Florida, the effect on the racial percentages of urban areas was more than negated by the reduction in the percent of Negroes in the state's overall population as shown by Table 2.6.

Table 2.9. PROPORTION OF URBAN/RURAL POPULATION BY RACE, 1940-1970 (In Percent)

|  | White |  |
| :--- | :--- | :--- |
| Year | Urban | Rural |
|  | Urban | Rural |
| 1970 | 83.9 | 85.8 |
| 15.7 | 13.8 |  |
| 1960 | 81.5 | 78.2 |
| 18.4 | 21.0 |  |
| 1950 | 78.1 | 73.2 |
| 21.8 | 26.7 |  |
| 1940 | 72.5 | 66.2 |

Source Code: BOC-3 1970

## AGE

The image of Florida as primarily a residence for older and retired persons is not born out by Tables 2.10 and 2.11. Table 2.10 shows that in 1970 the median age for Floridians was approximately 32 years. The median age, however, has been rising for whites while taking a downward turn for nonwhites in 1970. The median age for nonwhites was 13.1 years less than for the white population. One explanation for this is the higher birth rate of nonwhites coupled with their higher death rate in the middle and upper age brackets.

Table 2.10. MEDIAN AGE OF POPULATION BY COLOR AND SEX, 1930-1970 (In Percent)

|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Color/Sex | 1970 | 1960 | 1950 | 1940 | 1930 |
| State | 32.3 | 31.2 | 30.9 | 28.9 | 25.8 |
| $\quad$ Male | 30.4 | 30.3 | 30.6 | 29.1 | 26.4 |
| Female | 34.2 | 32.0 | 31.2 | 28.7 | 25.3 |
| White | 34.8 | 33.1 | 32.0 | 30.3 | 26.5 |
| Male | 32.7 | 32.1 | 31.5 | 29.9 | 26.8 |
| Female | 36.8 | 33.9 | 32.5 | 30.0 | 26.2 |
| Nonwhite | 21.7 | 23.0 | 27.2 | 26.7 | 24.6 |
| $\quad$ Male | 20.4 | 22.7 | 27.2 | 27.3 | 25.5 |
| Female | 22.8 | 23.3 | 27.2 | 26.1 | 23.8 |

Source Code: BOC-2 1970

Comparison of the urban and rural categories (Table 2.11) indicates there is a disproportionately large group of younger persons, 19 and under, in the rural areas, with the largest proportion in the rural farm areas being found between ages 5 and 19. There is a somewhat lower proportion of persons under age 5 in rural farm areas, possibly reflecting the out-migration of persons between ages 20 and 29, the primary child-bearing period.

## BIRTHS

The overall birth rate for Florida rose steadily between 1940 and 1960, then declined sharply by 1970 (Table 2.12). Of particular interest is the increasing differential in rates for whites and nonwhites during this period. In 1940 the nonwhite birth rate exceeded that for whites by approximately 1.5 per thousand population. In 1970 the difference had increased approximately five times, making the differential of nonwhites over whites almost ten per thousand population.
Table 2.11. AGE BY URBAN/RURAL RESIDENCE AND COLOR, 1970, (In Percent)


[^3]Table 2.12. BIRTH RATE BY COLOR, 1940-1970¹

| Color | 1970 | 1960 | 1950 | 1940 |
| :--- | :--- | :--- | :--- | :--- |
| Florida Total | 16.8 | 23.1 | 22.8 | 17.6 |
| White | 15.1 | 20.6 | 20.7 | 17.0 |
| Nonwhite | 26.0 | 34.9 | 30.5 | 19.1 |

Source Code: DHRS-1
'Births/1,000 population

The median age of mothers, by color, appears in Table 2.13. For each of the periods reported, the median age of nonwhite mothers tended to be lower than for white mothers.

Table 2.13. MEDIAN AGE OF MOTHERS BY COLOR, 1930-1970

| Color | 1970 | 1960 | 1950 | 1940 | 1930 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| White | 24.1 | 24.9 | 25.8 | 25.2 | 25.7 |
| Nonwhite | 22.4 | 24.3 | 24.3 | 23.5 | 23.8 |

Source Code: DHRS-1

## MORTALITY

Table 2.14 compares the death rates adjusted for proportionate age groups, for white and nonwhites. For the period reported, 1950-1970, the death rates of nonwhites persistently exceeded those for whites. While death rates for both groups declined, the gap between the races remained fairly constant.

Table 2.14. AGE ADJUSTED DEATH RATES BY COLOR, 1950$1970^{1}$

| Color | 1970 | 1960 | 1950 |
| :--- | :---: | :---: | :---: |
| Florida Total | 7.0 | 7.3 | 8.3 |
| White | 6.4 | 6.5 | 7.2 |
| Nonwhite | 11.1 | 11.2 | 12.7 |

Source Code: [HRS. 1
'Deaths per 1,000 population

Table 2.15 provides death rates by race and sex. Noteworthy is the relationshiprof white and nonwhite with respect to rates by sex. The death rate for males in both groups continued to remain higher than those for females. In 1970, the rate increased in all categories, except for nonwhite females.

Table 2.15. UNADJUSTED DEATH RATES BY COLOR AND SEX, 1950-19701

| Color/Sex | 1970 | 1960 | 1950 |
| :--- | :---: | :---: | :---: |
| Florida Total | 10.9 | 9.6 | 9.4 |
| White |  |  |  |
| Male | 13.6 | 11.8 | 10.8 |
| Female | 8.7 | 7.2 | 9.8 |
| Nonwhite |  |  |  |
| Male | 12.2 | 11.8 | 13.5 |
| Female | 8.1 | 8.6 | 9.7 |
| Source Code: DHRS.1 |  |  |  |

Source Code: DHRS. 1
${ }^{1}$ Deaths per 1,000 population

Florida has made advances in the reduction of infant mortality among both whites and nonwhites but Table 2.16 shows that the difference between the races is still wide and appears to be widening. Since 1940 the nonwhite infant mortality rate has continued to be almost twice as great as the rate for white infants.

Table 2.16. INFANT MORTALITY BY RACE, 1940-19701

| Color | 1970 | 1960 | 1950 | 1940 |
| :--- | :--- | :--- | :--- | :--- |
| Florida Total | 21.4 | 29.7 | 32.3 | 53.8 |
| $\quad$ White | 17.7 | 23.6 | 26.8 | 44.2 |
| Nonwhite | 32.9 | 46.1 | 45.7 | 76.8 |

Source Code: DRHR-1
'Deaths per 1,000 live births.

Even more striking is the reduction in the maternal death rate (Table 2, T). The rate has been reduced from an overall 60.5 deaths per $10 ; 000$ live births in 1940 to 3.0 in 1970. The rate for nonwhife mothers has improved even more markedly from 99.7 per 10,000 live births in 1940 to 3.6 in 1970.

Table 2.17. MATERNAL DEATH RATES BY COLOR, 1940-19701

|  | $1970^{\circ}$ | 1960 | 1950 | 1940 |
| :--- | :---: | ---: | ---: | ---: |
| Color | 3.0 | 5.0 | 12.9 | 60.5 |
| Florida Total | 2.4 | 2.0 | 7.4 | 44.7 |
| White | 5.0 | 13.1 | 26.2 | 99.7 |
| Nonwhite |  |  |  |  |

Source Code: DHRS-1
1Deaths per 10,000 live births.

Deaths by violence (Table 2.18, next page) show marked differences between whites and nonwhites. The rate for nonwhites is greater in all categories except suicide and self-inflicted injury, in which it is less than one-third. The opposite is the case in accidental deaths (excluding motor vehicular accidents) and is most marked on homicides. In this category the nonwhite rate is 8.6 times larger than that of whites.

## MIGRATION

Florida has a highly mobile population. Table 2.19 shows that 46.6 percent of those living in the state in 1970 resided in a different state, county or country in 1965. More than a quarter ( 25.2 percent) moved from another county. Almost one in five ( 18.5 percent) came from another state. Another 2.9 percent came in from outside the U.S. Caution is necessary in interpreting these figures. The definition of "migrant" used in these tables is different from that usually referred to as migrant worker population. As used here it is more synonymous with "movers" as is used for intrastatemd intracounty change of residence.

Tatiale 2.20) and Table 2.21 examine in more detail this migrant popuration which is one of the marked charactistics of
Table 2.18

| Type | 1970 |  |  | 1960 |  |  | 1950 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | W | NW | Total | W | NW | Total | W | NW |
| Accidents | 58.0 |  |  |  |  |  | Tolal | W | NW |
| Excluding motor vehicular | 58.0 29.7 | 54.2 26.5 | 80.6 48.5 | 57.4 32.7 | 52.6 | 79.2 | 68.7 | 64.1 | 85.2 |
| Moter Vehicular only | 28.4 | 27.7 | 48.5 32.1 | 32.7 24.6 | 29.2 | 48.7 | 38.0 | 33.8 | 53.0 |
| Homicide Suicide \& Self Inflicted Injury | 12.6 | 27.7 6.0 | 32.1 51.7 | 24.6 9.0 | 23.4 3.6 | 30.5 | 30.7 | 30.3 | 32.2 |
| Suicide \& Self Inflicted Injury | 13.7 | 15.3 | 4.2 | 9.0 13.4 | 3.6 15.5 | 33.8 | 13.1 | 4.3 | 44.6 |
| Source Code: DHRS. 1 |  |  |  |  | 15.5 | 3.9 | 11.4 | 13.7 | 3.1 |

Table 2.19. PERCENT OF FLORIDA'S POPULATION FIVE YEARS OF AGE AND OVER THAT IS MIGRANT BY TYPE

| Residence in 1965 | Residence in 1970 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | State | Urban | Rural |  |  | SMSA |  |
|  |  |  | Total | Nonfarm | Farm | Inside | Outside |
| In diff. county in state | 25.2 | 24.8 | 26.4 | 27.6 | 17.4 | 24.0 | 27.8 |
| In diff. state | 18.5 | 18.9 | 16.4 | 18.5 | 8.7 | 18.2 | 19.0 |
| Total | 43.7 | 43.7 | 42.8 | 46.1 | 26.1 | 42.2 | 46.8 |
| Abroad | 2.9 | 3.3 | 1.0 | 1.1 | 0.5 | 3.6 458 | ${ }_{4}^{1.3}$ |
| Grand Total | 46.6 | 47.0 | 43.8 | 47.2 | 26.6 | 45.8 | 48.1 |

Florida. Table 2.20 breaks down these movers into urban/rural and SMSA residency categories. Approximately four in five of those who moved from one county to another chose urban areas while an even higher percent of those coming from another state (82.6 percent) became urban residents. Only. 17.7 percent of the total found homes in rural nonfarm areas while 1.3 percent are classified as rural farm.

Table 2.21 is a breakdown of migrants and movers age 20 and over, by race and sex. Taken together the tables show the tremendous volume of in-migration and change of residence among Floridians contributing to a highly mobile population. Table 2.21 also shows a comparison of age groups, sex and race to distance moved using information gathered from the 1960 census. ${ }^{2}$

Table 2.21. FLORIDA'S MOVERS AND MIGRANTS: FIRST AND SECOND HIGHEST MOVERS BY AGE GROUPS, COLOR AND SEX, 1960

| Different House | White |  | Nonwhite |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female |
| Movers: |  |  |  |  |
| Same county | $\begin{gathered} 5-91 \\ 10-14^{2} \end{gathered}$ | $\begin{gathered} 5-9 \\ 10-14 \end{gathered}$ | $\begin{gathered} 5-9 \\ 10-14 \end{gathered}$ | $\begin{gathered} 5-9 \\ 10-14 \end{gathered}$ |
| Same state | $\begin{gathered} 5-9 \\ 20-24 \end{gathered}$ | $\begin{gathered} 5-9 \\ 20-24 \end{gathered}$ | $\begin{gathered} 20-24 \\ 5-9 \end{gathered}$ | $\begin{gathered} 20-24 \\ 5-9 \end{gathered}$ |
| Migrants: |  |  |  |  |
| Different state | $\begin{gathered} 5-9 \\ 10-14 \end{gathered}$ | $\begin{gathered} 5-9 \\ 10-14 \end{gathered}$ | $\begin{gathered} 20-24 \\ 5-9 \end{gathered}$ | $\begin{gathered} 20-24 \\ 5-9 \end{gathered}$ |
| Abroad | $\begin{aligned} & 25-29 \\ & 20-24 \end{aligned}$ | $\begin{aligned} & 25-29 \\ & 30-34 \end{aligned}$ | $\begin{aligned} & 25-29 \\ & 20-24 \end{aligned}$ | $\begin{aligned} & 25-29 \\ & 30-34 \end{aligned}$ |
| Moved, residence ris empurd | $\begin{aligned} & 20-24 \\ & 25-29 \end{aligned}$ | $\begin{aligned} & 20-24 \\ & 25-29 \end{aligned}$ | $\begin{aligned} & 20-24 \\ & 25-29 \end{aligned}$ | $\begin{aligned} & 20-24 \\ & 25-29 \end{aligned}$ |

Source var. BOC-3 1960
'Age group of 1 st highest mover
${ }^{2}$ Age group of 2nd highest mover

[^4]
## MARRIAGE AND DIVORCE

Information pertaining to the marital status of Florida's population is presented in Tables 2.22 through 2.25. Table $2 . \hat{2} 2$ shows the proportion of married persons which had been increasing since 1930 turned down in 1970. The increase in the number of divorced persons remained steady, approximately tripling for both males and females in the 40-year period reported. This table also indicates the continued increase in the preponderance of widowed females over widowed males.

Table 2.22. MARITAL STATUS BY SEX, 1930-1970¹ (In Percent)

| Status/Sex | Year |  |  |  | - |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1970 | 1960 | 1950 | 1940 | 1930 |
| Single: |  |  | - |  |  |
| Male | 24.4 | 21.6 | 22.9 | 31.0 | 32.2 |
| Female | 18.0 | 14.9 | 15.2 | 22.1 | 23.1 |
| Married: |  |  |  |  |  |
| Male | 68.9 | 71.8 | 70.4 | 62.8 | 60.9 |
| Female | 63.1 | 68.4 | 68.0 | 61.6 | 62.0 |
| Divorced: |  |  |  |  |  |
| Male | 3.4 | 2.7 | 2.5 | 1.6 | 1.2 |
| Female | 5.0 | 3.6 | 3.3 | 2.3 | 1.7 |
| Separated: |  |  |  |  |  |
| Male | 1.9 | 2.1 | 3.1 | NA | NA |
| Female | 2.5 | 2.8 | 3.8 | NA | NA |
| Widowed: |  |  |  |  |  |
| Male | 3.3 | 3.9 | 4.2 | 4.6 | 5.2 |
| Female | 13.9 | 13.1 | 13.5 | 14.0 | 13.1 |

Source Code: BOC-2 1950, 1960, 1970
'Persons 14 years old and over

Table 2.23 shows a higher percent of single and separated persons among nonwhites than whites. This is particularly noticeable in the category of separated, running about seven times higher for nonwhite males and about eight times higher for nonwhite females. The preponderance of widowed females over widowed males is indicated for both races, the percent being the same for both white and nonwhite females.

Table 2.23. PERCENT MARITAL STATUS BY SEX AND RACE, 1970

|  | Male |  |  | Female |  |
| :--- | ---: | ---: | :--- | :--- | ---: |
| Status | White | Negro |  | White | Negro |
| Single | 22.7 | 34.9 |  | 16.5 | 27.2 |
| Married | 70.8 | 57.1 |  | 64.4 | 53.9 |
| Divorced | 3.4 | 3.2 |  | 5.1 | 4.9 |
| Separated | 1.1 | 7.0 |  | 1.3 | 10.1 |
| Widowed | 3.1 | 4.8 |  | 14.0 | 14.0 |

Source Code: 80C-2 1970, BOC-3 1970
Population 14 years of age and over

Table 2.24 indicates there is a smaller proportion of married males in the rural farm category, as well as lower proportions in the divorced, separated and widowed categories. Females, however, presented a somewhat different picture in 1960, the latest figures available.

Marriage and divorce rates for Florida and the U.S. are compared in Tables 2.25 and 2.26. Although Florida's overall marriage rate was slightly lower than that for the nation-in 1970 (Table 2.25) the divorce rates have been consistently higher than for the nation since 1940 and in 1970 were two percentage points higher.

The divorce rates in Table 2.26 do not take into account separations without divorce. This lack of reliable statistics distorts the picture of marriages that have actually been dissolved. This situation has, historically, been of greater significance among nonwhites. The effect of this is related to the information in Table 2.7 in the preceding Population series, which shows the proportion of nonwhites in Florida exceeds that for the nation.

Minor children aged 18 and under are involved in approximately 55 percent of all divorces in Florida. More than one minor child is involved in 31.7 percent of divorce cases.
Table 2.24. PERCENT MARITAL STATUS BY PLACE OF RESIDENCE AND SEX, $1960^{1}$

| Marital Status | State |  | Urban |  | Rural Nonfarm |  | Rural <br> Farm |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female | Male | Female |
| Single | 21.8 | 14.7 | 20.8 | 14.9 | 24.3 | 13.7 |  |  |
| Married | 72.0 | 68.6 | 72.8 | 67.2 | 70.1 | 73.8 | 65.8 | 78.2 |
| More than once | 22.1 | 21.4 | 22.0 | 21.5 | 22.4 | 21.7 | 18.2 | 15.2 |
| Diverced | 2.7 | 3.7 | 2.8 | 4.2 | 2.4 | 2.2 | 1.8 | 1.4 |
| Separated | 2.1 | 2.8 | 2.2 | 3.1 | 1.8 | 2.0 | 1.8 | 1.4 |
| Widowed | 3.5 | 12.9 | 3.6 | 13.8 | 3.1 | 10.3 | 2.9 | 1.3 9.9 |

Table 2.25. MARRIAGE RATES BY COLOR, $1970^{1}$

|  |  | Color |  |
| :--- | :---: | :---: | :---: |
|  | Totai | White | Nonwhite |
| Florida | 10.1 | 10.5 | 8.6 |
| United States | 10.7 | NA | NA |

Source Cede: DHRS-1 1970
'Per 1,000 Population
Table 2.26. DIVORCE RATES, 1940-19701

|  | Year |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 1970 | 1960 | 1950 | 1940 |
| Florida | 5.5 | 3.9 | 6.4 | 5.8 |
| U.S. | 3.5 | 2.2 | 2.6 | 2.0 |

Source Code: DHRS-1
'Per 1,000 population
Table 2.27. DIVORCES INVOLVING MINOR CHILDREN, 1969

| Number of Children | Number of <br> Divorces | Percent |
| :--- | :---: | ---: |
| No minor children | 15,473 | 44.7 |
| One child | 7,765 | 22.4 |
| Two children | 5,767 | 16.7 |
| Three or more | 5,197 | 15.0 |
| Unknown | 398 | 1.2 |
| Total divorces | 34,600 | 100.0 |

Source Code: DHRS-1 1970

## FAMILY SIZE

Data pertaining to family size are presented in Tables 2.28 through 2.30. Rural families, both farm and nonfarm, tend to have more children under age 18 than do urban families (Table 2.28).

There was a higher percent of urban families with one child. There was a higher percent of rural and nonfarm families with two or three children. Families with four or more children were markedly more numerous proportionately among rural farm families.

Table 2.28. SIZE OF FAMILY: PERCENT OF FAMILIES WITH CHILDREN UNDER 18 YEARS OF AGE BY TYPE OF RESIDENCE, 1960

|  | Percent of Families by <br> Number of Children |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | ---: |
| Residence | None | 1 | 2 | 3 | 4 or |
| State | 47.8 | 17.8 | 16.4 | 9.5 | 8.4 |
| Urban | 49.1 | 17.9 | 16.4 | 9.1 | 7.5 |
| Rural Nonfarm | 43.5 | 17.7 | 16.9 | 10.6 | 11.3 |
| Rural Farm | 48.1 | 16.5 | 14.5 | 9.0 | 11.9 |
| Source Code: BOC. 31060 |  |  |  |  |  |

Source Code: BOC-3 1960
A tendency for more white than nonwhite families to be childless is indicated in Table 2.29. In the larger family category (four or more children under age 18) nonwhites outnumbered whites about three to one, a difference much greater than in any other category.

Table 2.29. SIZE OF FAMILY BY NUMBER OF CHILDREN UNDER 18 YEARS OF AGE BY COLOR, 1960

|  | Percent of Families with <br> Children Under 18 Years Old |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2 | 3 | 4 or <br> more |
| Color | None | 1 | 18.2 | 9.5 | 6.7 |
| White | 48.5 | 18.1 | 17.2 | 9.1 | 19.3 |
| Nonwhite | 43.5 | 16.3 | 11.8 |  |  |

The percent of households with both spouses present is shown in Table 2.30. It was significantly higher among whites ( 90.4 percent) than nonwhites ( 72.9 percent). In categories where only one was present, households headed by females outnumbered those headed by males in every category except that of white single males but even in this case the variance was minor.

## HOUSING

Table 2.31 indicates the typical Florida resident owned the house in which he lived ( 68.6 percent). The typical house had 4.7 rooms, sound plumbing ( 94.9 percent) and was valued at $\$ 15,000$. While the percent of home ownership was higher in rural areas ( 78 percent) the median value was lower at $\$ 11,600$.

Table 2.32, which isolates data on Negro housing characteristics, shows some differences from the housing picture as a whole. Except for those living in rural areas, less than half of this group owned their own homes. The proportion of Negro housing with sound plumbing was 78.8 percent compared with the 94.9 percent shown in the previous table for the entire state. In the category of rural housing, occupancy of more than one person per room was the case in 26.4 percent of the homes, compared with 9 percent for the state as a whole (Table 2.31).

## INCCME

Median income of Floridians, age 14 and over, is reported in Table 2.33. Income varied markedly with color, sex and place of residence. When color were held constant, males tended to receive higher income than females. When sex and color were held constant, urban income tended to be higher than nonurban. When sex and residence were taken into account, whites tended to receive higher incomes. Taking all three variables into consideration, white urban males received the highest income and nonwhite rural farm females the lowest.

Wide discrepancies in income between whites and nonwhites are shown in Table 2.34. Among nonwhites, 27.6 percent of the families had incomes below $\$ 3,000$. Among whites, only 10.8 percent were at this income level. Both these percentages are substantially higher than for the nation. Median income for Florida nonwhites was slightly more than half the national average for all families. Median income for Florida white families ( $\$ 8,267$ ) was still well below the national median of $\$ 9,433$. In the higher income levels ( $\$ 15,000$ a year and up) the difference between the races was even more marked. Among Florida white families, 18.6 percent were in this category compared to the national percent for all families of 19.2. But only 3.6 percent of Florida nonwhites were at this income level.
CHARACTERISTICS OF HOUSING BY PLACE OF RESIDENCE, 1970

|  |  |  |  |  | SMSA |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Characteristics |  |  |  |  |  |  |

[^5]Table 2.32. CHARACTERISTICS OF NEGRO HOUSING, 1970

|  |  |  |  | SMSA |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Characteristics | State | Urban | Rural | Inside | Outside |
| Med No. of rooms | 4.3 | 4.3 | 4.4 | 4.3 | 4.5 |
| Med. No. of persons | 3.1 | 3.1 | 3.2 | 3.1 | 3.0 |
| Sound plumbing facilities | $78.8 \%$ | $84.7 \%$ | $48.1 \%$ | $N A$ | NA |
| Miore than one person/room | $26.4 \%$ | $25 \%$ | $29.9 \%$ | $27.1 \%$ | $25.1 \%$ |
| Owned | $48.7 \%$ | $46.6 \%$ | $59.9 \%$ | $46.8 \%$ | $52.8 \%$ |
| Rented . | $51.2 \%$ | $53.4 \%$ | $40.1 \%$ | $53.2 \%$ | $47.2 \%$ |
| Median value | $\$ 9.100$ | $\$ 9.900$ | $\$ 5,600$ | $\$ 10,300$ | $\$ 6,800$ |
| Median rent | $\$ 59$ | $\$ 61$ | $\$ 36$ | $\$ 64$ | $\$ 44$ |

Table 2.33. MEDIAN INCOME OF PERSONS 14 YEARS OF AGE AND OVER BY PLACE OF RESIDENCE, COLOR AND SEX, 1960

|  |  |  | Males |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Residence | Total |  | White | Nonwhite |  |
| White | Nonwhite |  |  |  |  |
| State | $\$ 2,313$ | $\$ 3,743$ | $\$ 2,073$ | $\$ 1,308$ | $\$ 844$ |
| Urban | $2 ; 416$ | 4,006 | 2,261 | 1,401 | 908 |
| Rural | 1,985 | 3,175 | 1,409 | 984 | 639 |
| Nonfarm | 2,017 | 3,226 | 1,440 |  | 989 |
| Farm | 1,575 | 2,461 | 1,085 | 931 | 650 |

Souite Code: BOC-3 1960

Table 2.34. FAMILY INCOME BY COLOR, 1970

| Color | Income Level |  |  |
| :---: | :---: | :---: | :---: |
|  | Lessiman $\$ 2000$ | \$15,000 and Over | Median Income |
| United Stite | 93\% | 19.2\% | - 99,433 |
| White | 8: 11 | 20.6 | 9,794 |
| Nonwhite- | 20.4 | 8.3 | 5,999 |
| Florida | 12.8 | 16.8 | 8,267 |
| White | 10.8 | 18.6 | 8,818 |
| Nonwhite: | 27.6 | 3.6 | 5,016 |

Source Coteranc 1970

Themelationships between education and persomal income are shown in Tables 2.35 and 2.36. In both tables income is measured according to the amount of education and by sex. The direct correlation between the amount of schooling and income is obvious, income rising in a steady progression according to the degree of education. The table also shows wide disparity in income between the sexes at the same educational levels, median income of females being somewhat less than half that of males at every level except the highest, where it is slightly more than half.
Table 2.35 MEDIAN EDUCATION BY INCOME LEVEL AND SEX, 1960

| Sex | Median Education of Persons by Income (dollars) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 1 \text { to } 999 \\ \text { or less } \end{gathered}$ | $\begin{gathered} 1,000 \\ 10 \\ 1,999 \end{gathered}$ | $\begin{gathered} 2,000 \\ \text { to } \\ 2,999 \end{gathered}$ | $\begin{gathered} 3,000 \\ \text { to } \\ 3,999 \end{gathered}$ | $\begin{gathered} 4,000 \\ 10 \\ 4,999 \end{gathered}$ | $\begin{gathered} 5,000 \\ \text { to } \\ 5,999 \end{gathered}$ | $\begin{gathered} 6,000 \\ \text { to } \\ 6,999 \end{gathered}$ | $\begin{gathered} 7,000 \\ \text { to } \\ 9,999 \end{gathered}$ | 10,000 and over |
| Male | 7.8 | 8.4 | 8.7 | 10.0 | 11.5 | 12.1 | 12.3 | 12.6 | 13.8 |
| Female | 9.0 | 10.3 | 12.0 | 12.5 | 12.7 | 13.7 | 13.0 | 13.0 | 12.8 |

Table 2.36 MEDIAN PERSONAL INCOME BY YEARS OF SCHOOL COMPLETED AND SEX FOR FLORIDA, 1 ㅍ601

| Years of School Completed | Median Income (doillars) |  |
| :---: | :---: | :---: |
|  | Males | Ffemales |
| None | \$1,443 | \$ 639 |
| 1 to 5 years | 1,964 | 713 |
| High School | 4,781 | 1,254 |
| Some College | 5,274 | 2,036 |
| College or more | 6,524 | 3,558 |

Source Code: BOC-3 1960
${ }^{1}$ Persmars 25 years and older

## OCCUPATION AND EMPLOYMENT

Trends intoccupational activities for employed males and females appear in TiTable 2.37. Formales, there has beenna reduction in the proportioniemployed as farmers and farm managers, farm laborers and foremen. Increases for males are most notable in the professional categories, craftsmen, foremen ammd kindred workers, and managers, officials and proprietors. Increases among females are most notable in clerical and kindred werkers, which almost tripled in three decades, and in service wonlerins. There has also been an increase in female:craftsmen, forememiand kindred workers, but actual percent of the female work forme involved is small. The overall shift from agricultural toprofessiomal and service categories is eviident throughout.

The rank order of occupational groups based on numbers of employed in 1970, as well as median earnings for each group, appear in Table 2.38. Several contrasts between race and sex are apparent. Most notable is that the rank order of occupations is different for white and Negro males. Of the 12 occupations listed only one-craftsmen, foremen and kindred workers-is among the top five in rank order and in median earnings for both groups. When rank order is combined with median earnings, it is clear that whites tend to be found in the higher paying occupations while Negroes are found in the lower paying occupations. There is also an obvious disparity in median earnings between males and females in the one instance in the table where such a comparison can be made.


Table 2.38. RANK ORDER OF OCCUPATIOMAL PARTICIPATION and MEDIAN EARNINGS OF EMPLIOYED PERSONS BY SEX AND COLOR, 1970

| Occupational Group | Male |  | Femate |  | Earnings |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | W | NW | W | NW | Male | Female |
| Prof., Tech., Kindred | 2 | 6 | 3 | 5 | \$9,843 | NA |
| Farmers \& Farm Mgrs. | 10 | 10 | 1.1 | 11 | 5,087 | NA: |
| Mitgrs, Officials \& Prop. (exc. farm) | 3 | 8 | 6 | 10 | NA | NA |
| Clerical \& Kindred | 7 | 7 | 1 | 4 | NA | \$3,887 |
| Sales Workers | 5 | 9 | 5 | 7 | NA | NA |
| Craft, Foremen, Kindred | 1 | 3 | 7 | 9 | 7,139 | NA |
| Operatives \& Kindred | 4 | 2 | 4 | 3 | 5,404 | 3,004 |
| Private household | 11 | 11 | 8 | 2 | NA | NA |
| Service Workers (exc. household) | 6 | 4 | 2. | 1 | NA | NA |
| Farm Laborers \& Foremen | 9 | 5 | 9 | 6 | 2,985 | NA |
| Laborers (Exc. farm \& mine) | 8 | 1 | 10 | 8 | 3,627 | NA |

Source Code: BOC-3 1970

Looking at this same information by industry instead of occupation in Table 2.39, a different set of trends emerges. Of particular interest was the shift of agriculture from second to ninth position and the increasing importance of professional and related services which increased 115.1 percent between 1960 and 1970. Other large increases were in wholesale and retail trade and in manufacturing. Both business and repair services and financial, insurance and real estate also showed large gains in percent, although the numbers involved were smaller.

The rarik order of industrial groups, based on the percent of employed age 14 and over, appears in Table 2.40. Differences are shown between the sexes, within the racial groups and between racial groups of the same sex. While personal service ranks first for Negro females, it is fifth for white females. The most notable difference between the races is in agriculture, forestry and fisheries, which ranks ninth for whites of both sexes, but third for Negro males and fourth for Negro females. The widest difference between the sexes is in the field of construction.
Table 2.39.


Table 2.40. RANK ORDER OF PARTICIPATION IN INDUSTRY GROUP OF THE EMPLOYED BY SEX AND RACE, 1970

|  | White |  |  | Negro |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | Industry Group |  | Male | Female |  |

Source Code: BOC-3 1970

Tied directly to employment are figures on unemployment which appear in Tables 2.41, 2.42 and 2.43. The rate of unemployment in 1970 (Table 2.41) was urider the national average. This was particularly so for nonwhites, with a jobless rate of 5.2 percent compared with the national rate of 8.2 percent. Table 2.42 breaks down the figures further by sex and provides historical perspective. It shows a consistently higher rate of unemployment for females. Only in teenage unemployment (Table 2.43) does the Florida rate exceed that of the nation. Note, however, the rate for nonwhite teenage unemployment, although higher than that for whites, was lower than the national figure.

Table 2.41. UNEMPLOYMENT RATE AS PERCENT OF TOTAL LABOR FORCE BY COLOR, 1970

|  | Total | White | Nonwhite |
| :--- | :---: | :---: | :---: |
| United States | 4.9 | 4.5 | 8.2 |
| Florida | 3.8 | 3.5 | 5.2 |

[^6]Table 2.42. UNEMPLOYMENT RATE AS A PERCENT OF TOTAL LABOR FORCE BY SEX AND COLOR FOR FLORIDA, 1940-1970

|  | Year |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 1970 | 1960 | 1950 | 1940 |
| Sex/Color |  |  |  |  |
| Male | 3.0 | 4.6 | 4.4 | 13.1 |
| White | 4.4 | 6.5 | 4.8 | 14.4 |
| Nonwhite |  |  |  |  |
| Female | 4.3 | 4.8 | 4.0 | 14.1 |
| White | 6.2 | 7.1 | 6.2 | 10.7 |
| Nonwhite |  |  |  |  |

Source Code: BOC-3 1970, 1960, 1950
Table 2.43. TEENAGE UNEMPLOYMENT, AS A PERCENT OF TOTAL UNEMPLOYMENT, (AGES 16-19) FOR 1968

|  | Unemployment Rates |  |  |
| :--- | :---: | :---: | :---: |
|  | Total | White | Nonwhite |
| United States | $12 . \dot{7}$ | 11.0 | 25.0 |
| Florida | 16.0 | 15.1 | 20.7 |

Source Code: FSA 1969

## EDUCATION

The percent of persons age $5-24$ enrolled in school is given in Table 2.44. This shows a sharp increase in enrollment since 1940. Figures are not available to permit a comparison with national data for the 30 -year period. However, Table 2.45 shows that in 1970, Florida school population age $5-34$ was only 2.5 percent lower than the national average. Note that different age groups are used in these two tables. Table 2.45 also compares figures for white and nonwhite, showing the percent of nonwhite population enrolled in school is higher than for whites.
Table 2.44. PERCENT OF POPULATION 5 TO 24 YEARS OLD ENROLLED IN SCHOOL, 1930-1970

| Age Group | 1970 | 1960 | 1950 | 1940 | 1930 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 5 to 24 Yrs. | 72.9 | 68.6 | 60.8 | 54.7 | 54.0 |

Source Code: BOC-3 1970, 1960, 1950

Table 2.45. PERCENT OF POPULATION 5 TO 34 YEARS OF AGE ENROLLED IN SCHOOL BY COLOR, 1970

|  | Total | White | Nonwhite |
| :--- | :---: | :---: | :---: |
| United States | 58.9 | 58.6 | 60.6 |
| Florida | 56.4 | 55.9 | 59.7 |

Source Code: BOC. 31970
School enrollment by age and urban/rural residence is given in Table 2.46. Differences attributed to residence do not become notable until after the age 16-17 category. At that age level the proportion of rural nonfarm population in school begins to decrease markedly compared to urban and rural farm categories.

Table 2.46. PERCENT OF POPULATION ENROLLED IN SCHOOL BY AGE AND PLACE OF RESIDENCE, 1970

| Age | State | Urban | Rural |  | SMSA |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Nonfarm | Farm | Inside | Dutside |
| 5-6 | 73.3 | 75.0 | 67.4 | 65.3 | 74.8 | $70.2^{-}$ |
| 7-13 | 97.0 | 97.2 | 96.0 | 96.4 | 97.6 | 95.8 |
| 14-15 | 94.4 | 95.1 | 91.8 | 90.9 | 95.4 | 92.3 |
| 16-17 | 86.4 | 87.6 | 81.8 | 83.6 | 87.8 | 83.6 |
| 18-19 | 54.0 | 55.8 | 45.5 | 52.2 | 55.6 | 50.1 |
| 20-21 | 27.0 | 29.4 | 16.3 | 15.4 | 30.3 | 18.0 |
| 22-24 | 13.3 | 14.6 | 8.0 | 7.7 | 15.4 | 8.1 |
| 25-34 | 6.0 | 6.4 | 4.4 | 3.1 | 6.6 | 4.6 |
| 5 to 34 | 56.3 | 56.8 | 54.1 | 58.3 | 56.7 | 55.8 |

Source Code: BOC-3 1970

## RELIGION

Religious preferences and trends in those preferences for Florida's population are extremely difficult to assess. Not only are historical data virtually nonexistent but those estimates which are currently available are subject to error. Table 2.47 presents some estimates of church membership in 1968 which show 41.7 percent of Florida's population to be enrolled as church members.

Table 2.47. ESTIMATED RELIGIOUS AFFILIATION, 1968

| Organization | Number |  |
| :--- | ---: | :--- |
| A.M.E. | 60,000 | (African Methodist Episcopal) |
| A.M.E. Zion | 2,500 |  |
| Christian | 18,860 | (Disciples) |
| C.M.E. | 26,000 | (Christian Methodist Episcopal) |
| Church of Brethren | 1,200 |  |
| Episcopal, Diocese of Florida | 22,908 |  |
| Episcopal, Diocese of S. Florida | 64,918 |  |
| F.F.C.C. | 6,000 |  |
| Lutheran Church in America | 28,773 |  |
| Presbyterian, U. S. | 96,211 |  |
| United Church of Christ | 26,692 |  |
| United Methodist | 29,225 |  |
| United Presbyterian, USA | 43,889 |  |
| Baptist (Southern) | 611,756 |  |
| Roman Catholic | 747,000 |  |
| Jewish | 130,000 |  |
| Negro Baptist | 200,000 |  |
| All Others | 200,000 |  |
| TOTAL | $2,585,432$ |  |
| Percent of Total Florida |  |  |
| Population, 1968 | 41.7 |  |

Source Code: FCC 1968

## SUMMARY AND CONCLUSIONS

This section has presented a variety of information about the population of Florida. It is, in effect, a selected statistical abstract, describing the population and in some cases indicating historical trends. While this kind of information is of inherent value, it also contains implications for education.

Perhaps the most obvious are those having to do with growth and urbanization. Assuming the state continues to grow and become more urban, schools face the necessity to accommodate increasing enrollments. While urban centers will be most affected by size and .growth, ruial areas may experience different problems of dwindling resources as they lose population to the cities.

It is apparent that Florida's occupational structure and
economy have undergone important changes. The economy has been shifting from agricultural as the emphasis swings to commercial, trade, financial, manufacturing, and professional and other service activities. The shift reflects the increasingly urban character of the state.

On the assumption that these trends will continue (or at least not begin to reverse), there are several implications for education. A modern iridustrial-service economy requires skills and orientation different from those by a more traditional agricultural economy. The basic problem this poses for education is the challenge of anticipation and articulation-anticipation of new employment patterns and opportunities, and development of educational programs adapted to these changes.

A variant of this problem is tied to the rural-to-urban migration. There is a high and increasing probability that young persons growing up and being educated in rural areas will spend substantial portions of their working years in urban areas. Consequently rural as well as urban schools need to develop educational programs that are responsive to these changes and maximize the ability of their graduates to take advantage of new employment opportunities.

Several of the population characteristics presented in this section involved comparisons of Florida's white and nonwhite residents. Some of the differences by race pose additional problems for education. For example, the nonwhite population is becoming urbanized more rapidly than the white. Consequently, these problems generated by urbanization are more salient and critical for nonwhite youth.

Data presented on occupation by race also suggest that employment patterns of nonwhites lag behind those of whites in the overall shift from agricultural to industrial-service jobs. The educational system is challenged to develop programs that prepare nonwhite youths to move more rapidly into riew job opportunities in new fields.

In fact the preponderance of the data presented here on such characteristics as mortality, family size, housing, unemployment and income document gross disparities and inequities in the quality of life experienced by Florida's white and nonwhite populations. There is little agreement on how great an impact the schools can make in reducing these differences. To the extent that public education is committed to the equalization of opportunity for all citizens, however, the reduction of the racial differences presented here represents a major problem for contemporary schools.

## CHAPTER III

## PERENNIAL OBJECTIVES

The techniques of education have been improved but the goals have scarcely been changed. The task force which prepared the plan for this Needs Study made this discovery when they listed the objectives of an effective school system. The broad areas of human experience toward which modern education should be directed were found to be almost identical with the Seven Cardinal Principles which the National Education Association enumerated over a half century ago. The task force called these Perennial Objecitives and developed strategies for assessing the status of Florida learners in each of these areas. The statistical results are set forth in this section.

## COMMUNICATIONS AND LEARNING SKILLS

Florida has two statewide testing programs, one at grade nine, the other at grade twelve. Both programs employ the School and College Ability Test (SCAT) and, as well, special tests in the area of English, Social Studies. Mathematics, and Science. Over

Table 3.1. APPROXIMATE PERCENT OF STUDENTS FALLING below the 50th Percentile ON THE APTITUDE PORTION OF THE STATEWIDE NINTH GRADE TEST, 1968-69, 1969-70

| Test | 1968-69 |  | 1969-70 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number Tested | Percent Below Norm | Number Tested | Percent Below Norm |
| Verbal | 106341 | 62 | 111825 | 61 |
| Quantitative | 106348 | 67 | 111868 | 66 |
| Combined Aptitude | 106393 | 67 | 111760 | 67 |

the past several years, ninth grade students have consistently been below the national norm, both in verbal and quantitative sections of the SCAT test. The data reported in Table 3.1 is typical of this performance. Out of approximately 106,000 ninth graders taking the test in 1968-69, 62 percent and 67 percent respectively were below the verhal and quarititative norms. Tests on approximately 111,000 ninth grade: in the following year showed improvement of only one percent.

A study of the performance of Florida students in grade nine by sex and age has been published by the ninth-grade testing program. The results of this study are cited below:
"The mean test performance by sex and age is shown in Table 3.2. These means were computed on a random sample of 900 pupils. The facts are apparent in the table and were supported by statistical analysis of the scores:
a. There is no significant difference in mean test performance of males and females on the Florida N inth GradeTest Battery except for the English Achievement Test.
b. There is a significant difference in mean test performance by ages on all tests in the battery.
"As can be seen in Table 3.2, there is a difference of 5.15 points in the mean performance of males and females on the English test. This difference for English proved to be statistically significant. The superior performance of the female pupils is general across items, with 19 items showing substantial differences in performance favoring the females. The difference for the other tests ranged from .05 to .68 raw score points.
"Table 3.2 also shows the mean for each of the four most frequently occurring ages of ninth grade students taking the battery. The general trend from highest to lowest mean follows the age in this order: $14,13,15$, 16. In general there are slight differences in means for ages 13 and 14 , ranging from .41 to 1.44 points lower for the 13 -year-old group. Since most beginning ninth graders are 14 years old, the 13 -year-old group probably consists largely of those students who started school a year early, or perhaps advanced a grade at some point
in their schooling. One would not expect a large difference to exist as these two groups are probably nearly alike as to general ability.

Table 3.2. MEAN PERFORMANCE ON EACH TEST OF THE FLORIDA STATEWIDE NINTH GRADE TEST BY AGE AND SEX, 1967-68

|  |  |  |  | Ages |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  |  |  |  |  |  |  |
| Test | Total <br> Male | Female |  | 13 | 14 | 15 | 16 |  |
| SCAT V | 30.23 | 29.98 |  | 31.35 | 31.76 | 23.91 | 21.45 |  |
| SCAT Q | 28.67 | 28.24 |  | 29.51 | 30.16 | 21.92 | 21.08 |  |
| SCAT Total | 58.90 | 58.22 |  | 60.86 | 61.92 | 45.83 | 42.53 |  |
| Social Studies | 27.55 | 27.03 |  | 27.66 | 28.77 | 22.46 | 20.18 |  |
| English | 36.07 | 41.22 |  | 39.46 | 40.89 | 30.87 | 25.38 |  |
| Math Comp. | 23.35 | 23.30 |  | 23.92 | 24.68 | 18.34 | 17.43 |  |
| Math P.S. | 21.20 | 20.94 |  | 45.81 | 22.48 | 16.00 | 14.40 |  |
| Math Total | 44.55 | 44.24 |  | 41.21 | 47.16 | 34.34 | 31.83 |  |
| Science | 40.28 | 39.92 |  | 42.13 | 32.58 | 30.78 |  |  |
| Number |  |  | Male | 71 | 282 | 80 | 35 |  |
| Pupils | 468 | 425 | Fer ale | 74 | 298 | 48 | 5 |  |
|  |  |  | Total | 145 | 590 | 128 | 40 |  |

Source Code: NGTS 1968
The difference in TM and TF means proved significant at the , 05 level as did the difference in age means.
This was analyzed by a two-way ANOVA design.
"The difference in means for ages 14 and 15 are substantially ranging from 6.09 to 12.82 points lower for the latter group. This 15 -year-old group probably consists largely of those who are one-grade repeaters, and if past performance can be considered indicative of both future performance and general ability, ene would expect the mean to be lower. The test user should remember that the total range of differences between two means for ages 14 and 15 are all significantly different. This probably is also true for the range of means for 14 and 15 year olds.
"The differences in means for ages 14 and 16 are very substantial, ranging from 7.25 to 19.39 points lower for the 16 -year-old group, and are all significant differences. One must use caution in interpreting their scores.

However, it is probably logical to assume that most of these students are two-grade repeaters and, therefore, such performance would not be surprising. It is also interesting to note that the ratio of males to females in this group is almost seven to one."1

In addition to investigating the effect of sex and age on student performance on ninth-grade standardized tests, the testing service also investigated the effect of school size. A summary of this study is quoted below:
"Since it can be argued that school size is an indication of at least the quantity of educational opportunity, and perhaps also the quality of such opportunity, it was felt advisable to undertake an analysis in order to determine what, if any, relationship existed between school size and performance on tests in the ninth-grade battery.
"The number of ninth-graders in each participating school was selectes as the criterion of school size. This aliowed a 'standard unit of measurement' for all schools and avoided the pitfall that various schools are organized in different number of grades, e.g., 6-3-3, 8-4, 6-6, etc. Performance was defined as each school's mean score for each of the nine scores reported.
"Positive relationships between school size and school mean scores were found for all tests included in the ninth grade battery, i.e., the larger mean scores were associated with larger enrollment. This, of course, is not intended to imply a causal relationship. The analysis was not designed, nor could it be with present data, to provide results that could support the premise that increasing school enrollment will automatically increase mean school achievement. The intent of this subsection is to report the observed relationships. Precise interpretations are premature at this point.
"The correlations for the private schools are the smallest, being .08 to .29 , perhaps partially due to the restricted
range in school size, most being small. Combined, the public and private schools yield correlations of .27 to .36 with a pronounced positively skewed distribution of school sizes. These correlations are shown in Table 3.3. ${ }^{2}$

Table 3.3. CORRELATIONS BETWEEN PERFOKMANCE ON EACH TEST OF THE FLORIDA STATEWIDE NINTH GRADE TEST AND SCHOOL SIZE, 1967-68

| Tests | Private <br> Schools | Public <br> Schools | All Schools <br> Combined |
| :--- | :---: | :---: | :---: |
| SCAT Verbal | .22 | .51 | .33 |
| SCAT Quantitative | .26 | .46 | .32 |
| SCAT Tota: | .24 | .49 | .33 |
| Social Studies | .21 | .46 | .28 |
| English | .24 | .45 | .27 |
| Math Comprehension | .29 | .46 | .30 |
| Math Problem-Solving | .26 | .48 | .32 |
| Math Total | .28 | .47 | .31 |
| Science | .08 | .49 | .36 |

Source Code: NGTS 1968

Data for 1963-70 for only the aptitude portion of the 12th grade battery, are presented in Table 3.4. In this table, all Florida seniors are included in the comparison with the national sample and are seen to rank slightly above the national mean in performance. There is, however, some question as to whether 12th grade test performance is actually acceptable as status data because of the very apparent "culling out" of less capable students at the secondary level in Florida schools. It would also be necessary to know the national attrition between grades nine and twelve. The drop in enrollment between these grades is significant. For example, in 1969, siightly over 72,000 took the twelfth grade test, while three years earlier approximately 102,000 students were enrolled in the ninth grade. This difference, plus the marked increase in the level of student performance on the twelfth grade test would strongly suggest that many of the students having the greatest need in this area are prematurely terminating their formal education.

[^7]Table 3.4. EQUIVALENT MEAN SCALED SCORES FOR ALL SENIORS ON THE APTITUDE TEST OF THE FLORIDA STATEWIDE 12th GRADE TESTING PROGRAM, FALL. 1963 THROUGH FALL 1970

| Year | Number <br> Tested | Florida <br> Mean | National <br> Mean | Approximate <br> Percent Above <br> Na千'l Mean |
| :--- | :---: | :---: | :---: | :---: |
| 1970 | 83,158 | 292 | 291 | $50+$ |
| 1969 | 82,039 | 288 | 287 | $50+$ |
| 1968 | 79,110 | 288 | 287 | $50+$ |
| 1967 | 73,071 | 288 | 287 | $50+$ |
| 1966 | 71,552 | 290 | 287 | $50+$ |
| 1965 | 67,517 | 290 | 287 | $50+$ |
| 1964 | 67,507 | 290 | 287 | $50+$ |
| 1963 | 59,992 | 290 | 287 | $50+$ |

Source Code: ETS 1963-1970

There are several additional types of data which may be used as sources for information about the communication and learning abilities of Florida students. Table 3.5 provides comparative historical data for the United States and for Florida on the percent of selective service draftees failing preinduction and induction mental tests for the period 1962-70. For this period, the per-

Table 3.5. PERCENT OF SELECTIVE SERVICE DRAFTEES FAILING PREINDUCTION AND INDUCTION MENTAL TESTS, 1962-1970

|  | Year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1970 | 1969 | 1968 | 1967 | 1966 | 1965 | 1964 | 1963 | 1962 |
| United States |  | 7.1 | 11.8 | 11.3 | 12.4 | 21.4 | 29.9 | 24.7 | 24.5 |
| Florida | 5.9 | 10.8 | 16.2 | 11.3 | 17.9 | 26.4 | 35.8 | 33.8 | 32.9 |
| Difference | 0.6 | 3.7 | 4.4 | 0.0 | $5.5{ }^{\circ}$ | 5.0 | 5.9 | 9.1 | 8.4 |

Source Code: ROS 1962-1968, BOC-5 1971
cent of draftees rejected in Florida has persistently exceeded national figures althoura the gap was almost closed in 1970. While Table 3.5 indicates a trend toward the reduction of this difference, there has also been an overall reduction in the proportion of men failing the test nationwide. Consequently, any interpretation of apparent trends based on the data reported in this table should be tempered by the possibility that some of the equalization between rates could be the result of changing criteria for passing mental examinations, or changing deferment practices by the Selective Service System, or both.

A more complete breakdown which gives the percent of Floridians disqualified during their preinduction examinations for military service, by reason of rejection, is shown in Table 3.6. Disqualifications for medical reasons were slightly above the national norm for the year covered (1970). Disqualifications for failure to meet mental requirements were also more numerous in Florida than in the nation.

Another type of data which may be used, if only indirectly, to explore the area of communication and learning skills is that pertaining to the literacy level.

Census figures for Florida and for the U.S. show a persistent decline in the percent of illiterates (i.e., persons who can neither read nor write in any language) from 1910 to 1970. These data are in Table 3.7.

The rate of functional illiteracy (less than five years of school) shows a similar decline (Table 3.8). This table shows that the state has made consistent gains in the amount of schooling completed at all levels. At the high school and college levels the percent has almost doubled in the past 30 years. The rate for functional illiteracy for Florida has decreased, corresponding to the national experience. The large expansion of the state's population indicates that the actual number of functional illiterates has risen. Therefore, the problem remains a serious one for the school system.

Functional illiteracy rates are strongly influenced by race and, to a lesser degree, by sex and place of residence. These relationships are shown in the following three tables. Table 3.9 shows the disparity between the races. While the percent of functional illiteracy for whites in Florida was lower than for the nation, the percent for nonwhites was higher than that for the nation and about six times higher than for whites in Florida. Nonwhites consistently completed fewer years of schooling at all levels, the median amount of education being over three years less than for whites.

| Table 3.6. | STATUS OF EXAMINED FOR cent) |  | selective service praftees military service, 1970 (In Per- |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\substack{\text { Number } \\ \text { Examinad } \\(1000)}}{\text { (10) }}$ | $\begin{gathered} \text { Total } \\ \text { Dois } \\ \text { qualified } \end{gathered}$ | $\begin{gathered} \text { Medically } \\ \text { Dics- } \\ \text { qualified } \end{gathered}$ | $\begin{gathered} \text { Failed } \\ \substack{\text { Fientat } \\ \text { Mentat } \\ \text { Test }} \end{gathered}$ | Limited Train- ability | $\begin{gathered} \text { Medical } \\ \text { and } \\ \text { Mental } \end{gathered}$ | Adminis tratively ified ${ }^{2}$ |
| United States | 1,004.6 | 45.7 | 37.6 | 4.8 | 0.9 | 1.4 | 1.0 |
| Florida | 35.0 | 49.3 | 40.1 | 5.9 | 0.8 | 1.3 | 1.2 |

Table 3.7. PERCENT ILLITERATE, 1910-19701

|  | Vem |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 槙\% | \$960 | \%94in | 1930 | 1920 | 1910 |
| United States | 1.0 | 2.4 | 3.3 | 4.8 | 6.5 | 8.3 |
| Florida | $1.2{ }^{2}$ | 2.6 | 3.9 | 7.7 | 10.2 | 14.4 |

Source Code: BOC-5 1970. 1960. 1950
${ }^{1}$ Percent of population 14 years old and older
${ }^{2}$ Estimate

Ta*) 3.8. PEEENT OF POPULATION COMPLETING SELECTED SCHOOL YEARS, 1940-1970¹

| Year | Median School Yrs. Completed | Percent of Persons Completing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | None | Less Than 5 Years ${ }^{2}$ | High School | Some College | Callege or More |
| 1970 | 12.1 | 1.6 | 5.9 | 30.7 | 11.6 | 10.3 |
| 1960 | 10.9 | 2.1 | 9.2 | 25.1 | 9.7 | 7.8 |
| 1950 | 9.6 | 2.6 | 14.1 | 21.1 | 8.3 | 6.5 |
| 1940 | 8.6 | 4.0 | 18.8 | 15.4 | 6.2 | 5.0 |

Source Code: BOC-3 1970, .1960, 1950
${ }^{1}$ Persons 25 years of age and over
${ }^{2}$ Functional illiteracy - includes the category "None"
Table 3.9. PERCENT OF POPULATION COMPLETING SELECTED SCHOOL YEARS BY COLOR FOR THE U.S. AND FLORIDA, $197{ }^{1}$

| Color | None | Less Then <br> 5 Years $^{2}$ | High <br> School | Some <br> College | College <br> or More | Median <br> Education |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. | NA | 5.3 | 34.0 | 10.2 | 11.0 | 12.2 |
| White | NA | 4.2 | 35.2 | 10.7 | 11.6 | 12.2 |
| Nonwhite | NA | 15.1 | 23.4 | 5.9 | 4.5 | 9.9 |
| Florida | 1.6 | 5.9 | 30.7 | 11.6 | 10.3 | 12.1 |
| White | 1.2 | 3.9 | 32.7 | 12.6 | 11.1 | 12.2 |
| Nonwhite | 4.6 | 21.2 | 16.6 | 4.3 | 4.4 | 8.8 |

Source Code: BOC-3 1970
${ }^{1}$ Persons 25 years of age and over
${ }^{2}$ Functional Illiteracy - includes the category "None'"

When the factor of sex is added (Table 3.10), the figures present another dimension. A larger percent of females completed high school than males but a smaller percent went on to college. The median amount of schooling was the same for both sexes for whites, while nonwhite females remained in school approximately a year longer than nonwhite males.

Table 3.10. PERCENT OF POPULATION COMPLETING SELECTED SCHOOL YEARS BY SEX AND COLOR, $1970^{1}$

|  | Male |  |  | Fenaie |  |
| :--- | ---: | :---: | ---: | :---: | ---: |
| Years Completed | White | $\dot{y}$ Nonwhite |  | White | Nonwhite |
| None | 1.2 | 5.8 |  | 1.1 | 3.5 |
| 1 to 4 years. | 3.2 | 20.2 |  | 2.3 | 13.6 |
| High School | 28.6 | 15.2 |  | 36.2 | 17.2 |
| Some College | 13.0 | 4.0 |  | 12.2 | 4.1 |
| College or more | 14.3 | 3.3 |  | 8.3 | 4.7 |
| Median yrs. compl. | 12.2 | 8.3 |  | 12.2 | 9.2 |

Source Code: BOC-3 1970
'Persons 25 years of age and ovei

The percent of persons completing less than five years of school was higher for rural than for urban residents in 1970 (Table 3.11). The degree of difference by place of residence was not as great as in the areas of race and sex. Note that the median varied only slightly in all categories.

Table 3.11. PERCENT OF POPULATION COMPLETING SELECTED SCHOOL YEARS BY PLACE OF RESIDENCE, 1970¹

|  |  | Rural |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Years Completed |  | Urban | Total | Nonfarm |
| None | 1.5 | 1.8 | 1.8 | 1.8 |
| Ness | 3.9 | 6.1 | 6.0 | 7.3 |
| Less than 5 | 31.2 | 28.8 | 29.0 | 27.1 |
| High School | 12.2 | 8.7 | 8.9 | 6.9 |
| Some College | 11.0 | 7.0 | 7.2 | 5.8 |
| College or more | 12.1 | 10.9 | 11.3 | 10.6 |
| Median |  |  |  |  |

Source Code: BOC-3 1970
${ }^{1}$ Persons 25 years of age and over

Another type of data providing some insight into communication and learning skills is the rate at which students are enrolling in foreign language courses in Florida's public schools (Table 3.12). During 1969-70, only 8.59 percent were in such classes. The rate for the secondary level was 19 percent, indicating a preponderance of these classes in the high school grades. Comparing these figures with those for earlier years (not shown in table form) a decline of enrollment in foreign language courses is indicated. The language most frequently studied in 1970 was Spanish, followed by French. Comparable national data for this period were not available.

Table 3.12. FOREIGN LANGUAGE ENROLLMENT IN FLORIDA PUBLIC SCHOOLS, SCHOOL YEAR 1969-70

|  |  | As Percent of |  |  |
| :--- | ---: | ---: | :---: | :---: |
| Language | Number | Languages <br> Taught | Total <br> Enrollment | Secondary <br> Enrollment |
| Spanish $^{1}$ | 81,175 | 62.13 | 5.40 | NA |
| French $^{1}$ | 29,816 | 22.82 | 1.98 | NA |
| German $^{1}$ | 7,875 | 6.03 | 9.52 | NA |
| Russian | 542 | 0.41 | 0.04 | 0.08 |
| Latin | 10,837 | 8.30 | 0.72 | 1.58 |
| Italian | 249 | 0.19 | 0.02 | 0.04 |
| Chinese | 22 | 0.02 | 0.00 | 0.00 |
| Hebrew | 131 | 0.10 | 0.01 | 0.02 |
| Total | 130,647 | 100.00 | 8.69 | 19.00 |

Source Code: DOE-2
${ }^{1}$ Elementary \& Secondary

Data on nonpromotion in Florida's school system are provided in Tables 3.13 and 3.14. Grade one consistently produced the highest rates of nonpromotion, far outstripping any other grade level (Table 3.13). The next highest was at the tenth grade. While some small improvement was shown at the twelfth grade in the table, the relative stability of the nonpromotion rate by grade level over the years is striking.

Nonpromotion data by race for the school year 1960-61 are provided in Table 3.14. Later figures are not available since this type of information by race was not recorded after that date. These data show a much higher nonpromotion rate for nonwhites at all grade levels. However, desegregation was only in its initial

| Table 3.13. | PRQ Perc | ION |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School Year | Grade Level |  |  |  |  |  |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1969.70 | 8.1 | 3.8 | 2.3 | 1.2 | 0.9 | 0.7 | 4.6 | 4.9 | 4.6 |  |  |  |
| 1968-69 | 8.9 | 4.4 | 3.1 | 1.8 | 1.3 | 1.0 | 5.2 | 5.2 | 4.6 5.0 | 6.8 7.4 | 5.3 5.7 | 3.7 <br> 3.8 |
| 1967-68 | 10.0 | 5.2 | 3.6 | 2.4 | 1.7 | 1.1 | 6.5 | 6.2 | 5.4 | 7.4 8.1 | 5.7 6.0 | 3.8 3.8 |
| 1966-67 | 10.7 | 5.4 | 3.9 | 2.6 | 2.0 | 1.2 | 6.9 | 6.5 | 5.4 5.8 | 8.1 | 6.0 6.2 | 3.8 <br> 3.8 |
| . 1965-66 | 10.8 | 5.8 | 4.0 | 3.0 | 2.2 | 1.2 | 7.2 | 7.1 | 6.0 | 7.8 | 6.2 6.4 | 3.8 <br> 3.7 |
| 1964-65 | 11.1 | 5.8 | 4.2 | 3.4 | 2.4 | 1.7 | 7.7 | 7.3 | 6.5 | 8.5 | 6.6 | 3.9 |

Source Code: DOE-1

Table 3.14. NONPROMOTION BY GRADE GROUPINGS AND RACE, SCH00L YEAR 1960-61 (In Percent)

|  | Race |  |
| :--- | :---: | :---: |
| Grade Groups | White | Negro |
| Grades 1-6 | 4.41 | 8.41 |
| Grades $7-9$ | 7.13 | 9.94 |
| Grades $10-12$ | 5.57 | 8.31 |

Source Code: DOE-1
stages at that time. As an indicator of the present situation in Florida's public schools, these figures should be viewed with caution.

The final set of data offered under this objective deals with the post-secondary educational activities of Florida's graduating seniors (Table 3.15). There has been an overali increase between 1962 and 1970 in the proportion of high school seniors entering universities or colleges. However, while enrollment in fouryear institutions dropped by almost five percentage points between 1962-1970, the percentage of high school graduates enrolling in junior colleges almost doubled. Technical, trade and other specialized school enrollment fluctuated over the years. Two years, 1968 and 1970, had a lower proportion in thesespecialized schools than in the base year. In 1964 there was little change and four other years had higher proportions. The differences, however, were slight. Generally speaking, there has been an increase in the percent of high school graduates entering some type of post-secondary iristitution.

This section has presented data from a variety of sources on factors indicative of the communication and learning skills of Florida pupils. The performance of ninth grade pupils on standardized tests (SCAT) was substantially below the national average. Sex differences in performance seemed to be minimal, with female students doing better than males in English. School size was also positively associated with the test performance of ninth grade pupils. Seiective Service data indicate that Florida was above the national average in the percent of draftees failing preinduction and induction mental tests. Florida also exceeded the national

| Table 3.15. $\begin{aligned} & \text { PERCENT OF FLCRIDA HIGH SCHOOL GRADUATES PARTICIPATING IN POST-SECONDARY EDUCATION } \\ & \text { OR TRAINING, } 1962-1970\end{aligned}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Year |  |  |  |  |  |  |  |  |
| Entered | 1970 | 1969 | 1968 | 1967 | 1966 | 1965 | 1964 | 1963 | 1962 |
| College or University | 54.57 | 55.75 | 55.31 | 53.97 | 54.66 | 51.48 | 49.74 |  |  |
| 1) Junior College | 31.04 | 31.77 | 32.53 | 32.35 | 34.63 | 27.48 | 49.74 24.09 | (2) | 45.50 |
| 2) Four-year | 23.53 | 23.98 | 22.78 | 21.62 | 22:33 | 24.44 | 25.65 | (2) | 28.30 |
| Technical, trade, or other | 5.11 | 5.74 | 4.23 | 5.64 | 5.78 | 5.43 | 25.65 5.23 | (2) | 28.30 |
| No Continuation ${ }^{\text {r }}$ | 40.32 | 38.51 | 40.41 | 40.39 | 40.56 | 5.43 43.09 | 5.23 45.03 | (2) | 5.21 49.29 |

Source Code: DDE-3
${ }^{2}$ Not Available .
average in the extent of illiteracy found in the state. This was affected by the high rate for nonwhites, the rate for whites being much lower than the national figure. The difference between the races in Florida has been narrowing and the state's position in relation to the nation in the amount of functional illiteracy has been improving. As of 1970, however, functional illiteracy remained a problem among the nonwhite population and, to a lesser extent, in rural areas. Ne,npromotion in Floricia schools was also considerably higher among nonwhite than among white pupils. Thia percent of high school graduates has been increasing and, as of 1970, over half went on to some form of post-secondary education.

## CITIZENSHIP EDUCATION

Citizenship education and needs of Florida pupils are difficult to assess. Reliable information is scarce and there are few direct measurements. Most of the data available often relate to citizenship only indirectly.

On the assumption that "good citizens" vote, the registration and voting characteristics are presented in Tables 3.16 and 3.17. Florida's voting record in the 1968 national election (Table 3.16) shows that just over half of those eligible to vote went to the polls. This was four percent below the national average.

Table 3.16. PERCENT OF-ELIGIBLE VOTERS WHO VOTED IN THE 1968 PRESIDENTIAL ELECTION

|  |  | Percent Voting |
| :--- | :---: | :---: |
| Florida | $\cdot$ | $58 \%$ |
| United States |  | $62 \%$ |
| Source Code; OSS |  |  |

Source Code; OSS

The percent of Florida population of voting age who registered to vote is shown by race in Table 3.17. There was an iticrease between 1950 and 1960 of about seven percent, due to the increased registration of nonwhites while the registration of whites remained at the same level. In the next decade 1960-70, however, nonwhite registrations increased dramatically while white registrations declined almost four percent. Comparisons by race of those
who actually cast their ballots are not possible as such records are not kept.

Table 3.17. PERCENT OF PERSONS IN FLORIDA OF VOTING AGE WHO WERE REGISTERED TO VOTE BY COLOR, 19501970

|  |  | Color |  |
| :--- | :--- | :---: | :---: |
|  |  |  |  |
| Year | Total | White | Nonwhite |
| 1970 | 64.2 | 65.4 | 57.5 |
| 1960 | 65.4 | 69.3 | 39.0 |
| 1950 | 58.5 | 65.3 | 31.6 |

Source Code: OSS
While voter registration increased substantially between 1950 and 1970, due almost entirely to the dramatic increase in nonwhite registration, just over half of those eligible to vote cast their ballots in the 1968 Presidential election. Insofar as this is a measure of citizenship, Florida lags behind the nation as a whole. The registration figures by race show that while the percent of white voter registrations had been fairly constant sinse 1950, dropping somewhat in 1970, the percent of nonwhite voters has increased steadily, and markedly so in the 1960-70 decade.
(Another indirect measure of citizenship could be the extent of crime and delinquency in the state. However, for the purpose of this study, these data would seem to have even greater implić.. tions where the moral and ethical values of the state's population are concerned and the discussion of rates relating to such behavior appears in a later section.)

## VOCATIONAL INTERESTS

In the school year 1969-70, approximately 22 percent of all students in grades 10-12 were enrolled in vocational educational programs. The largest proportion at this level was in trade and industrial education, which also drew the largest proportion of adult enrollees. For the post-secondary level, the category of office personnel attracted the largest proportion-more than half. Total enrollment in 1970 in vocational education courses at all levels, by occupational class, is shown in Table 3.18.

Table 3.18. NUMBER AND PERCENT OF ENROLLEES ! N VOCATIONAL EDUCATION PROGRAMS BY LEVEL OF ENROLLMENT AND OCCUPATIONAL CLASS, 1970

|  |  | Percent Enrolled in |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Total | Elementary <br> Secondary | Post <br> Secondary | Adult |
| Program | 22,416 | 19,826 | 1,713 | 877 |
| Agriculture | 7.19 | 28.42 | 1.49 | 0.69 |
| Percent | 52,146 | 12,241 | 15,581 | 24,324 |
| Distribution | 16.73 | 17.55 | 13.54 | 19.18 |
| Percent | 86,001 | 25,942 | 11,581 | 48,478 |
| Trades \& ind. | 27.60 | 37.18 | 10.07 | 38.23 |
| Percent | 10,822 | 599 | 7,022 | 3,201 |
| Health | 3.47 | 0.86 | 6.10 | 2.53 |
| Percent | 7,810 | 2,181 | 896 | 4,733 |
| Home Economics | 2.51 | 3.13 | 0.78 | 3.73 |
| Percent | 108,528 | 8,141 | 61,031 | 39,356 |
| Office | 34.83 | 11.67 | 53.05 | 31.04 |
| Percent | 23,892 | 839 | 17,229 | 5,824 |
| Technical | 7.67 | 1.20 | 14.97 | 4.60 |
| Percent | 311,615 | 69,769 | 115,053 | 126,793 |
| Total Enrollment | 100.00 | 100.00 | 100.00 | 100.00 |
| Percent |  |  |  |  |

Source Code: DOE-3
Table 3.19 provides follow-up data on graduates from vocational training programs for 1970. Of those at the secondary level who completed courses and were available for the job market, 79.7 percent found employment in their field of training or related areas. Of the post-secondary group, 86.9 percent found such employment.

If the function of vocational education is to provide skills for jobs in the existing labor market, it is helpful to compare the data in this section with Tables 2.37 and 2.38 in the Selected Population Characteristics section of this study. At the post-secondary and adult levels, the greater emphasis on vocational training in the fields of distribution, office, technical and trades categories seems consistent with the changing occupational patterns of the state as shown in Table 2.37. On the secondary level, such a shift is occurring also. It is noteworthy that a high proportion of those who completed their courses at both secondary and post-secondary levels found jobs in their field of study or related areas.


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## MENTAL AND PHYSICAL HEALTH

Comparable morbidity statistics for whites and nonwhites for the years 1970 and 1960 are given in Tables 3.20 and 3.21 . These are based on voluntary medical reports and therefore do not reflect the complete picture. Their greatest value is as a basis for historical comparisons. Table 3.20 shows a considerable dissimilarity to Table 3.21 in the prevalence and to some degree the rank-order of different diseases for whites and nonwhites. A correlation of .764 was obtained between whites and nonwhites when the Spearman rank-order test was applied to the 1970 data in Table 3.20 indicating considerable similarity in disease patterns. A Spearman rank-order correlation of .594 based upon the data in Table 3.21 reveals much greater differences to have existed in the prevalence of certain diseases for the two groups in 1960.

Table 3.20. RATE AND RANK OF SELECTED DISEASES BY COLOR,

| Disease | White |  | Nonwhite |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Rate | Rank | Rate | Rank |
| Aseptic Meningitis | 3.1 | ( 7) | 13.8 |  |
| Chancroid ${ }^{2}$ | 0.5 | (10.5) | 24.0 | (4) |
| Diphtheria | 0.1 | (14.5) | 0.9 | (13.5) |
| Dysentery, Amoebic | 0.2 | (12) | 0.6 | (15.5) |
| Dysentery, Bacillary | 3.0 | (8) | 12.8 | (8) |
| Encephalitis | 0.0 | (17.5) | - 0.0 | (18) |
| Gonorrhea² | 107.2 | (1) | 1678.0 | - (1) |
| Granuloma Inguinale ${ }^{2}$ Hepatitis, Infectious | 0.0 | (17.5) | 2.2 | (12) |
| Hepatitis, Infectious Hepatitis, Serum | 25.0 | ( 2) | 18.3 | (5) |
| Hepatitis, Serum Lymphopathia Venereal ${ }^{2}$ | 3.8 | (14) | 2.6 | (11) |
| Lymphopathia Venereal ${ }^{2}$ Malaria | 0.1 0.5 | (14.5) | 7.2 | (19) |
| Meningococcal Infection | 1.0 | (10.5) | 0.6 5.0 | (15.5) (10) |
| Salmonellosis | 14.0 | (3) | 17.7 | (6) |
| Syphilis ${ }^{2}$ | 9.8 | ( 5) | 226.6 | ( 2) |
| Tetanus <br> Tuberculosis | 0.1 | (14.5) | 0.9 | (13.5) |
| Tuberculosis | 13.9 | (4) | 71.3 | (3) |
| Typhoid Fever | 0.1 | (14.5) | 0.5 | (17) |

Source Code: DHRS. 21970
'Rate per 100,000 population
${ }^{2}$ Venereal Disease

Table 3.21. RATE AND RANK OF SELECTED DISEASES BY COLOR, $1960{ }^{1}$

| Disease | White |  | Nonwhite |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Rate | Rank | Rate | Rank |
| Aseptic Meningitis | NA | NA | NA | NA |
| Chancroid ${ }^{2}$ | 0.4 | (10) | 25.2 | ( 4) |
| Diphtheria | 0.3 | (11.5) | 6.2 | (8) |
| Dysentery, Amoebic | 3.6 | ( 6) | 3.3 | (11) |
| Dysentery, Bacillary | 1.4 | ( 7) | 5.6 | (9) |
| Encephalitis | 1.2 | (8) | 0.8 | (14) |
| Gonorrhea ${ }^{2}$ | 28.8 | ( 2) | 1003.5 | (1) |
| Granuloma Inguinale ${ }^{\mathbf{2}}$ | 0.0 | (15.5) | 8.4 | ( 6) |
| Hepatitis, Infectious | 24.6 | ( 3) | 13.9 | ( 5 ) |
| Hepatitis, Serum | NA | NA | NA | NA |
| Lymphopathia Venereal2 | 0.0 | (15.5) | 4.1 | (10) |
| Malaria | 0.1 | (13.5) | 0.0 | (16) |
| Meningococcal Infection | 0.9 | ( 9) | 2.5 | (12.5) |
| Salmonellosis | 6.8 | ( 5) | 6.9 | (7) |
| Syphilis ${ }^{2}$ | 30.2 | (1) | 315.7 | (2) |
| Tetanus | 0.1 | (13.5) | 2.5 | (12.5) |
| Tuberculosis | 22.5 | (14) | 56.8 | (3) |
| Typhoid Fever | 0.3 | (11.5) | 0.3 | (15) |

Source Code: DHRS-2 1960
'Rate per 100,000 population
${ }^{2}$ Venereal Disease

Comparison of the two tables indicates an increase in gonorrhea, the rate increasing 3.7 times for whites and climbing over 60 percent for nonwhites. The rate for nonwhites in 1970 was 16 times that for whites. On the other hand, the reported rate for sybilis among whites declined and the rank-order from first in 1960 to fifth in 1970. For nonwhites the rank-order for syphilis remained the same at second. Infectious hepatitis increased among whites and took over second place in the rank-order in 1970. Note that cancer was not included in the tables as comparative data were not available.

The following tabulation shows changes in rates (per 100,000 population) between 1960 and 1970 in a selection of diseases not listed in the previous tables:

| Decrease in Rates | 1970 |  |
| :--- | ---: | ---: |
| Brucellosis | 0.0 | 1960 |
| Chicken Pox | 50.6 | 0.1 |
| Diarrhea of the Newborn | 0.4 | 114.4 |
| Influenza | 562.6 | 3.2 |
| Measles | 22.3 | 323.7 |
| Tetanus | 0.2 | 82.7 |
| Typhoid Fever | 0.2 | 0.6 |
| Whooping Cough | 1.4 | 0.3 |
| German Measles | 52.8 | 8.6 |
| Malaria | 1.0 | 16.8 |
| Streptococcal Infection | 152.0 | 0.1 |
|  |  | 108.1 |

The preceding table indicates an overall reduction in Florida disease rates. There are, however, some notable exceptions. Bacillary dysentery showed a marked increase among nonwhites, only a slight increase among whites. Tuberculosis increased more than four times among nonwhites, advancing from fifth to third in rankorder. At the same time the prevalence of this disease among whites decreased and the rank-order slipped from third to fourth. The striking changes in the venereal disease categories and the disproportionate figures for whites and nonwhites call for further consideration.

Disease rates for Florida have shown a steady overall reduction since 1960. However, there has been a substantial increase in the rate of gonorrhea, up 3.7 times for whites and over 60 percent for nonwhites. The rate for nonwhites was 16 times that for whites in 1970. The rate for syphilis decreased for whites but remained about the same for nonwhites. There was also an indication that the highest incidence of venereal diseases was occurring in a younger age group. In most disease categories, differences exist in the rates for whites and nonwhites. Especially noteworthy is this higher incidence among nonwhites of venereal disease, tuberculosis and dysentery. The incidence of tuberculosis declined among whites but increased fourfold among nonwhites in the 196070 decade.

Table 3.22 provides a closer look, examining five types of venereal disease by age groups of highest reported incidence, by color. This shows the highest incidence was in an unusually low age group. There is little variation in this respect between the races.

The number and percent of pupils enrolled in specialized health courses in Florida public schools is presented in Table 3.23. The percent is low, particularly at the elementary level. This does

Table 3.22. VENEREAL DISEASE BY TYPE, COLOR, AND AGE GROUP OF HIGHEST INCIDENCE, 197®

|  | Age Groups |  |
| :--- | :---: | :---: |
| Disease | White | Nonwhite |
| Chancroid | $20-24$ | $25-34$ |
| Gonorrhea | $20-24$ | $20-24$ |
| Granulome Inguinale | None | $25-34$ |
| Lymphopathia Venereal | $35-44$ | $20-24$ |
| Syphilis | $25-34$ | $25-34$ |

Source Code: DHRS-1 1970
not present the whole picture. Most elementary children receive some instruction in health related courses, usually as part of regular classroom instruction. The number of students receiving instruction in other than specialized health courses cannot be ascertained and therefore is not included.

Table 3.23. ENROLLMENT IN SPECIALIZED HEALTH COURSES, 1969-701

| Grade Level | Students | Percent |
| :--- | :---: | :---: |
| Elementary | 6,530 | 0.80 |
| Secondary | 30,388 | 4.41 |
| Total | 36,918 | 2.45 |

Source Code: DOE-4
'The table shows the number of students enrolled in specialized health courses at the elementary and secondary levels. Acknowledging that the percentage is low, the majority of elementary students receive health instruction in the self-contained classroom. The number of students receiving instruction in other than specialized health courses cannot be ascertained and therefore are not included in the table.

Table 3.24 presents data on the number of alcohol and narcotic abuse referrals to Florida juvenile courts. It indicates a dramatic increase in the absolute number of referrais between 1962 and 1970. Breakdown by sex and color, avaiiable for 1970 only, shows a wide variation between the sexes. These actual figures do not permit comparisons by percent between the races. They cover only actual referrals. Whiie the proportion of juveniles reported for such offenses was relatively small when compared with other types of offenses (See Table 3.34) the increasing significance of this as a mental and physical health problem is suggested.

Table 3.24. ALCOHOL AND NARCOTIC REFERRALS BY SEX AND COLOR, 1962, 1967, 1970

|  | Year |  |  |
| :---: | :---: | :---: | :---: |
| Type of Referral by Color | 1970 | 1967 | 1962 |
| Alcohol |  |  |  |
| Total | 1,884 | 1,965 | 562 |
| White |  | 1,965 | 562 |
| Male | 1,281 | NA |  |
| Female | 202 | NA | NA |
| Nonwhite |  |  |  |
| Male | 356 | NA |  |
| Female | 45 | NA | NA |
| Narcotics |  |  |  |
| Total | 6361 | 141 | 1 |
| White * 141 |  |  |  |
| Male | 392 | NA |  |
| Female | 134 | NA | NA |
| Nonwhite |  |  |  |
| Male | 99 |  |  |
| Female | 11 | NA | $\begin{aligned} & \text { NA } \\ & \text { NA } \end{aligned}$ |

Source Code: DLE
'Based on six months

## HOME AND FAMILY LIVING

Data on referrals to Juvenile Court for dependency in 1970 are presented in Table 3.25. The major causes for referrals are lack of physical care and lack of financial support. In general, lack of physical care was more common in white referrals and lack of financial support among nonwhite referrals but the differences were not large.

The percent increase in dependency referrals for 1960-70 appears in Table 3.26. The increase for white juveniles, of both sexes, exceeded that for nonwhites. White male referrals were up over 66 percent and white females over 53 percent. Male referrals of both races increased more rapidly than female referrals.

Table 3.25. DEPENDENCY REFERRALS TO FLORIDA JUVENILE CGURTS BY REASON, COLOR AND SEX, IN PERCENT, 1970

| Reason | $\begin{gathered} \text { Total } \\ (15634) \end{gathered}$ | White |  | Nonwhite |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Male } \\ (5483) \end{gathered}$ | $\begin{aligned} & \text { Female } \\ & (5183) \end{aligned}$ | $\begin{gathered} \text { Male } \\ (\mathbf{2 6 6 0}) \end{gathered}$ | $\begin{aligned} & \text { Female } \\ & (2308) \end{aligned}$ |
| Abuse ${ }^{1}$ | 10.72 | 10.79 | 12.10 | 7.81 | 10.87 |
| Other ${ }^{\text {Neglect }}{ }^{2}$ | 84.99 | 84.53 | 84.35 | 87.70 | 84.40 |
| Other ${ }^{3}$ - | 4.27 | 4.66 | 3.54 | 4.47 | 4.72 |

Source Code: DHRS-3 1970
Includes: Beaten, burned, deprived of food and medical care, all others
ancludes: Lack of care of support from parent or guardian, abandonment or desertion, conditions injurious to morals, all other
${ }^{3}$ Includes: Parents violation of probation
Table 3.26. PERCENT INCREASE IN OEPENDENCY REFERRALS BY COLOR AND SEX, 1960-70

| Sex | Color |  |  |
| :---: | :---: | :---: | :---: |
|  | White | Nonwhite | All Races |
| Male | 66.01 | 39.55 | 56.38 |
| Female | 53.05 | 17.87 | 40.09 |

Source Code: DHRS-3 1970
The percent of Florida's population participating in state welfare programs from 1940 to 1970 is shown in Table 3.27.

Aid to Dependent Children (ADC) increased almost seven times between 1940 and 1950. Although this type of assistance tended to drop in 1960, it again seems to be on the increase in 1970, almost approaching its 1950 level. On the other hand, persons receiving welfare and "Other" categories have shown a persistent tendency to decline since 1950.

The actual numbers of families participating in the ADC program are shown in Table 3.28. As might be expected, the percent of Florida families with children under 18 years of age receiving ADC assistance closely parallels the pattern of participation shown for ADC children in Table 3.27.

Table 3.27. PERCENT OF FLORIDA'S POPULATION RECEIVING AID FROM THE STATE WELFARE BOARD, 1940-1970

|  | Year |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Recipients | 1970 | 1960 | 1950 | 1940 |
| ADC $^{1}$ | 7.2 | 4.3 | 8.0 | 1.2 |
| Other $^{2}$ | 1.3 | 2.5 | 3.7 | 2.8 |
| All Classes | 3.7 | 3.1 | 5.0 | 2.3 |

Source Code: DHRS-4, BOC-3 1970, 1960, 1950, 1940
${ }^{1}$ ADC percentages were derived by dividing the number of chiidren receiving aid by the state population under 18 years of age
${ }^{2}$ Includes: Old age assistance, aid to the blind and aid to the disabled
Table 3.28. FLORIDA FAMILIES RECEIVING ASSISTANCE THROUGH THE AID TO DEPENDENT CHILDREN PROGRAM, 1940-1970

|  | Year |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 1970 | 1960 | 1950 | 1940 |
| Number | 52,621 | 24,969 | 27,413 | 2,581 |
| Percent ${ }^{1}$ | 5.7 | 3.7 | 8.1 | NA |

Source Code: DHRS-4 1970, BOC-3 1970, 1960, 1950
'Percent of families with children under 18 years of age

Table 3.29. PERCENT OF CHILDREN UNDER 18. YEARS OF AGE IN FAMILIES WITH INCOMES LESS THAN POVERTY LEVEL, 1970

| Total Number of Families | 921,769 |
| :--- | ---: |
| Families Below Poverty Level | 136,017 |
| Average Number of Children in Low Income Families | 2.98 |
| Estimated Number of Children in Low Income Families | 405,330 |
| Children In Low Income Families as a Percent of All Children |  |

Source Code: BOC-3 1970

The estimated number and percent of children. from low income families is shown in Table 3.29 (previc is page). Low income families are those families classified in the census as below poverty level. For the purposes of the census, income less than poverty level is determined by comparing family income with such factors as family size, sex of family head, number of children under 18 years of age, and farm and nonfarm residence. Table 3.29 indicates that 37.5 percent of ail children under 18 are in low income families.

Data on dependency referrals, welfare, and family income have been examined in this section in order to gain an insight into the needs associated with home and family living in Florida. While data of this type gives exceedingly limited coverage to this important area of concern, it has yielded the following information for consideration.
(1) There is a distinct difference in the major causes of dependency referrals by color;
(2) Over :... past decade, at least, there has been a marked increase in the number of such referrals;
(3) There has also been a corresponding increase in both children and families receiving Aid to Dependent Children welfare assistance; and, finally,
(4) In 1970, approximately 38 percent of all children 18 years of age and under were members of families with incomes below poverty level.

## AESTHETIC AND CULTURAL APPRECIATION

Statistical data relative to this Perennial Objective are either nonexistent or difficult if not impossible to collect. Libraries are available to most Florida school children. Availability of a library, however, is no measure of the number or quality of books on the shelves. The number of persons attending a library throws little light on the extent of library use. These same imponderables apply to the use of state parks, historical sites and other cultural facilities.

In 1967-68, approximately 48 percent of Florida's students were enrolled in humanities-type courses ${ }^{1}$. These included literature, art, music and others in which at least one-fourth of the material was drawn from the fields of art, music, literature,
${ }^{1}$ Florida Department of Education, Division of Elementary and Secondary Education, Accreditation Section; Bureau of Curriculum and Instruction.
philosophy, cultural history and others of this kind. In 1966, 35 counties reported offering courses in humanities, another 11 reported humanities-type courses and the remaining 21 reported offering both.

## MORAL AND ETHICAL VALUES

While crime and delinquency rates, from a legal standpoint, are indicators of citizenship, the kind of behavior these rates represent can be used to assess the moral and ethical needs of Florida learners. On this assumption this section presents a variety of data on the incidence of crime and delinquency in the state, with national comparisons. Table 3.30 lists the incidence of seven major crimes in Florida and the U.S. for 1960 and 1970. Florida consistently exceeded the nation in all categories except auto theft in 1970. Florida also had an increase in all types of crime (as has the nation as a whole), the most dramatic being in the categories of robbery and burglary. Two interrelated factors are suggested for this increase. One is improved reporting of crime statistics. The other is increasing urbanization. Table 3.31, showing crime rates for the same seven types of offenses in Florida's seven largest metropolitan areas, is pertinent to this point. Note that in many but not all categories these rates in SMSAs exceeded those for the state as a whole.

Table 3.30. CRIME RATES BY TYPE OF CRIME, 1960-1970¹

| Type of Offenses | 1970 |  | 1960 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Fla. | U.S. | Fla. | U.S. |
| 1. Murder \& nonnegligent manslaughter | 12.7 | 7.8 | 10.6 | 5.0 |
| 2. Forcible rape | 22.2 | 18.3 | 8.1 | 8.9 |
| 3. Robbery | 186.1 | 171.5 | 80.9 | 51.7 |
| 4. Aggravated assault | 277.2 | 162.4 | 106.9 | 73.0 |
| 5. Burglary | 1,561.8 | 1,067.7 | 807.1 | 456.5 |
| 6. Larceny over $\$ 50$ | 1,143.1 | 859.4 | 353.4 | 266.0 |
| 7. Auto theft | 396.6 | 453.5 | 187.6 | 177.6 |

Source Code: FBI 1970, 1960
'Known offenses per 100,000 population

Turning now to juvenile delinquency, Table 3.32 shows that w.ile the percent of 10-17 year olds in the Florida population referred to juvenile courts increased since 1960, the increase in Florida was not as great as in the nation until 1970 when it exceeded the estimated national figure.

Table 3.32. PERCENT OF 10-17 YEAR OLDS REFERRED TO JUVENILE COURTS, 1960-1970

| Year | U.S. | Florida |
| :--- | :--- | :--- |
| 1970 | 4.91 | 5.3 |
| 1967 | 4.4 | 3.8 |
| 1964 | 3.9 | 3.5 |
| 1960 | 3.2 | 3.4 |

Source Code: FSA 1971
'Estimate of 1970 based on projections
Table 3.33, for comparison, examines the rate of increase in referrals by race and sex. This brings out some interesting variations. The rate of increase was very large for all groups, but was considerably higher for females than for males, for nonwhites than for whites.

Table 3.33. PERCENT INCREASE IN JUVENILE DELINQUENCY REFERRALS BY SEX AND RACE, 1960-i 970

|  | Race |  |  |
| :--- | :---: | :---: | :---: |
| Sex | White | Negro | Total |
| Boys | 217.6 | 278.8 | 234.7 |
| Girls | 343.9 | 386.9 | 494.4 |
| Total | 244.3 | 301.2 | 259.5 |

Source Code: DHRS-3 1970
The ten most frequent reasons for refer:als to Juvenile Court, for 1960, are shown in Table 3.34. These suggest marked
Table 3.34. the ten most frequent reasons for referral to juvenile court classified as delinauency as percent of total referrals by race and sex, 19601,2

| Reason for Referral | $\begin{gathered} \text { Total } \\ (21,473) \end{gathered}$ | White |  | Negro |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Boys } \\ (12,270) \end{gathered}$ | $\begin{gathered} \text { Girls } \\ (3,189) \end{gathered}$ | $\begin{gathered} \text { Boys } \\ (4,755) \end{gathered}$ | $\begin{gathered} \text { Girls } \\ (1,241) \end{gathered}$ |
| Running Away | 14.3 ( 1) | 13.9 ( 1 ) | 30.2 (1) | 4.7 ( 7) | 14.7 ( 3 ) |
| Being Ungovernable | 11.3 ( . 2 | 7.9 ( 5 ) | 22.8 ( 2 ) | 8.015 | 29.2 (1) |
| Larceny, Petty | 11.3 ( 3) | 12.4 ( 3) | 3.2 ( 7 ) | 15.8 ( 2$)$ | 3.5 (8) |
| Breaking \& Entering Act of Carelessness | 11.2 ( 4) | 12.2 ( 4) | 1.5 (10) | 17.4 ( 1) | 1.9 (10) |
| or Mischief | 10.6 ( 5) | 12.8(2) | 5.9 (5) | 10.6 (4) |  |
| Truancy | 9.8(6) | 6.3 ( 6) | 14.4 ( 3) | 12.7 (3) | 21.5 ( 2) |
| Shoplifting | 4.9 (7) | 3.2 (9) | 7.7 ( 4) | 6.6 (6) | 7.7 ( 4 ) |
|  | 4.1 (8) | 6.0 (7) | 1.6 (9) | 1.9 (12) | 0.5 (13) |
| Auto Theft Sex Offense | 3.4 (9) | 4.8 ( 8) | 0.8 (14) | 2.5 (10) | 0.1 (20) |
|  | 2.6 (10) | 1.9 (15) | 4.1 ( 6) | 1.9 (12) | 7.4(5) |
| Unauthorized Use |  |  |  |  |  |
| Violation of | 1.9 (14) | 2.7 (10) | 0.4 (18) | 1.3 (17) | 0.1 (20) |
| Probation | 1.7 (16) | 1.4 (17) | $1.7(8)$ | 2.2 (11) | 2.7 (9) |
|  |  |  |  |  |  |
| Scooter Theft | 2.2 (12) | 2.4 (13) | 0.2 (21) |  |  |
| Injury to Person | 2.3 (11) | 2.0 (14) | 1.0 (12) | 3.4 ( 9) | 3.9 ( 6 ) |

[^8]Tabie 3.35. THE TEN MOST FREQUENT REASONS FOR REFERRALS TO JUVENILE COURT CLASSIFIED AS DELINQUENCY AS PERCENT OF TOTAL REFERRALS BY PACE AND SEX, 19701,2

| Reason for Referral | $\begin{gathered} \text { Total } \\ (55,731) \end{gathered}$ | White |  | Negro |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Boys } \\ (26,701) \end{gathered}$ | $\begin{gathered} \text { Girls } \\ (10,967) \end{gathered}$ | $\begin{gathered} \text { Boys } \\ (13,256) \end{gathered}$ | $\begin{gathered} \text { Girls } \\ (4,801) \end{gathered}$ |
| Running Away | 19.6 (1) | 19.0 (1) | 39.8 (1) | 4.7 (8) | 17.2 (2) |
| Larceny, Petty | 16.7 (2) | 13.7 (2) | 14.1 (2) | 21.5 (1) | 26.2 (1) |
| Burglary-B \& E | 11.0 (3) | 13.1 (3) | 1.9 (10) | 17.8 (2) | 1.8 (8) |
| Ungovernable Behavior | 7.8 (4) | 6.1 (5) | 13.0 (3) | 5.0 (6) | 13.8 (3) |
| Disorderly Conduct | 5.5 (5) | 5.1 (7) | 2.8 (7) | 8.0 (3) | 6.5 (6) |
| Truancy | 5.2 (6) | 4.3 (8) | 6.0 (4) | 5.0 (5) | 8.3 (5) |
| Vandalism | 4.9 (7) | 6.6 (4) | 2.3 (9) | 4.8 (7) | 1.5 (9) |
| Assault-Aggravated \& Not | 4.3 (8) | 27 (12) | 1.2 (12) | 7.9 (4) | 9.6 (4) |
| Drunkenness-Posses. | 3.9 (9) | 5.6 (6) | 4.3 (5) | 1.2 (13) | 1.0 (10) |
| Larceny, Grand | 3.2 (10) | 3.2 (11) | 2.3 (8) | 3.4 (10) | 4.1 (7) |
| Drugs | 2.9 (11) | 4.1 (9) | 3.9 (6) | 0.5 (18) | 0.5 (4) |
| Auto Theft-Unauthoiized Use | 2.7 (12) | 3.4 (10) | 0.5 (13) | 3.9 (9) | 0.4 (15) |
| Violation of Curfew | 1.5 (13) | 1.6 (13) | 1.8 (11) | 1.5 (12) | 0.5 (13) |
| Auto Theft-All Other | 1.0 (14) | 1.4 (14) | 0.2 (15) | 1.2 (14) | 0.02 (21) |

Source Code: DHRS-3 1970
'This table is based upon the number referred and does not adjust for c. en dismissed
${ }^{2}$ Rank-order of offense is given in parentheses.
variations by race and sex. "Running away" ranked highest for both white boys and girls, significantly so for girls. But this offense ranked seventh for nonwhite boys and third for nonwhite girls. Another look at these rankings in Table 3.35, this time for the year 1970, shows several changes in the order of frequency of referrals. More significantly, referrals for white boys more than doubled in the decade, while those of white girls almost tripled. The rate for nonwhite boys also tripled and that for nonwhite girls quadrupled. This continued a trend that began in 1967 but is not shown here in table form.

Comparison of Tables 3.34 and 3.35 offers interesting contrasts. Shifts in the reason for referral were greater for nonwhite boys and girls. Nonwhite girls followed a pattern of rebelliousness similar to white girls (there was some inversion in the top three ranked reasons). Nonwhite beys, however, exhibited a pattern highlighted by crimes against property in both tables. Both tables include information on categories of delinquent behavior not in the top ten in frequence. The comparison indicates changing behavioral patterns, the most significant being the appearance of drugs as a ranked category for the first time in 1970.

A marked increase in referrals for traffic violations has been shown by Florida juveniles. Table 3.36 provides data on these referrals for 1960 and 1970, by sex and race, with percent increase for each group. Altrough rates of increase were high for each of the four groups, those for nonwhites and females of both groups were particulariy noticeable.

Table 3.36. TRAFFIC VIOLATION REFERRALS BY RACE AND SEX, 1960-1970

|  |  | White |  |  | Negro |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Total | Male | Female |  | Malé | Female |
| 1960 | 7,515 | 5,571 | 744 | 325 | 56 |  |
| 1970 | 14,216 | 11,177 | 1,900 | 953 | 168 |  |
| Yercent <br> Increase |  | 100.6 | 156.5 | 196.3 | 200.0 |  |

Source Code: DHRS--3 1960, 1970

The increase in the probem of repaters in the caseloads of juvenile courts is shown in Table 3.37. This examines the number

Source Code: DRHS-3 1960, 1970
of referrals of those with previous records in the areas of delinquency and traffic violation for selected years between 1961 and 1967. (Information for 1970 was not available at time of publication.) The number of repeaters in both areas increased in every period reported, both in absolute numbers and in percent of caseload.

Data in the preceding tables on referrals to juvenile court must be assessed with caution. They do not take into account the results of adjudication. While overall dismissal rates can be computed from available juvenile court records ( 6.1 percent in 1960, 7.5 percent in 1967) there is no way to apply these rate: to the categories of offense, race or sex. Juvenile court statistics, in addition, are often inexact. These are not adversary proceedings as in criminal courts. Juvenile judges and staffs have wide latitude in their decisions. With these cautions in mind, the data and trends indicated in these tables are relevant.

Data in the area of illegitimate births also are subject to these limitations. The figures in Table 3.38, however, appear to be the basis for acceptable comparisons. There are large differences between the figures for whites and nonwhites. The rate of illegitimate births in Florida esceeded that for the United States. There was a significant increase in the rate of illegitimacy, up about four timies for whites and almost three times for nonwhites in the years between 1930 and 1970. This increase parallels the national figure, aithough the percent of illegitimate births for Florida exceeded that for the U.S.

Table 3.38. ILLEGITIMATE BIRTHS AS PERCENT OF LIVE BIRTHS, 1930-1970

| Color | Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1970 | 1960 | 1950 | 1940 | 1930 |
| Florida: |  |  |  |  |  |
| Total | 15.0 | 9.6 | 8.0 | 6.2 | 5.4 |
| White | 6.5 | 2.8 | 1.8 | 1.5 | 1.4 1.5 |
| Nonwhite | 41.1 | 27.9 | 23.2 | 17.4 | 14.2 |
| United Stater: Total | 11.2 | \% 5.3 | 3.9 | 3.5 | N.A. |

Source Cocre: D*iRS-1 1950, 1960, 1970

Table 3.39 indicates that the proportion of teenage mothers of illegitimate children is also on the increase. Latest data show more than half were in this age bracket. The proportion of nonwhite teenage mothers has been higher than white teenage mothers in every period reported.

Table 3.39. ILLEGITIMACY AMONG FLORIDA TEENAGERS (19 YEARS OF AGE AND UNDER) BY COLOR AS PERCENT OF ALL ILLEGITIMATE BIRTHS, 1952-1970

|  |  | Year |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Color | 1970 | 1967 | 1962 | 1957 | $\mathbf{1 9 5 2}$ |
| Total | 54 | 51 | 50 | 39 | 40 |
| White | 51 | 46 | 38 | 38 | 34 |
| Nonwhite | 56 | 54 | 41 | 39 | 41 |

Source Code: DHRS-1 1952-1970

Further light on these racial differences is provided by examination of age groupings of teenage mothers of illegitimate children. The top three ages for whites are, in order, 19, 1.8 and 17 . For nonwhites they are 18,17 and 16.

Florida in 1970 exceeded the national rates in all major types of crime except auto theft. These rates have been increasing steadily in both state and nation. In the area of juvenile delinquency as measured by referrals to the courts, the increase in Florida has not been as large as in the nation. There have been marked racial differences in this area, the increases being largest among nonwhites of both sexes and among white girls. Referrals of nonwhite boys were most frequent for crimes against property while behavior problems predominated for white boys. Categories of rebellious behavior among white gir!s showed significant increases. Traffic violatiorıs by juveniles increased sharply between 1960 and 1967. Florida also exceeded the nation in the rate of illegitimate births and its teenage mothers of illegitimate children averaged one year younger among nonwhites than whites.

## CHAPTER IV

## SURVEY OF DISTRICT EEUCATIONAL PRACTICES

## DESCRIPTION AND DEFINITION OF VARIABLES

Three types of information about county school districts constitute the Survey of District Educational Practices ${ }^{1}$ described in this chapter. They are both conceptually and operationaliy distinct and are derived from an approach commonly referred to as system analysis. The three types of iniformation include:

Input The kind and level of support which school districts provide their schools.
Context The socioeconomic and cultural characteristics of the schooi district in which the students are enrolled.
Output The variety of conventional and nonconventional ${ }^{2}$ educational consequences presumed to be directly or indirectly attributable to the educational activities of the county school system.

In this chapter the relationships between thirty-seven variables are examined: six input variables, ten context variables and twenty-one output variables. These thirty-seven variables are in no way presumed to be exhaustive. Their choice has been dictated almost solely by three considerations: (1) their availability from secondary sources; (2) their suitability for this type of analysis; and ( 3 ) the degree to which they seemed consistent with the objec-

[^9]tives of the Plan for Study of the Educational Needs in Florida.
Table 4.1 summarizes the thirty-seven variables included in the analysis according to whether they have been operationally defined as inputs, context, or outputs. Where possible, comparable figures for the United States also have been included. Unfortunately, national data were not available for some variables and were, therefore, omitted from the table. The letters "NA" were used where this occurred. it will be noted in Table 4.1 that Florida is neither uniformly above or below the nation with respect to those variables which one might consider desirable on the one hand or undesirable on the other.

Table 4.2. . SYSTEM V. JABBLES

| Variable | Year | Florida | United States |
| :---: | :---: | :---: | :---: |
| t. Input |  |  |  |
| 1. Fully Accredited Schools | 1970 | 52.7\% | $N{ }^{1}$ |
| 2. Expenditures for Instruction | 1970 | 76.1\% | 72.0\% |
| 3. Classes Taught by Teachers Infield | 1970 | 86.9\% | NA |
| 4. Teachers Rank II and Up | 1970 | 2- \% | 30.6\% - |
| 5. Teachers Rank Ill and Below | 1970 | 72.\% | 69.4\%* |
| 6. Pupil-Teacher Ratio | 1970 | 23.6 | 22.3 |
| II. Context |  |  |  |
| 1. Negro | 1970 | 15.5\% | 11.2\% |
| 2. Urban | 1970 | 80.5\% | 73.5\% |
| 3. White Collar | 1970 | 49.8\% | 48.3\% |
| 4. Averige Family income | 1970 | \$10,120 | NA |
| 5. Farnily Income Below Poverty Level 6. Born in State | 1970 | 12.7\% | 9.8\% |
| 7. Median Education | 1970 | 37.6\% | 12.2 |
| 8. Transfers from Out-of-State | 1970 | 5.1\% | NA |
| 9. Transfers from Out-of-County | 1970 | 2.4\% | NA |
| 10. Family Income $\$ 15,000$ and Up | 1970 | 16.8\% | 19.2\% |
| III. Output |  |  |  |
| 1. Enrolled in School, 14-17 | 1970 | 90.6\% | 94.13\% |
| 2. Promoted Grades 1-12 | 1970 | 96.2\% | NA |
| 3. Percent Attendance 1-12 | 1970 | 93.3\% | 93.4\% |
| 4. Post Secondary College | 1970 | 54.6\% | 61.9\% ${ }^{2}$ |
| 5. Post Secondary Vocational | 1970 | 5.1\% | NA |
| 6. Post Secondary None | 1970 | 40.3\% | NA |
| 7. Juvenile Delinquency ${ }^{\text {d }}$ | 1970 | 3.3\% | 4.9\% |
| 8. Unemployment | 1970 | 3.8\% | 4.9\% |
| 9. Alcohol and Narcotic Referrals | 1970 | 15.7\% | NA |
| 10. Truancy | 1970 | 17.9\% | NA |
| 11. Divorce Rates | 1970 | 5.5 | 3.5 |
| 12. Dependency Referrals4 | 1970 | 0.7\% | NA |
| i3. Hilegitimate Births | 1970 | 15.0\% | 11.2\% |
| 14. Percent Voting | 1970 | 64.2\% | 62.0\% |
| 15. Verbal Mean Score | 1970 | 29.8\% | 54.9 |
| 16. Quantitative Mean Score | 1970 | 27.6 | 32.2 |
| 17. Social Studies Mean Score | 1970 | 28.2 | NA |
| 18. English Mean Score | 1970 | 39.1 | NA |
| 19. Math Computation Mean Score | 1970 | 22.7 | NA |
| 20. Math Problern Solving Mean Score | 1970 | 21.7 | NA |
| 21. Science Mean Score | 1970 | 42.9 | NA |

"NA" Not avalable $\propto$ nol applicabre
'Estimate
${ }^{3}$ Age groud 10.17
-Age Rroud Birth. 17
-Equivatent dexrees

## CORRELATION VARIABLES

## Input Variables

1. Percent of the district's schools designated as fully accredited by the E - yartment of Education in 1970 (DDE-4)
2. Percent of the district's expenses devoted to instiuction, i.e., staff salaries, textbooks, audio visual equipment, etc., 1970 (DOE-6)
3. Percent uf majortish school classes in the district taught by teachers " "iold, 1970 (DOE-6)
4. Percent of $\mathrm{i}_{\text {rolluctional personnel in the district holding }}$ a Rank II or higher certificate (Masters Degree or above), 1970 (DOE-6)
5. Percent of instructional personnel Rank III or below (Bachelors Degree) 1970 (DOE-6)
6. Average number of pupils per teacher, based on average daily membership, grades 1-12, 1970 (DOE-6)

Context Variables

1. Percent of county population who were nonwhite in 1970 (BOC-2)
2. Percent of county population classified as urban in 1970 (BCs-2)
3. Percent of employed persons in the county in white collar occupations, 1970 (BOC-3)
4. Average family income for the county, 1970 (BOC-3)
5. Percent of the families in the county with an annual income of less than poverty level, 1970 (BOC-3)
6. Percent of native population born in Florida, 1970 (BOC-3)
7. Median school years completed by persons 25 years old and over in the county, 1970 (BOC-3)
8. Transfers from out-of-state as a percent of total enrollment, grades 1-12, 1970 (DOE-6)
9. Trarisfers from other counties as a percent of total enrollment, grades 1-12, 1970 (DOE-7)
10. Percent of families with annual income of $\$ 15,000$ and over, 1970 (BOC-3)

## Output Variables

1. Percent of county population 14-17 years of age enrolled in school, 1970 (BOC-3)
2. Percent of regular district membership promoted at close of 1970 school year, 1-12 (DOE-6)
3. Percentage of the pupils in membership grades 1-12 who were in attendance during school year, 1970 (DOE-6)
4. Percent of public school graduates in the district who entered college, 1970 (DOE-5)
5. Percent of public school graduates who entered technical, trade, or similar schools, 1970 (DOE-5)
6. Percent of public school graduates who did not immediately continue education, 1970.(DOE-5)
7. Percent of juveniles in the county referred to juvenile court for delinquency offenses, 1970 (DHRS-3)
8. Annual average of unemployment rates, 1970 (BOC-3)
9. Percent of juveniles referred to juvenile court for alcohoiic and narcotic offenses, 1970 (DHRS-3)
10. Juveniles referred to juvenile court for truancy offenses as percent of children enrolled in school, 1970 (DHRS-3)
11. Divorce rates per 1,000 population, 1970 (DHRS-1)
12. Percent of juveniles referred to juvenile court beacuse of parental neglect, 1970 (DHRS-3)
13. Percent of all live births which were illegitimate, 1970 (DHRS-1)
14. Percent of electors in the county voting of those who were eligible to vote by age and citizenship, 1970 (OSS)
15. Ninth gree standardized tests means (NGTS)
(Source Codes are identified in parentheses. The actual source of information for these variables may be found in the List of Sources and Source Codes, pages viii and ix).

## INPUT VARIAELES ${ }^{3}$

Table 4.2 reports the product-movement correlations which were obtained when each of the six school input variables were run against one another. An inspection of Table 4.2 reveals what seems to be two major "clusters" of relationships which are worthy of $s^{\prime n}$ nc:- note. Tine first of these clusters centers around school acc ation. It would appear that school accreditation is rather strongly related to the percentage of classes in the district being taught by teachers in field and to the percentage of teachers working in the district who hold a Rank II certificate and above. It is not, however, very strongiy related to how much of the district's

[^10]Table 4.2.

| Input | Fully Acc. Sch. | Exp. for Inst | Tch. Infld. 1970 | Tch. RK. II | $\begin{gathered} \text { Tch. } \\ \text { RK. } \stackrel{1}{\prime} \text { II } \end{gathered}$ | PupilTeacher Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fully Accredited Schools | - | . 123 | . 475 |  |  |  |
| Expenditures for Instruction | - | . 123 | . 365 | . 403 | -. 351 | . 227 |
| Teachers Infield 1970 |  |  | . | . 279 | -. 219 | . 513 |
| Teachers, Rank II and Up |  |  | - | . 279 | -. 219 | . 265 |
| Teachers, Rank III and Below |  |  |  | - | -. 980 | . 040 |
| Pupil-Teacher Ratio |  |  |  |  | - | -. 033 |

budget is spent for instruction. Expenditures for instruction, on the other hand, does seem to be strongly associated with both the number of classes taught by teachers in field in a district and its pupil-teacher ratio, thus forming the second "cluster." The two "clusters" apparently overlap where teachers in field are concerned since this particular variable is highly related to the key variables in both clusters. The existence of these two overlapping clusters would suggest that the input variables being used in the study, while they are certainly not all inclusive, are identifying to varying degrees, two somewhat different types of school system resources. Considering the nature of the variables involved, the first cluster would seem to be related to the quality of system resources and, the second, although somewhat more indirectly, to the quantity of resources.

## CONTEXT VARIABLES INTERCORRELATIONS

Correlations were also run between each of the ten context variables used in the study. The results are reported in Table 4.3 below. Unlike the input variables discussed in the preceding section, we do not find the same clear-cut evidence of clustering but rather, with only a few exceptions, an almost uniformly high set of correlations. A cursory interpretation of this fact would suggest that these variables are measuring slightly different dimensions of district socioeconomic conditions.

## OUTPUT VARIABLES INTERCORRELATIONS

Because of the very large number of variables being used to represent district outputs in the study (twenty-one in all), it was necessary to break the intercorrelation matrix which resulted when each of these variables was run against the other into three separate tables. Table 4.4a below, the first of the three tables, contains the correlations produced by the first fourteen of these variables. Table 4.4b contains the results of the correlation of these same fourteen variables with the remaining seven variables which represent student performance on the various sections of
CONTEXT INTERCORRELATIONS

| Context | Negro | Urban | White Collar | Avg. Fam. hnc. | Fam. Income Poverty Level | Fam. Income $\$ 15,000$ | $\begin{aligned} & \text { Born } \\ & \text { in } \\ & \text { Fla. } \end{aligned}$ | Median Edu. | Trans. From Dut-otState | Trans. From Other District |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Negro | - | -. 263 | -. 358 | -. 485 | . 532 | -. 279 | . 529 | -. 426 | -. 504 | -. 074 |
| Urban |  | - | . 796 | . 883 | -. 730 | . 774 | -. 636 | . 787 | . 254 | -. 612 |
| White Collar |  |  | - | . 868 | -. 710 | . 787 | -. 638 | . 852 | . 184 | -. 563 |
| Average Family Income |  |  |  | - | -. 843 | . 842 | -. 798 | . 871 | . 370 | -. 498 |
| Family Income Below Poverty Level |  |  |  |  | - | -. 771 | . 814 | -. 880 | -. 462 | . 187 |
| Farnily Income \$15.000 and Up |  |  |  |  |  | - | -. 590 | . 752 | . 266 | -. 428 |
| Population Born in Florida |  |  |  |  |  |  | - | -. 845 | -. 650 | . 256 |
| Median Education |  |  |  |  |  |  |  | - | . 445 | -. 414 |
| Transfers from Out-of-State |  |  |  |  |  |  |  |  | . | . 021 |
| Transfers from Other Districts |  |  |  |  |  |  |  |  | . | - |

OUTPUT INTERCORRELATIONS

| Output | $\begin{aligned} & \text { Enrid. } \\ & \text { 14-17 } \end{aligned}$ | Prom. 1-12 | Attn. | Coll. | Voc. | None | Juv. <br> Del. | Unemp. Rates | Alc. 8 Nar. Ref. | Tru. Ref. | Div. Rates | Dep. Ref. | illegit. | Vote Per. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Enrld. in School 14-17 | - | . -.046 | -. 035 | . 122 | . 106 | -. 165 | . 043 | -. 030 | -. 237 | $-.017$ | . 001 | -. 003 | . 176 | 329 |
| Prom. 1-12 |  | - | -. 0442 | -. 015 | -. 237 | . 101 | -. 033 | . 085 | -. 122 | . 010 | . 102 | -. 007 | -. 155 | . 028 |
| Percent Attendance |  |  | - | -. 001 | -. 014 | . 009 | -. 110 | -. 027 | -. 094 | . 014 | . 017 | $-.070$ | -. 005 | -. 141 |
| Post Secondary College |  |  |  | - | -. 332 | -. 946 | . 319 | . 287 | . 229 | . 118 | -. 036 | . 189 | -. 179 | . 334 |
| Post Secondary Vocation |  |  |  |  | - | . 006 | . 027 | -. 137 | -. 017 | . 095 | -. 085 | . 168 | . 186 | $-.143$ |
| Post Secondary None |  | . |  |  |  | - | -. 347 | -. 256 | -. 236 | -. 157 | . 067 | -. 259 | . 126 | -. 304 |
| Juvenile Delinquent |  |  |  |  |  |  | . - | . 276 | . 578 | . 569 | -. 045 | . 732 | . 126 | . 311 |
| Unemployment Rates |  |  |  |  |  |  |  | - | . 142 | . 177 | . 231 | . 287 | -. 265 | . 298 |
| Alcoh. \& Narc. Referrals |  |  |  |  |  |  | . |  | - | . 219 | . 025 | . 341 | . 111 | . 207 |
| Truancy Referrals |  |  |  |  |  |  |  |  |  | - | . 084 | . 471 | . 045 | . 042 |
| Divorce Rates |  |  |  |  |  |  |  |  |  |  | - | -. 097 | -. 052 | . 031 |
| Dependency Referrals |  |  |  |  |  |  |  |  |  |  |  | - | -. 097 | . 240 |
| lllegitimacy |  |  |  |  |  |  |  |  |  |  |  |  | - | . 050 |
| Voting Performance |  |  |  |  |  |  |  |  |  |  |  |  |  | - |

Table 4.4b. OUTPUT INTERCORRELATIONS

| Output | Verbal | Quant. | Soc. Std. | Eng. | Math Comp | Math Prob. Sov. | Sci. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Enrld. in Sch. 14-17. | . 143 | . 040 | 129 | 126 | . 006 | . 111 | . 096 |
| Prom. 1-12 | . 079 | -. 052 | -. 025 | -. 026 | -. 047 | . 031 | -. 044 |
| Attendance | . 023 | . 136 | . 149 | 162 | . 143 | . 160 | . 123 |
| Post Sec. College | . 663 | 604 | . 645 | . 644 | . 589 | . 622 | . 553 |
| Post Sec. Voc. | -. 219 | -. 128 | -. 115 | -. 140 | -. 130 | -. 176 | -. 054 |
| Post Sec. None | -. 627 | -. 595 | -. 644 | -. 634 | -. 578 | -. 598 | -. 568 |
| Juv. Delina. | . 423 | . 410 | . 404 | . 416 | . 403 | . 320 | . 395 |
| Unemp. Rates | . 294 | . 322 | . 314 | . 287 | . 376 | . 275 | . 324 |
| Alcoh. \& Narc. Ref. | . 296 | . 297 | . 297 | . 305 | . 273 | . 177 | 256 |
| Truancy Ref. | . 066 | . 018 | . 029 | . 022 | -. 003 | -. 021 | . 067 |
| Divorce Rates | -. 032 | -. 109 | -. 093 | -. 055 | -. 125 | -. 038 | -. 115 |
| Dependency Ref. | . 325 | . 343 | . 275 | . 293 | . 320 | . 251 | . 283 |
| Illegitimacy | -. 398 | -. 412 | -. 318 | -. 258 | -. 348 | -. 382 | -. 274 |
| Voting Performance | . 494 | . 427 | . 427 | . 478 | . 395 | . 419 | . 464 |

NINTH GRADE STANDARDIZED TEST INTERCORRELATIONS, 1969-70

|  | Verbal | Quant. | Soc. Std. | Eng. | Math Comp. | Math <br> Prob. Sol. | Sci. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Verbal | - | . 929 | . 942 | . 910 | . 906 | . 909 | . 908 |
| Quantitative |  | - | . 950 | . 936 | . 952 | . 951 | . 920 |
| Social Studies |  |  | - | . 954 |  |  | . 941 |
| English |  |  |  | - | . 898 | . 916 | . 940 |
| Math Co- on |  |  |  |  | - | . 939 | . 892 |
| Math Prowwhl ${ }^{\text {Solving }}$ |  |  |  |  |  | - | . 906 |
| Science |  |  |  |  |  |  | - |

the state's ninth grade standardized test. Table 4.4c, the final table, contains the results of the intercorrelations among the various sections of the test.

A review of the correlations in all three tables reveals only one clearly defined "cluster" of variables. Evidence of this cluster's existence may be found in tables 4.4 b and 4.4 c where one can observe the various academic variables such as the percentage of a district's students attending college and student mean scores on the different sections of the ninth grade test to be highly intercorrelated. Interestingly, enrolled in schiool 14-17, promotion grades 1-12, and percent attendance do not seem to fall within the cluster, while two apparently nonacademic variables, juvenile delinquency and voting performance, seem to be included. Why this is the case is beyond the scope of this paper to speculate upon. It will also be noted that most of the correlations between the remaining variables are rather small, suggesting that they measure largely independent phenomena.

## SYSTEMS ANALYSiS

Some insight into the relationships between the educational inputs of a school district and its socioeconomic and racial context can be gained from an inspection of Table 4.5. In Table 4.5, expenditures for instruction, classes taught by teachers infield, teachers with Rank II certificates and above, and, contrary to popular opinion, pupil-teacher ratio, are all found to be strongly and positively associated with percent urban, percent white collar, average family income, median erscation and the percent of families with annual incomes of $\$ 15,000$ or more. On the other hand, the percent of fully-accredited schools in the district is strongly and negatively associated with percent nonwhite, the percent of families in the district with yearly incomes below poverty level, and the percent of the district's population born in the state; expenditures per pupil is strongly negatively related to the percent of families with incomes below poverty level and percent of the population born in state; the percent of classes taught by teachers infield in the district is also strongly negatively related to the percent of families below poverty level; and, finally, the percent of teachers with Rank II certificates and above is negatively but somewhat less strongly related to all of the above context variables. Interestingly, the percent of teachers with Rank III certificates and below (the inverse of Rank II certificates and above), not unexpectedly presents a picture exactly the opposite of that just discussed.
Table 4.5.

| Input | Context |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Negro | Urban | White Collar | Ave. Fam. Jnc. | Fam. Inc. Poverty Level | $\begin{aligned} & \text { Fam. } \\ & \text { Inc. } \\ & \$ 15,000 \end{aligned}$ | $\begin{aligned} & \text { Born } \\ & \text { in } \\ & \text { Fla. } \end{aligned}$ | Med. Ed. | Trans. From Out of State | Trans. From Other District |
| Fully Accredited Schs. | -. 318 | . 588 | . 535 | . 645 | -. 575 | . 598 | -. 441 | . 448 | . 040 | -. 275 |
| Expenditures for Instruction | -. 041 | . 626 | . 493 | . 529 | -. 401 | . 415 | -. 473 | . 549 | . 291 | . 547 |
| Teachers Infield | -. 103 | . 542 | . 547 | . 542 | -. 416 | . 476 | -. 286 | . 413 | . 014 | -. 279 |
| Teachers, Rank II and Up | -. 001 | . 300 | . 373 | . 393 | -. 272 | . 438 | -. 284 | . 284 | -. 033 | -. 131 |
| Teachers, Rank 111 and Below | . 026 | -. 256 | -. 312 | -. 367 | . 255 | -. 415 | . 284 | -. 252 | -. 038 | .682 -.459 |
| Pupil-Teacher Ratio | -. 114 | . 606 | . 510 | . 538 | -. 432 | . 455 | -. 411 | . 506 | . 185 | -. 459 |

There is little questior. after examining the correlations found in Table 4.5 that insofar as "good" education is defined by such things as accreditation, expenditures, and teacher characteristics, there is a definite advantage for Florida children to live in urban, white collar, and high income districts.

Table 4.6 a and 4.6 b correlates input variables to output variables. Because of the number of output variables involved, the following discussion will be in terms of each of the input variables.

The percent of fully accredited schools is strongly and positively associated with the percent of high school graduates going on to college, student mean scores on the ninth grade test, juvenile delinquency and dependency referrals, and negatively and strongly related to the percent of students not immediately going on to some form of post secondary education. School accreditation, on the other hand, does not appear to have a very strong association with the percent of 14-17 year olds enrolled in school in a district, the proportion of the student body in grades $1-12$ who were promoted at the close of the 1970 school.year, the percent average daily attendance, the proportion of high school graduates going nin to vocational education, unemployment rates, juvenile alcoholic and narcotic referrals, truancy, divorce rates, illegitimate births, or voting participation in the county.

The second input variable, expenditures for instruction, is not completely unlike fully accredited schools in that it is strongly and positively associated with the percent of high school graduates going on to college, student mean scores on all portions of the ninth grade test, and voting performance. Conversely, it is strongly and negatively related to the percent of high school graduates not seeking any form of higher education. There does not seem to be a very strong relationship between expenditures for instruction and the remaining variables in the table.

The proportion of secondary teachers teaching in those subjects for which they were trained would appear to be related positively and strongly to the proportion of the graduating class seeking a college education, the mean scores on all sections of the ninth grade test and juvenile delinquency and dependency referrals and strongly and negaiively associated with the percent of graduating high school students not enrolled in post-secondary education.

With the exception of the strong and positive association between voting performance and the percent promoted $1-12$, the percent of teachers with Rank II certificates and above is not strongly related to any other output variable. In fact, the only other
Table 4.6a. INPUT VS. CONVENTIONAL CUTPUT

| Input | Conventional Output |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Prom. $1-12$ | Attind. | Coht. | Voc. | Pione | Verb | Quant. | $\begin{aligned} & \text { Soc. } \\ & \text { Std. } \end{aligned}$ | Eng. | Math Comp. | Math Prob. | Sci. |
| Fully Acc. Sciss. | . 256 | . $155^{\circ}$ | -. 116 | . 379 | -. 072 | -. 377 | . 501 | . 408 | . 445 | . 398 | 493 | . 460 | . 423 |
| Exp. for Instr. | . 040 | -. 054 | . 157 | . 437 | -. 161 | -. 407 | . 427 | . 372 | . 396 | . 399 | . 393 | . 407 | . 338 |
| Tch. Infield | . 250 | -. 126 | -. 026 | . 419 | . 014 | -. 448 | . 439 | . 383 | . 422 | . 378 | . 390 | . 416 | . 340 |
| Tch.. Rank 11 and Up | . 107 | . 480 | -. 179 | . 204 | -. 249 | -. 130 | 262 | . 107 | . 156 | . 176 | . 129 | . 160 | . 187 |
| Tch.. Rank 111 and Below | -. 013 | . .486 | . 215 | -. 191 | . 285 | . 104 | -. 255 | -. 100 | . 146 | -. 162 | -. 121 | $-.128$ | -. 166 |
| Pupil.Tch. Ratıo | -. 043 | . 156 | . .110 | . 251 | -. $0 \pm 6$ | -. 249 | . 359 | . 254 | . 300 | . 295 | . 283 | . 234 | . 266 |

Table 4.6b. INPUT VS. NONCONVENTIONAL OUTPUT

| Input | Nonconventional Output |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }_{\text {due }}^{\text {duv. }}$ | ${ }_{\substack{\text { Unemp. } \\ \text { Rate }}}^{\text {a }}$ | $\xrightarrow[\substack{\text { Alch. } \\ \text { Nare. }}]{\text { are }}$ | $\underset{\substack{\text { Tru- } \\ \text { ancy }}}{ }$ | $\xrightarrow{\text { porce }}$ | ${ }_{\substack{\text { Oepen- } \\ \text { deney }}}$ |  | ${ }_{\substack{\text { Sote } \\ \text { Perf. }}}^{\text {Vor }}$ |
|  |  | $\begin{aligned} & .090 \\ & .3050 \\ & .107 \\ & .017 \\ & .004 \\ & \hline 113 \\ & \hline \end{aligned}$ |  |  | $\begin{gathered} -.105 \\ \hline .066 \\ .0 .068 \\ -.056 \\ -.058 \\ \hline \end{gathered}$ | 官家 | $\begin{aligned} -.046 \\ -150 \\ \hline \end{aligned}$ |  |

strong relationships remaining in Tables 4.6a and 4.6b are evident between teachers with Rank III certificates and voting performance and percent promoted $1-12$ which is negative.

Pupil-teacher ratio is moderately and positively related only to verbal test scores in the district. No strong relationship is found to exist between this and any of the other variables in the table.

Tables 4.7 a and 4.7 b relate context variables to the conventional and nonconventional outputs of Florida school districts. Since percent of 14-17 year olds enrolled in school, percent average daily attendance, percent promoted 1-12, percert high school graduates enrolling in some kind of vocational education, truancy, unemployment rates and divarce rates are not very strongly reiated to any of the context variables in Tables 4.7a and 4.7b, only the remaining variables will be considered in detail in tine followiig discucsion.

The second variable, percent urban in the county, is positively and strongly associated with the proportion of high school students seeking college, performaince on all aptitude and achievement tests, juvenile delinquency referrals, and voting performance. It is strongly and negatively related to the proportion of high schoo! graduates who do not seek post-secondary education.

It will be recalled that Table 4.3, earlier, showed percent white collar and percent urban to be quite highly related. This interrelatedness is evident in its similar association with high school graduates going on to college, aptitude and achievement test performance, juvenile delinquency and dependency referrals, withdrawals, and voting performance. Additionally, white collar seems to be somewhat strongly associated, positively, with the percent of 14-17 year olds enrolled in schsol in the district. Like urbanity, white collar is negatively and strongly related to the percent of high school graduates not seeking any form of post secondary education.

The amount of average family income, median education and the proportion of the county population earning 515,000 or more are all associated with school outputs in somewhat the same way. Specifically, they are positively and strongly related with the percent of high school graduates attending college, ninth grade test performance, juvenile delinquency and dependenivy referrals (with the exception of family income of $\$ 15,000$ or up), and voting performance. In addition, families with an income of $\$ 15,000$ or up is positively reiated to school promotion rates, $1-12$, and median education is positively associated with juvenilealcohol and narcotic referrals. The same three context variables are negatively and strongly associated with; the percent of high school graduates not
Table 4.7a. CONTEXT vs. CONVENTIONAL OUTPIT

Table 4.7b. CONTEXT VS. NONCONVENTIONAL OUTPUT

| Context | Nonconventional Output |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Juv. Del. | Unem. Rate | Alch. \& Narc | Truancy | Divorce | Dependency | Illig. Births | Voting Perf. |
| Negro | -. 176 | -.311 | -. 199 | -. 038 | . 055 | -. 240 | . 703 | - 202 |
| Urban | . 524 | . 181 | . 248 | . 149 | -. 028 | . 408 | -. 103 | 437 |
| White Collar | . 494 | . 286 | . 177 | . 128 | . 005 | . 388 | -. 195 | . 473 |
| Ave. Fam. Inc. | . 505 | . 244 | . 282 | . 096 | -. 027 | . 392 | -. 221 | . 497 |
| Fam. Inc. Berow Poverty Level | -. 485 | -. 314 | -. 262 | -. 179 | -. 015 | -. 344 | . 166 | -. 423 |
| Fam. Inc. \$15.000 and Up | . 380 | . 155 | . 250 | . 101 | . 004 | . 267 | -.110 | . 392 |
| Pop. Born in Fla. | -. 565 | -. 299 | -. 434 | -. 161 | . 025 | -. 438 | . 085 | -. 517 |
| Med. Edue. | . 593 | . 299 | . 376 | . 228 | . 025 | . 408 | -. 112 | . 520 |
| Tris. from Out-of-State | . 363 | . 305 | . 466 | . 080 | -. 008 | . 310 | -. 222 | $\text { . } 281$ |
| Trfs. from Other Districts | -. 232 | -. 109 | -. 145 | . 143 | $\ldots .029$ | -. 167 | . 011 | -. 344 |

seeking any form of post secondary education.
The proportion of families in the county earning less than poverty level is positively and strongly associated with the percent high school graduates not seeking immediate post secondary. It is negatively and strongly associated with the proportion of high school graduates seeking college, performance on the ninth grade test, juvenile delinquency and dependency referrals, voting and, to some extent, unemployment rates.

The percent of the county population born in Florida is particularly interesting in that the output variable with which it is positively and strongly associated is not desirable, i.e., not going on to immediate post secondary education. It is negatively and strongly associated with the percent of high school graduates seeking college, aptitude and achievement test performance, juvenile delinquency, dependency and alcohol and narcotic referrals, and voting.

The percent of enrollment in a county transferring from out of state is positively and strongly associated with ninth grade test performance, juvenile delinquency and alcohol and narcotic referrals. However, it does not seem to be strongly related, on the negative side, to any output variable. In contrast to this, the proportion enrolled in school who are transfers from other Florida districts is not strongly associated on the positive side, with any output variable that can be considered desirable. It is strongly and negatively associated with performance on the ninth grade test, the proportion of high school graduates seeking college, and voting.

## PARTIAL CORRELATIONS

Partial correlation is a statistical technique which permits one to observe the degree of association between two variables while at the same time controlling for the influence of another or third variable. Such an analysis is carried out in Table 4.8. In the table, the primary or original relationships are given in the first column and the various control or third variables across the top. Our interest is to see whether or not the primary relationship is reduced significantly after removing the influence of the control variable.

As can be seen in Table 4.8, with the exception of the association between teachers Rank II and the two output variables,

| \％ | remer | － | － | mas | 을 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
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| Smememman |  |  |  |  |  |  |
|  | 習 |  | 4 | \％ | \％ | 礶 |
| ORumamb | 3 | \％ | $\cdots$ | ．180 | ${ }_{\text {a }}$ | \％ |
|  | 趗 | ${ }^{3}$ | \％ | ${ }_{\text {\％}}^{\text {¢ }}$ | － | 趗 |
| ！${ }^{\text {a }}$ | \％ | \％ | 3 | \％ | $\stackrel{4}{9}$ | ${ }_{\text {\％}}^{48}$ |
|  |  |  |  |  |  |  |
| amem | \％o | A | 91 | 480 |  | 4 |
|  | ， |  | $\underset{\substack{\text { as } \\ \text { as }}}{\text { a }}$ | － | ， | ${ }_{\substack{36 \\ 0 \\ 0}}$ |
| まown |  | －ap | $\bigcirc$ | $\cdots$ | $!$ | ${ }^{-68}$ |
| \％omemem |  |  |  |  |  |  |

promotion 1-12 and voting, the introduction of controls for urban, white collar, average family income and median education virtually eliminates the earlier perceived relationships between school inputs and outputs. On the other hand, the variable Negro does not seem to have a comparable effect.

For example, controlling for the proportion of the county population that is urban eliminates the original (primary) strong relationships between fully accredited schools and verbal mean on the ninth grade test. Likewise, the once strong relationship between the percent of expenditures going for instruction and the percent of those students going on to college is reduced considerably when the variable, average family income is being controlled. Similar effects of this nature are evident throughout the table.

In contrast when controlling for the context variable, Negro, the relationships between the input variables and output variables are not greatly influenced. As can be seen the primary relationship between fully accredited schools and the verbal scores of the ninth grade test of .510 is not significantly reduced with the introduction of the context variable, percent Negro.

It is evident from Table 4.8 that not all the possible partial relationships that could be considered in this study have been included. However, given the partials that have been considered and the primary correlations discussed in the preceding section, a basic pattern is apparent. The general pattern is that Florida schools in counties which are predominantly white, urban, well educated and have large numbers of their population drawn from states other than Florida, "adequately" meet the educational needs of their children. Those Florida schools in counties having the opposite context characteristics tend not to have schools which are comparable.

## SUMMARY AND CONCLUSIONS

To summarize the information provided by the preceding tables is difficult. However, it does seem reasonable that:

1) What goes into school systems in Florida is largely a function of their environment. Specifically, those schools located in counties which are more urban, white collar occupationally, higher median education and with a larger proportion of their families earning $\$ 15,000$ or better, are more likely to have what
is generally felt to be better educational opportunity, e.g., accreditation, better qualified teachers, and teachers qualified to teach in the appropriate subjects.
2) When the same input variables are considered, a positive correlation of less magnitude is evident between fully accredited sshools and the percent of 14-17 year olds in school, percent promoted $1-12$, college attendance and the percent in attendance during the 1970 school year. This can also be said of the input variables, teachers with a Rank II certificate or higher and teachers teaching in the subject area for which they have been trained (except for promotion, attendance, and in the case of teachers teaching in the area for which they have been trained, college attendance).
3) Nonconventional educational outputs, such as unemployment rates, alcohol and narcotic referrals, truancy, divorce rates and illegitimacy rates are not very strongly related to school inputs, while, delinquency and dependency referrals, and voting performance are only selectively associated to certain district inputs. Thus, by and large, such outputs do not seem to be directly associated with educational resources.
4) Contexts (social characteristics of the county) seem to be most highly related to the school outputs considered in this study. Specifically, a district which is more urban, occupationally white collar, having a higher average family income and education is more likely to have a school system with "desirable" conventional outputs such as college going and higher performance on academic achievement tests.
5) Like the conventional output measures, the nonconventional output variables are most clearly related to the context variables. Thus, a county that is more urban and occupationally white collar, with higher median education and average family income is more likely to have a higher number of juvenile delinquency and dependency referrals, but a lower rate of illegitimacy. So, also, voter participation is apparently related to occupational structure, urbanity and median education of the county.
6) The Negro population of Florida counties is obviously a very significant factor in the output of school systems, although apparently not particularly significant in terms of input (except for the percent of fully accredited schools). Cognitive skills are appreciably lower in county school systems with larger proportions of nonwhites, as is the percentage going on to any form of higher education beyond high school.
7) A most significant factor in the relationship of context to input and output is the effect of native born Floridians in the
county population upon inputs and outputs of the school system. It is negatively associated with every input measure, except the proportion of teachers with Rarik III certificates or lower. These native Floridians are, of course, more Negro, rural, and of low income than non-natives which probably explains in part the poor outputs obtained by school systems in counties where they are in greater numbers.

Therefore, on the basis of the data it would appear that:
a) Florida education is probably most relevant for white individuals living in the more developed counties. It is not relevant for Negro, rural, or poor people;
b) The locus of individual differences and motivation for learning lies in large measure not in the school system (although it certainly contributes), but in the larger community's values and beliefs regarding the role of education; and
c) Nonconventional "outcomes" of education, such as delinquency, divorce, illegitimacy, etc., are not very strongly school related but, rather, in large measure have their origins in the community.

## CHAPTER V

## IDENTIFICATION OF CRITICAL LEARNER NEED

The information presented in the three preceding chapters provided an overview of the Florida population and learner status in the seven broad behavioral areas important to education. Once this information had been assembled, the focus shifted to the primary purpose of the study spelled out in the opening sentence on the first page of the report, that is, the identification of the critical educational needs of the state as a whole and the critical needs of the various geographic groups within the state. The planning task force had recognized the importance of this step and set up guidelines for the process. The guidelines were followed closely in the implementation.

The first step was a refinement of the mass of data, discarding those which did not contribute meaningfully to the objectives of the study. This was done by a committee consisting of a coordinator and three specialists with research experience in the fields of education and sociology. When their task was completed the result was submitted to an evaluation panel organized to identify the critical areas of need (see Appendix C). Great care was taken in the selection of this group, as it was with all those associated with the study (see pages 3-4). The evaluation panel spent two days studying the refined data. The outcome was identification of eight critical needs areas, the data collected to identify such need areas and the target populations described below.

## CRITICAL NEED AREA 1

Florida's learners need to acquire the basic language and quantitative skills and knowledge which will enable them to deal competently with the usual kinds of intellectual and learning tasks expected of them both in and out of school.
Status Data ..... Page
Student performance on standardized tests of aptituc and achievement ..... $43-48$
The performance of Flonida draftees on Selective Service mental and aptitude tests ..... $48-50$
Nonpromotio rates in Florida schools ..... 53-55
Target Population Characteristics ..... Page
Blacks ..... 53, 55, 94-97
Rural residents ..... 94-97
Low socioeconomic status ..... 94-97
Born in the state ..... 94-97
Students who are over age for grade level ..... 43-46
Students from small schools ..... 47
CRITICAL NEED AREA 2

Florida's learners meed to realize the functional importance of the preparatory skills aniaiknowledge:which can be gained through the formal educational process and to develop:the kinds of attitudes *hat will, in turn, lead to tiveir continued participation in school at least through the twelfih grade or its equivalent.

Status Data Page
Educational attainment of the Florida population51-52

The association of income and education 32-34, 85
The relationship between education and occupational stytus ..... 85

The relationship between eduration and unemployment
Target Population Characteristics ..... Page
Black ..... 51-52, 85
Rural residence ..... 85
Low socioeconomic status ..... $29,32,34,85$

## CRITICAL NEED AREA 3

Florida's learners need to acquire, prior to entering the first grade, the experiential background which will enable them to participate successfully in the formal educational process.

Status Data Page
Excessively high nonpromotion rates in the first grade

## Target Population Characteristics

(Data which are currently available indicate that nonpromotion at the first grade level is not selectively associated with specific population characteristics. However, a correlation of -.387 between first grade nonpromotion across districts and the percent of their first graders, who had kindergarten experience the preceding year, would tend to suggest that preschool experiential background plays a desirable role in school success.)

## CRITICAL NEED AREA 4

Florida's learners need to develop the appropriate attitudes and citizenship skills which will lead them to understand more fully and to assume actively the role of responsible members of a democratic society.
Status Data ..... Page
Voter registration and voter performance ..... 57-58
Illegal or criminal behavior ..... 69-70
Selected types of delinquent behavior ..... 71-76

Target Population Characteristics
Page
Black
Low socioeconomic status
57-58, 71-76, 94-97
Born irı state
94-96
94-96

## CRITICAL NEED AREA 5

Florida's learners need to develop the appropriate attitudes and requisite vocational skills which will enable them to successfully respond to current and anticipated demands of local, state and national job markets.

## Status Data

Page
Trends in industrial and occupational
groups of employed persons
Unemployment rates
38-39
Enrollment in vocational educational programs

Occupational placement success of vocational program participants

Target Population Characteristics
Page
Black
Rural residence
Teenage population
36, 38-39, 85, 96
Low income and low occupational status

85, 96
38-39
85, 96

## CRITICAL NEED AREA 6

Florida's learners need to acquire the attitudes and health habits essential to the maintenance of good mental and physical health.

## Status Data

Page
Juvenile referrals for narcotics and alcohol abuse$64-65$
Morbidity statistics ..... 61-64
Infant and maternal mortality ..... 17-18
Homicide and suicide rates ..... 18-19, 69-70
Target Population Characteristics ..... Page
Black 18-19, 61-64, 94, 96
Rural residence
Low occupational status ..... 94, 96 ..... 94, 96
Male ..... 65
CRITICAL NEED AREA 7

Florida's learners need to acquire the interpersonal anid social skills and attitudes which are essential in establi shing and maintaining stable, responsible family relationships.

| Status Data | Page |
| :--- | ---: |
| Divorce statistics | $23-26$ |
| Feferrals to juvenile court because of | $65-66$ |
| dependency | Page |
| Target Population Characteristics | $23-26,66,94,96$ |
| Black | 94,96 |
| Urban residence | 94,96 |
| Low economic, occupational and educa- | $23-26$ |
| tional status |  |
| Female |  |
| CRITICAL NEED AREA 8 |  |

Florida's learners need to develop the kinds of social attitudes and values that will lead to the adoption of behaviors acceptable to the moral and legal codes of contemporary society.
Status Data Page

Crime and delinquency rates
19, 69-76
Selected dependency referral data
65-66
Illegitimate birth rates

# Target Population Characteristics 

Page
Black (selected items)
19, 71-77, 94, 96
White, (selected items)
71-76
Low income, occupational and educa-
tional status, (selected items)
Males
71-75
Females, (selected items) 71-77

The panel listed no critical need areas under the perennial objective "Aesthetic and Cultural Appreciation." This does not indicate a lack of need but rather is due to a lack of usable data upon which to base an evaluation of learner status. In some other categories the data were not complete. Consequently, in such instances, the evaluation relied on information that was suggestive rather than definitive.

## CHAPTER VI

## PROJECTION

Much was learned from Florida's first, full scale, formal assessment of educational needs which this report has summarized. Not only did it produce a quantity of relevant and useful data but valuable experience as well with respect to the "do's" and "don'ts" of such an assessment. The superabundance of information already collected to describe various aspects of Florida's population was a surprise to those engaged in the study. However, not all of this data was found usable, either because of the form in which they were reported or because of certain reservations heid about the manner or condition under which they were collected. Perhaps one of the most valuable spinoffs of the study was the recognition by the Florida Department of Education of the desirability of a viable, uniform data base for the continuous assessment of learner needs, which in turn, stimulated the development of the "Florida Needs Assessment Information and Statistical Support System." This information system, including data base and statistical routines, is expected to play a vital role in the future assessment and evaluation activities of the state.

The future of statewide assessment of educational needs is assured by the Legislature and it is hoped that much of the experience gained in this initial activity will be of some use in the state supported assessment program now under way. It is obvious that needs assessment is not a terminal activity. The wealth of data produced is still being reviewed and analyzed. A review of both the strategies and the variables used in this analysis will continue, looking toward further assessments of wider scope, including more sophisticated methods of analysis to explore in greater depth those relationships that exist between the educational systems inputs, contexts and outputs, hopefully, will be developed.

In sum, the Title III Needs Assessment Study accomplished two things: (1) it provided the first formal in-depth survey of the critical needs of Florida learners to be conducted in the state and, (2) it provided the base for a continued and expanded assessment program to assist in bringing a meaningful educational program to the learners in Florida.

The importance of these objectives, not only for the learners but for the total population of the state, is clearly set out by a group of authorities:
"Educational attainment and opportunity are linked in many ways. Abundant evidence supports the view that education affects income, occupational participation, social deviance, etc. Indeed, educational attainment is related to opportunity in so many ways that the two terms seem inextricably intertwined in the minds of the layman and in the findings of the social scientist."

Levin, Henry M., et. al.
School Achievement and Post-School Success.
Review of Educational Research, February, 1971, p. 14.

## APPENDICES

## APPENDIX A

## PLAN FOR STUDY OF EDUCATIONAL NEEDS OF FLORIDA

## I. OVERVIEW OF THE PLAN

This plan assumes that the ultimate outcome of this study will be a report including the following sections
A. Status of education, $\mathrm{K}-12$ in Florida, with respect to achievement of the following perennial objectives

1. Communication and learning sk:lls
2. Citizenship education
3. Vocational interests
4. Mental and physical health
5. Home and family relationships
6. Aesthetic and cultural appreciations
7. Moral and ethical values
B. Evaluation of current educational programs in terms of certain major criteria
8. The relevance of educational programs for Florida now and in the future
9. The relevance of educational programs for selected sub-populations within the state
10. The effectiveness of educational programs in (a) providing for individual differences and (b) providing motivation and skill for self-directed, continued learning
11. Comparison of Florida's status in.education with that of other states
C. Identification from (B) of critical needs for education in Florida, K-12

Based on the foregoing assumptions, the work of the planning team consisted of these steps:

1. Each perennial objective (A.1-7 above) was broken down into certain behaviors expected of persons who have completed schooling and sought in the educational program. These behaviors are believed indicative of satisfactory accomplishment of the objective. The complete list of behaviors as developed by the planning team follows:

## a. Communication and Learning Skills

1) Reads, writes, speaks and listens in standard (acceptable) English
2) Reads, writes, speaks and listens in a second language
3) Uses effectively many sources of information in his learning activities
4) Applies rational processes in arriving at the solutions of problems
5) Continues learning on his own initiative
6) Demonstrates understanding of the basic concepts of mathematics, science, and social studies
b. Citizenship Education
7) Exhibits understanding of democratic processes
8) Participates in civic enterprises
9) Exhibits concern for the welfare of others
10) Discharges civic responsibilities (obeys laws, pays taxes, supports improvement of government)
c. Vocational Interests
11) Exhinits knowledge of
a) Broad expanse of job opportunities
b) Sources of employment information
c) Laws and regulations pertinent to employment
d) Economic and social conditions of 'employment .
12) Exhibits respect for all honorable occupations
13) Chooses vocational interest appropriate to his aptitudes, abilities, and life goals
14) Chooses an educational program appropriate to vocational interests
15) Remains in occupation and job for reasonable periods
16) Exhibits accuracy, dependability, and command of basic skills in work experience
d. Mental and Physical Health
17) Exhibits objective judgment concerning ordinary life situations
18) Exhibits self-actuating behavior in daily events
19) Reacts to events with appropriate emotional demonstrations
20) Works hard and and purposefully to optimum levels
21) Accepts self honestly and objectively
22) Respects beliefs and actions of others
23) Remains relatively free of preventable disease and illness
24) Meets minimal health standards for occupational and educational enterprises
25) Exhibits knowledge of health services in his community
26) Exhibits appropriate physical and mental vigor
27) Recognizes health hazards
e. Home and Family Relationships
28) Respects the role of the American family in American society
29) Seeks to maintain for the family an economic level at or above an acceptable minimum (as defined in the poverty program)
f. Aesthetic and Cultural Appreciations
30) Uses systematically collected and preserved resource materials to promote cultural and aesthetic appreciation (libraries, museums, historical sites)
31) Participates in and/or observes the performing arts and sports
32) Appreciates and utilizes the natural resources of the state
33) Interacts positively with individuals of other cultures or subcultures
g. Moral and Ethical Values
34) Exhibits respect for such values as beauty, righteousness, love of country, respect for the rights of others
35) Relates to others effectively
36) Respects the religious beliefs of others
2. Qurestions to be answered regardingtherdevelopment and status of each behavior were listed and are
included by key numbers (behavior number, question number) in the appropriate section below. The entire list of perennial objectives, behaviors, and questions is reproduced in Appendix I.
3. Schedules (see section II) for collection of data pertaining to the questions were developed for these procedures of the study:
a. Review of data already available
b. A poll of opinions heid by selected groups
C. A survey of a representative sample of schools
4. A plan for analysis and evaluation of these data and a time schedule for the project were prepared and are included herewith.
This proposed study is being supplemented by a comprehensive study of the migrant perpulation and the educational needs of migrant children. This study is being funded under the migrant section of Title I.

## II. DESCRIBING PRESENT EDUCATION IN FLORIDA

A. Suggested Procedures for Collecting and Analyzing
Available Data

Much data concerning the status of education in Florida are available. These data are the results of many different studies and data collection procedures undertaken by local, state, and national public and non-public agencies. The first step in the study to assess the educational needs of Florida will be the bringing together of all such data and using these data to answer questions which will assist in arriving at what the situation is now, what it should be, and how do we get from where we are now to where we should be.

This phase of the study would be done by a coordinator who would have the overall responsibility for the total study and a team of at least three people. Team members
should have competencies in measurement, research design, statistics, and data analysis.

The team would be guided in the collection of data by questions listed under the following behaviors and the suggested sources of data to be used in answering the questions.

In structuring the data the team should use simple formats that describe the sources and validity of the data used and the method of analysis. The data should be structured according to the objectives, the behaviors listed under each objective, and the questions answered concerning each behavior. Reports should represent findings in appropriate, graphic forms.

1. Questions describing general characteristics of Florida's population pertinent to the study of educational needs are as follows:
a. What is the density of population by county?
b. How is population distributed (using ranges critical to educational planning in Florida), i.e., rural (less than 2,500), etc.?
c. What are the ages and sex of Florida's . population? (5-year intervals: 0-4 through 7074, then 75+)
d. How is Florida's population distributed by race? (Caucasian, Indian, Negro, Oriental, combinations)
e. How is Florida's population distributed by religion?
f. How is Florida's population distributed by languages spoken at home? (English, only; Spanish, only; English and Spanish; etc.)
g. How is Florida's population distributed by years ill residence?
h. How is Florida's population characterized by selected changes?
1) Births
2) Deaths
3) Loss to armed forces
4) Migration: incoming
outgoing
i. How is Florida's population distributed by citizenship? (native born, naturalized, alien)
j. What are the national extraction and ethnic subcultures in Florida and how is population distributed among them?
k. What is the marital status of Florida's population? (single, married, separated, divorced, remarried, widowed)
I. How is Florida's population distributed by families and/or households?
m. How is Florida's population distributed by home occupancy? (own, rent)
n. How is Florida's population distributed by family income?
o. How is Florida's population distributed by personal income?
p. How is Florida's population distributed by employment? (farming, construction, government, etc.)
q. How is Florida's population 25 years and over distributed by years of school completed?
r. How is Florida's population under 25 years distributed by school enrollment? (private/public/other non profit; nursery, kindergarten, primary grades, intermediate grades, Jr. high, Sr . high, college !ower-division, college-upper division, graduate school, adult education, etc.)
2. Suggested questions keyed to the behaviors and sources of data for answering these questions are as follows:

## COMMUNICATIONS AND LEARNING SKILLS

Questions:
1.1 What percent of the people cannot gain satisfactory employment because of lack of communications skills?
.2 What percent of draftees and volunteers are rejected by the armed services because of lack of communications skills?
1.3 What percent of pupils are above, at, and below national norms on standardized tests in reading and English?
1.4 What percent of drop outs are above, at, and below national age norms in reading and English?
1.5 How is literacy distributed among population sub-groups?

## Sources of data:

U.S. and Florida

Employment Services
U.S. Department of Labor

State and Local Adult Vocational Agencies

Armed Services records

Standardized test results
ESEA Title I reports

State and local dropout studies

Census
Standardized test results

Federal, state, and local government agencies

Local school system studies

Census
U.S. and Florida

Employment Services
2.3 What percent of the school popelation is learning to communicate in a second language?
3.1 What percent of the population has libraries available? What percent uses them?
3.2 How does Florida compare in book sales, newspaper and magazine sales, and TV and radio audiences?
4.1 How do students perform on sections of standardized tests emphasizing application of facts, concepts, and processes?
4.7 How competent is the out of school population to detect propaganda, evaluate sources, detect bias, and analyze issues?
4.5 Is the school day organized to encourage individual work on problem solving in all areas of learning?
5.1 What percent of the out of school population is enrolled in voluntary educational programs?
5.3 What percent of the population make use of supplementary educational programs such as 200S, museums, and art galleries?
5.4 What percent of drop outs later continue in educational programs?

State and local enrollment studies

State and local library studies, both educational and noneducational agencies

Bureau of Economic and Business Research

Advertising agencies
Standardized test results

National Council for the Social Studies

Accreditation reports

State and local adult vocational education agencies

State and local agencies administering such

State and local stadies of drop outs
5.5 What percent of high school graduates continue formal education?
5.6 What opportunities are available for continued learning for the disadvantaged?
6.1 What percent of students areabove, at and below national norms on standardizational tests in mathematics?
6.2 What percent of students are above, at, and below national norms on standardizational tests in science?
6.3 What percent of students are above, at; and below national norms on standardizational tests in social studies?

## CITIZENSHIP

## Questions:

1.1 What percent of the students achieve a satisfactory level on tests of civic understanding?
2.1 What percent of those eligible register to vote? What percent do vote?
2.2 What percent of students have opportunities to participate in civic enterprises?

USOE, NEA, Board of Regents, State and local adult vocational agencies

USOE, OEO
State and local adult vocational education agencies

Standardized test results

Standardized test results

Standardized test results

## Sources of data:

Standardized test results

Florida Secretary of State

Accreditation reports
State and local studies
$\left.\begin{array}{ll}\begin{array}{l}\text { 2.3 What percent of students partici- } \\ \text { pate in school improvement proj- } \\ \text { ects (both paid and unpaid)? }\end{array} & \begin{array}{l}\text { Neighborhood Youth } \\ \text { Corps }\end{array} \\ & \begin{array}{l}\text { State and local voca- } \\ \text { tional education } \\ \text { agencies }\end{array} \\ & \text { Accreditation reports }\end{array}\right\}$


| 5.1 How long does the employee remain |  |
| :--- | :--- |
| in one vocation? | State Department <br> Labor Statistics |
| MENTAL AND PHYSICAL HEALTH |  |
| Questions: |  |
| 7.1 What is the incidence of malnutri- | Sources of data: |
| tion, anemia, hookworm, obesity, |  |
| etc.? | county records |

\(\left.$$
\begin{array}{ll}\text { 2.4 What percentage of families owns } \\
\text { their home and what percentage } \\
\text { rents their home? } & \begin{array}{l}\text { Bureau of Economic } \\
\text { and Business } \\
\text { Research, U. of F. }\end{array}
$$ <br>
\begin{array}{l}2.5 What percentage of families is certi- <br>
fied by school system for participa- <br>

tion in Title I programs?\end{array} \& County School Boards\end{array}\right]\)| 2.6 What percentage of families is on | State Board of Welfare |
| :--- | :--- |
| welfare? |  |$\quad$|  |
| :--- | :--- |
| AESTHETIC AND CULTURAL APPRECIATION |

2.4 How available is instruction in the
arts and humanities in the schools?

State Department of
Education
2.5 What percent of students is enrolled in the arts and humanities courses?
3.1 What are the unique natural resources in Florida?

County school offices
State Department records

County school offices
State Dept. of Conservation State Park Board Commission of Fish and Wildlife

Title III Conservation projects

## B. Opinion

The purpose of this phase of the study is to gather information about the opinions which selected groups of people hold about some facets of public education. This information will supplement that which is collected in the execution of phases I and III of the project.

> Sample

The following groups must be represented in an overall sample or a sample should be drawn for each of: citizens (adult), parents of in-school children, public school administrators, public school teachers, public school students, employers of public school students who are enrolled in work experience programs, employers of former public school students, school board members,
and former students who were taught a second language and subsequently traveled in foreign countries.

The samples of students, teachers, administrators, parents, citizens, and others should be drawn so that each sample will contain enough elements from (a) each sex, (b) white and nonwhite races, (c) rural and urban residence, and (d) school size (where relevant) to enable making differential statements about segments of each major category in the sample.

The decision about whether to draw these samples on a statewide basis or to draw them from the geographical areas of the "study schools" of phase III must be delayed until it is determined whether the aggregate of the "study schools" and their supporting geographic area and constituency can be construed as representing the state, and until it is determined whether the opinion survey data are to be analyzed in conjunction with other information about the same populations collected as part of phase III.

Questionnaires should be constructed for each group listed below and should contain items which assess the topics which are named below. In addition, each questionnaire should contain identification items which will enable categorizing the respondent according to his race, rural urban residence, sex; age, length of residence in Florida, educational level and family income.

## Topics for Opinion Assessment

3-A: This section presents the topics about which opinions are to be sought and identifies the desired respondents to each topic.

It should be noted that although questionnaire-like items are listed, the intention was that these items be suggestive of topics which should be assessed. The items are not offered for inclusion in a questionnaire.

| $\begin{aligned} & \stackrel{n}{\varphi} \\ & \stackrel{N}{N} \\ & \stackrel{N}{0} \end{aligned}$ | $\begin{aligned} & \text { 雲 } \\ & \frac{2}{\omega} \\ & \text { à } \end{aligned}$ |  | $\begin{aligned} & \text { U } \\ & \stackrel{1}{0} \\ & \text { © } \\ & \stackrel{\oplus}{5} \end{aligned}$ | $\begin{aligned} & \frac{n}{\overline{3}} \\ & \frac{0}{3} \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 1 2 | Communication 2.4 | How useful is second language which was taught in school? |
|  |  |  | $X$ | $x$ |  | $\begin{gathered} \text { Communication } \\ 3.6 \end{gathered}$ | What use is made of questions, interaction, interview techniques by in-school and out-of-school populations? |
|  | X |  | $x$ | . |  | Communication 4.4 | How well do students resist irrational solutions to problems? |
|  |  | $x$ | $X$ | $x$ |  | Communication $4.5$ | Is the school day organized to encourage individual problem solving in all areas of learning? |
|  | $x$ |  |  | X |  | Citizenship $3.1$ | What is the student's attitude toward anher ethnic groups? |
| $x$ |  |  |  |  |  | Citizenship 3.5 | Does the citizen participate in the protection of rights of others? |
| $x$ | X | X | X | X | 3 | Physical Health | Do citizens, parents, school board memmers, administrators, pupils approve and desire giving studenterinstruction about sex, drugs, tobacco, alcohol? |
|  |  |  |  |  | 4 | Vocational 6.1 | How do employers view work-experience swidents as to their accuracy, dependability, and command of basic skills (3 R's)? |





1. Employers of students whe had sscond language competency. Employment partially based on that competency due to tis relation to job.
2. Students who had second language training while in school and subsequently traveled in foreign country where that language is spoken.
3. School Board Members
4. Employers of work experience students

Decisions must be made about the conditions of executing the opinion survey and how theadereshould.be analyzed. Our purpose here is to identify these decirision points and to suggest possible solutions and the rationale of them.

A choice must be made between thesealternatives: (a) to conduct the opinion survey on a statewide sampling basis, or (b) to conduct it in the particular geographiical areas in whicli schools will be studied intensively as part of the overall study. It is recommended that the study be statewide in character to assure representativeness which would probably not be:attainable through generalizing from data collected in particular and unrepresentative geographic areas.

A decision must be made about whether to (a) draw one sample which will include enough cases to permit drawing generalizations from the smallest subsamplewhich will be included, or (b) to draw many samples, one for each group which is included. This problem arises because specific generalizations must be made about responses for these groups: citizens (adults), citizens who are parents of school age children, citizens who are school board members, school administrators, school teachers, students; and others. For each group data should be categorized according to the following classification variables when appropriate: sex, age, length of Florida residence, family income, race, rural-urban residence, and school size. It is recommended that this decision be made by experts in sampling survey and inferential statistics on the basis of feasibility and economy of data collection. It is also suggested that the entire "opinion survey" facet of the study be conducted by an independent and qualified firm whose personnel are highly trained and broadly-experienced in conducting such studies.

It is further suggested that all units of the State Department of Education be invited to submit items for inclusion in the survey instruments and to criticize them prior to their administration. The former seems to be especially important because statewide surveys of opinions about education are infrequent, therefore this survey constitutes a singular opportunity to gather valuable data for many purposes in addition to the precipitative one.

If the opinion poll is conducted on a statewide basis, then State Department personnel should consider whether they wish to administer the statewide instruments to relevant groups at the
"school survey" site. The advantage in doing so would be theecollection of complete data for the particular sites which would mable analyses of the extent to which the two sets of data interact:
C. SURVEY OF SCHOOL PRACTICES

A sample of schooks would be selected scas towincluede populations represemative of (1) inner cinty, sulthurban, small town, and ruraill schools; (2) different sizes of schwols by levels: ementary, junior thigh, and senior high; (3) differentsethmic groups; (4) mikrants; ( 3 ) different geographic negemssin the state; and (6) public and nonpublic schools.

A list of background data to be compiled for each school in the sample:precedes the listing of questions.

## Background Data for Schools in Sample

1. Breakdown of sctraol population
a. Subcultures: Negro, Cuban, Indian, Caucasian, migrant, rural, uriban
b. By income levelrof family (Title I)
c. Family membership
d. Employment of:parents
e. Age.grade distribution
f. Holding power
g. Classes of exceptionality
2. School personnel
a. Certification status
b. Number teaching in and out of field
c. Turnover rate
d. Teachers' background: residence, experience, age; sex
e. Number in-school supportive personnel: guidance, health, materials, curriculum, administration
f. Shared supportive personnel
3. School facilities
a. Number students per classroom
b. Single or double session
c. Special rooms: auditorium, lunchroom, library, gymnasium, etc.
d. Condition of facilities
e. Flexibility of instructional space for large groups, small groups, individual study
f. Grounds, play space
g. Safety factors
h. Heating, air conditioning, ventilation
ii. Permanent and temporary space
4. Curriculum and Instruction
a. Program of studies
b. Organization of instructional groups
c. Pupil progress policies
d. Instructional aids
5. Organization
a. Gradedness - non gradedness
b. Horizontal organization
c. Staff organization
d. Schedule

A sumey team would be chosen to include persons with recognized competences in the educational areas representing the perennial objectives on which the study is based. This team would be expected to collect its data on site and compile its report according to the items listed below (numeral before the decimal point refers to the behavior, and the second numeral to the question in the original list).

## Communication and Learning Skills

1.3 What percent of pupils are above, at, or below national norms on standardized tests in reading and English?
1.4 What percent of dropouis are above, at, or below national age norms in reading and English?
1.6 How many who are not literate in English are literate in another language?
1.7 How and how well is English being taught as a second language?
2.3 What percent of school population is learning to communicate in a second language?
3.3 How extensively and effectively are library facilities in school being used?
3.4 How effectively are textbooks used?
3.5 Do teaching procedures encourage use of varied sources of information?
3.6 What use is made of questions, interaction, and interview techniques?
4.1 How do students perform on sections of standardized tests emphasizing application of facts, concepts, and processes?
4.2 How do students perform on tests of propaganda analysis, evaluation of sources, analysis of issues, etc.?
4.3 How do students go about decision-making in student government and other student directed activities?
4.4 How well do students resist irrational solutions to problems?
4.5 Is the school day organized to encourage individual problem solving in all areas of learning?
4.6 Do teachers use procedures which encourage application of rational processes to solution of problems?
5.1 What percent of the out of school population is enrolled in voluntary educational programs?
5.2 What percent of students enroll in summer schools and other activities, if any, not required by the school?
5.3 What percent of the population make use of supplementary educational programs such as museums, zoos, art galleries?
5.4 What percent of school dropouts later continue in educational programs?
5.7 What opportunities are available for student initiated learning in school?
6.1 What percent of students are above, at, and below national norms on standardized tests in mathematics?
6.2 What percent of students are above, at, and below national norms on standardized tests in science?
6.3 What percent of students are above, at, and below national norms on standardized tests in social studies?

## Citizenship Education

1.1 What percent of students achieveat a satisfactory level on tests of civic understanding?
2.2 What percent of students have opportunities to participate in civic enterprises?
2.3 What percent of students participate in school improvement projects (paid and unpaid)?
2.5 What opportunities are provided for stu dent participation in policy development?
3.2 What voluntary efforts are made to solve in-school problems of pluralism?
3.3 What school organizational and curriculum policies assist integration?
4.2 What courses and units of instruction are focused on citizenship responsibilities?

## Vocational Interests

1.1 What percent of students at various grade levels stratified by race, sex, rural-urban, school size, and occupational goal, can demonstrate acceptable level of information on an examination concerning such subjects as job opportunities, sources of employment information, employment regulations and laws, economic and social conditions of employment?
2.1 What are students' attitudes toward work?
3.1 What percent of students at various grade levels, stratified by race, sex, rural-urban, s.chiool size, and occupational goal, can demonstrate acceptable level of information on an examination con-

- cerning educational requirements of jobs?
4.1 What courses or units for vocational orientation are offered? Grade levels? Enrollment?
4.2 Is vocational orientation correlated with general education program?
4.3 What exploratory courses are offered in junior high schools?
4.4 Are vocational course offerings of such nature • that salable skills are being developed?
4.5 What opportunities for vocational counseling are available and are all students receiving such counseling?


## Mental and Physical Health

1-6.1 On a standardized adjustment inventory, what percent of students at various grade levels, stratified by sex, rural-urban residence, school size, and race exhibit the behaviors listed as 1-6?
9.1 What percent of students at 12 th grade level, stratified by sex, urban-rural, school size, exhibit satisfactory knowledge of health services in their community?
10.1 What percent of students at various grade levels, by sex, race, rural-urban, and school size, exhibit appropriate physical fitness?
11.1 What percent of students at various grade levels, by sex, race, rural-urban, and school size, recognize health hazards?
11.2 What percent of schools offer health education? Grade levels? Enrollment?

Home and Family Relationships
1.1 What courses or units of instruction are provided at what grade levels relating to sex education? Enrollment?
1.2 What courses or units of instruction are provided at what grade levels relating to home and family living? Enroliment?
2.1 What provisions are made by the school to compensate for deficiencies in home and family backgrounds?
2.2 What opportunities are offered for parent education?
2.3 What special services are provided students to prevent or ameliorate delinquent behavior?

Aesthetic and Cultural Appreciation
1.1 What library facilities and services are available?
1.3 Is a museum accessible? What is extent of use by the school? What is cost of admission, if any?
1.4 What is the extent of use of historical sites?
2.1 What opportunities are offered for participation in sports, interscholastic and intramural?
2.2 What percent of students participate in sports, interscholastic and intramural?
2.3 What opportunities exist for observation of athletic events?
2.4 How available is instruction in the arts and humanities in the schools?
2.5 What percent of students are enrolled in arts and humanities courses?
2.6 What opportunities are provided for individual recreational activities which enhance a person's physical and mental health?
3.2 To what extent are local natural resources utilized by the schools?
3.3 What courses or units of instruction relate to resource use education?
4.1 What opportunities exist for interaction among individuals and groups of varying subcultures in and out of school?
D. Organization of the Data

Three kinds of data will be presented in the final report:

General Information, Accomplishment of Perennial Objectives, and Opinions about Education. The order of presentation should be as the kinds are stated above.

General Information. The topics included in this section will deal with population, society, economy and industry, and education. A subsection might be devoted to each of them. The data will be presented in tables, charts, and graphs. The textural material will briefly describe the data and present concise summaries of it. No interpretation or evaluation of the data will be presented in this section of the report; it will be presented subsequently in IV.

Whenever possible the information presented in this section should include temporal projections so the reader might gain insight into the recent development of the state and the probable future development.

The purpose of the information in this section is to give the reader a comprehensive conceptual background so that he will view in perspective the specific educational data which are presented in succeeding sections.

Accomplishment of Perennial Objectives. The data in this section will include that which came from general published sources and from specific projects which were conducted as part of the school survey and the opinion poll.

The organization of data should be as follows:
(a) All data about each objective should be presented before another objective is considered; i.e., there will be seven major sections.
(b) For a given objective, the data should be presented about each "school survey unit" separately and then in summary.
(c) Within each ohjective and school site, the data should be presented according to each major subsidiary behavior and the specific questions which were asked to yield evidence about the accom-
plishment of it. Answers to these questions will be obtained from published summaries and specific studies which are conducted at the school sites.
(d) Whenever appropriate, specific evidence should be presented in terms of whatever of the following identifying characteristics are relevant-sex, grade-level, rural-urban-inner city, and racial group.

Opinions about Education This section will contain data obtained by means of the statewide opinion poll. The questions could be organized in the following groups:
(a) Effectiveness of schools
(b) Susceptibility of schools to innovation
(c) New courses of instruction

Each of these major categories might be reduced to subsidiary categories, e.g., "c" will certainly include units on morals and values, health education, sex education, occupational traịning, etc.

The data should be presented according to identification variables of respondents; age, sex, length of residence in Florida, rural-urban-inner city, family income, age and racial group.

Some data will be collected from different classes of respondents. These data should be presented according to category of respondent in a manner which will highlight whatever differences exist between categories.

## EVALUATION OF CURRENT EDUCATIONAL PROGRAMS

After the data have been coilected and organized then the organized data would be used to evaluate current educational
programs in Florida. This evaluation would be done in relation to at least four criteria. Other criteria would be added as a direct outcome of the collection and organization of the data.

The four criteria which seem most important at the present. time are:
a. The relevance of educational programs for teday and for Florida at certain future times
b. The relevance of educational programs for sub-populations within the state.

1. Cuban
2. Caucasian
3. Indian
4. Negro
5. Urban
6. Rural
7. Disadvantaged
8. Combinations of sub-groups
c. The effectivene s of educational programs in (1) providing for individual differences and (2) providing motivation and ability for self-directed learning.
d. How Florida cornpares to other states

The evaluation would be done by a panel made up of the coordinator of the total study and his staff, staff representative of the survey team, staff representative of opinion poll, and an expert who would bring to the job an expertise directly related to one or more of these four criteria. This panel would include personnel from government, business and industry, and education. The panel would include such specialists as an economist, a sociologist, an anthropologist, a research analyst, a political scientist, a population analyst, and an educationist.

The evaluation would be done in relation to the behavior as these were described in section one of the study and as they are revised and refined in light of the analysis of the data collected.

A schema for undertaking the evaluation would be a look at educational programs in Florida according to the organized data by behavior and the priority criteria.


## IV. DEFINING CRITICAL NEEDS

The evaluation panel described in III above would recommend from their evaluation conclusions the educational needs of Florida considered critical. The following criteria would be considered in determining criticality:

1. Extent of present deficiency in the state
2. Relative importance in achieving perennial objectives
3. Frobable duration
4. Economic and political feasibility

## v. OUTLINE OF TIME SCHEDULE

July-August, 1968:
Organize staff for II, A - (Data Review) Arrangements for II, B (Opinion Poll) and II, C - (Survey)

September-December, 1968:

January-February, 1969:

March-

Collection and organjzation of data in II, A, B , and C

Evaluation (III) by the evaluation panel

Preparations of recommendations as to critical needs (IV) by the panel

## Perennial Objectives, Behaviors, and Questions

## I. Communicarion and Learning Skills

A. Reads, writes, speaks and listens in standard (acceptable) English
1.1 What percent of the people cannot gain satisfactory employment because of lack of communications skills?
1.2 What percent of draftees and volunteers are rejected by the armed services because of lack of communications skills?
1.3 What percent of pupils are above, at, and below national norms on standardized tests in reading and English?
1.4 What percent of drop-outs are above, at, and below national age norms in reading and English?
1.5 How is literacy distributed among population sub-groups?
1.6 How many who are not literate in English are literate in another language?
1.7 How and how well is English being taught as a second language?
B. Reads, writes, speaks and listens in a second language
2.1 What percent of the out-of-school population can communicate in a second language?
2.3 What percent of the school population is learning to communicate in a second language?
2.4 How useful is second language which was taught in school?
C. Uses effectively many sources of information in his learning aetivities
3.1 What percent of the population has libraries available? What percent uses them?
3.2 How does Florida compare in book sales, newspaper and magazine sales, and TV and radio audiences?
3.3 How extensively and effectively are library facilities in school being used?
3.4 How effectively are textbooks used?
3.5 Do teaching procedures encourage use of varied sources of information?
3.6 What use is made of questions, interaction, and interview techniques?
D. Applies rational processes in arriving at the solutions of problems
4.1 How do students perform on sections of standardized tests emphasizing application of facts, concepts, and processes?
4.2 How do students perform on tests of propaganda analysis, evaluation of sources, analysis of issues, etc.?
4.3 How do students go about decision-making in student government and other student directed activities?.
4.4 How well do students resist irrational solutions to problems?
4.5 Is the school day organized to encourage individual problem-solving in all areas of learning?
4.6 Do teachers use procedures which encourage application of rational processes to solution of problems?
8.7 How competent is the out-of-school population to detect propaganda, evaluate sources, detect bias, and analyze issues?
E. Continues learning on his own mitiative
5.1 What percent of the out-of-school population is enrolled in voluntary educational programs?
5.2 What percent of students enroll in summer schools. and other activities, if any, not required by the school?
5.3 What percent of the population make use of supplementary educational programs such as zoos, museums, and art galleries?
5.4 What percent of drop-outs later continue in educational programs?
5.5 What percent of high school graduates continue formal education?
5.6 What opportunities are available for continued learning for the disadvantaged?
5.7 What opportunities are available for student-initiated learning in school?
F. Demonstrates understanding of the basic concepts of mathematics, science, and social studies
6.1 What percent of students are above, at, and below national norms on standardizational tests in mathematics?
6.2 What percent of students are above, at, and below national norms on standardizational tests in science?
6.3 What percent of students are above, at, and below national norms on standardizational tests in social studies?

## II. Citizenship Education

A. Exhibits understanding of democratic processes
1.1 What percent of the students achieve a satisfactory level on tests of civic understanding?
B. Bisticiprates in civic enterprises
2.1 What percent of those eligible register to vote? What percent do vote?
2.2 What percent of students have oppartunities to pare ticipate in civic enterprises?

23 Whater percent of students participate in school improvement projects (both paid and unpaid)?
2.4 What percent of the population participate in voluntary civic action organizations?
2.5 What opportunities are provided for student participation in policy development?
C. Exhibits concern for the welfare of others
3.1 What is the student's attitude toward other ethnic groups?
3.2 What voluntary efforts are made to solve in-school problems of pluralism?
3.3 What school organizational and curriculum.policies assist integration?
3.4 To what extent do communities support the United Fund and other voluntary welfare programs?
3.5 Does the citizen participate in the protection of rights of others?
D. Discharges civic responsibilities (obeys laws, pays taxes, supports improvement of government)
4.1 What percent of the population violates laws and regulations?
4.2 What courses and units of instruction are focused on citizenship responsibilities?
4.3 To what extent do in-school pupils comply with school rules and regulations?
II. Vocational Interests
A. Exhibits knowledge of (a) broad expanse of job opportunities; (b) sources of employment information; (c) laws and regulations pertinent to employment; (d) economic and social conditions of employment
1.1 What percent of students at various grade levels stratified by race, sex, rural-urban, school size and occupational goal, can demonstrate acceptable level of information on an examination concerning such subjects as job opportunities, sources of employment information, employment regulations and laws, economic and social conditions of employment?
B. Exhibits respect for all honorable occupations
2.1 What are students' attitudes toward work?
C. Chooses vocational interest appropriate to his aptitudes, abilities, and life goals
3.1 What percent of students at various grade levels, stratified by race, sex, rural-urban, school size, and occupational goal, can demonstrate acceptable level of information on an examination concerning educational requirements of jobs?
D. Chooses an educational program appropriate to vocational interests
4.1 What courses or units for vocational orientation are offered? Grade levels? Enrollment?
4.2 Is vocational orientation correlated with general education program?
4.3 What exploratory courses are offered in junior high schools?
4.4 Are vocational course offerings of such nature that salable skills are being developed?
4.5 What opportunities for vocational counseling are available and are all students receiving such counseling?
E. Remains in occupation and job for reasonable periods
5.1 How long does the employee remain in one vocation?
F. Exhibits accuracy, dependability, and command of basic skills in work experience
6.1 How do employers view work-experience students as to their accuracy, dependability, and command of basic skills? ( 3 r's)?
IV. Mental and Physical Health
A. Exhibits objective judgment concerning ordinary life situations
B. Exhibits self-actuating behavior in daily events
C. Reacts to events with appropriate emotional demonstrations
D. Works hard and purposefully to optimum levels
E. Accepts self honestly and objectively
F. Respects beliefs and actions of others
6.1 On a standardized adjustment inventory, what per-
cent of students at various grade levels, stratified by sex, rural-urban residence, school size, and race exhibit the behaviors listed as 1-6?
G. Remains relatively free of preventable disease and illness
7.1 What is the incidence of malnutrition, anemia, hookworm, obesity, etc.?
H. Meets minimal health standards for occupational and educational enterprises
8.1 What is the ratio of mentally retarded, partially sighted, etc. to the total population?
I. Exhibits knowledge of health services in his community
9.1 What percent of students at 12 th grade level, stratified by sex, urban-rural, school size, exhibit satisfactory knowledge of health services in their community?
9.2 How many certified teachers of health education are employed in schools?
J. Exhibits appropriate physical and mental vigor
10.1 What percent of students at various grade leveis, by sex, race, rural-urioan, and school size, exhibit appropriate physical fitness?
K. Recognizes health hazards
11.1 What percent of students at various grade levels, by sex, race, rural-urban, and school size, recognize health hazards?
11.2 What percent of srhools offer health education? Grade levels? Enrollment?

## v. Homie and Family Relationships

A. Respects the role of the American family in American society
1.1 What courses or unite of instruction are provided at what grade levels relating to sex education? Enrollment?
1.2 What courses or units of instruction are provided at what grade levels relating to home and family living? Enrollment?
1.3 What percentage of children is classified as delinquents?
1.4 What percentage of girls 18 years old and younger is unwed mothers?
B. Seeks to maintain for the family an economic level at or above an acceptable minimum (as defined in the poverty program)
2.1 What provisions are made by the school to compensate for deficiencies in home and family backgrounds?
2.2 What opportunities are offered for parent education?
2.3. What special services are provided students to prevent or ameliorate delinquent behavior?
2.4 What percentage of families owns their homes and what percentage rerits their homes?
2.5 What percentage of families is certified by school system for participation in Title I programs?
2.6 What percentage of families is on weifare?
VI. Aesthetic and Cultural Appreciations
A. Uses systematically collected and preserved rescurce
materials to promote cultural arid aesthetic appreciation (libraries, museums, historical sites)
1.1 What library facilities and services are available?
1.2 What use is made of library facilities and services, public and school?
1.3 Is a museum accessible? What is extent of use by the school? What is cost of admission, if any?
1.4 What is the extent of use of historical sites?
B. Participates in and/or observes the performing arts and sports
2.1 What opportunities are offered for participation in sports, interscholastic and intramural?
2.2 What percent of students participate in sports, interscholastic and intramural?
2.3 What opportunities exist for observation of athletic events?
2.4 How available is instruction in the arts and humanities in the schools?
2.5 What percent of students is enrolled in the arts and humanities courses?
2.6 What opportunities are provided for individual recreational activities which enhance a person's physical and mental health?
C. Appreciates and utilizes the natural resources of the state
3.1 What are the unique natural resources in Florida?
3.2 To what extent are local natural resources utilized by the schools?
3.3 What courses or units of instruction relate to resource use education?
D. Interacts positively with individuals of other cultures or sub-cultures
4.1 What opportunities exist for interaction among individuals and groups of varying subcultures in and out of school?
VII. Mora! and Ethical Values
A. Exhibits respect for such values as beauty, righteousness, love of country, respect for the rights of others

### 1.1 Can patriotism be taught?

1.2 Does the school share a responsibility in teaching moral values?
1.3 What is morality?
1.4 How do moral attitudes of youth differ from those of preceding generations?

1:5 What is the generation gap?
1.6 What is moral significance of increasing crime rate?
1.7 Should schools teach personal values? If so, whose?
1.8 What is responsibility of school in teaching appreciation of beauty in music, art, literature?
1.9 What is responsibility of school in teaching rightecusness?
B. Relates to others effectively
2.1 Can something be ethical for one person and unethical for another?
2.2 Are schools teaching pupils to work together?
C. Respects the religious beliefs of others
3.1 Does the school teach respect for religious beliefs of others?

## APPENDIX B

## FERDC TASK FORCE MEMBERS

Acting upon an invitation from the Florida State Department of Education, the Florida Educational Research and Development Council organized a task force to develop a plan for study of the educational needs of Florida. This group met for a preliminary session on May 22 and worked from June 2-5 continuously on developing a design for this study. The group accepted the challenge to be creative in developing a plan for the identification of the educational needs. The task force membership was drawn from public and private schools, public and private universities, the State Department of Education, and the U.S. Office of Education.

The members of the task force were:

Dr. A. A. Abrahams
Florida A\&M University
Tallahassee, Florida
Dr. William M. Alexander University of Florida
Gainesville, Florida
Dr. Joyce Cooper
University of Florida
Gainesville, Florida
Dr. Joseph Crenshaw
Florida Department of Education Tallahassee, Florida

Dr. Joseph Fordyce, President
Santa Fe Jr. College
Gainesville, Florida
Dr. Ralph Hall
Dade County Public Instruction

Mr. Leo Howell
Florida Department of Education Tallahassee, Florida

Dr. Russell Kropp Florida State University
Tallahassee, Florida
Dr. A. A. Robinson, Principal
Raines High School
Jacksonville, Florida
Dr. Leon Sims
Florida Department of Education Tallahassee, Florida

Mr. Jon Stapleton
Florida Department of Education Tallahassee, Florida

Dr. Richard Stewart Indian River Regional Educational Development Council

Major Dewitt Hooker, Exec. Sect. Vero Beach, Florida Fla. Independent School Ass'n.

| Dr. James R. Swanson | Dr. Herbert Wey |
| :--- | :--- |
| Florida Department of Education | University of Miami |
| Tallahassee, Florida | Miami, Florida |
| Dr. Ellen Thiel | Dr. Al White |
| Florida State University | U.S. Office of Education |
| Tallahassee, Florida | Washington, D.C. |
| Dr. Mitchell Wade | Dr. J. B. White, Exec. Sect., FERDC |
| Florida Department of Education | University of Florida <br> Gainesville, Florida |
| Tallahassee, Florida |  |

## APPENDIX C <br> data review and evaluation committees

1. Data Review

Dr. Howard Stoker
Professor of Education
Department of Research and Testing Florida State University
Tallahassee, Florida
Dr. Ronald M: Pavalko Professor of Sociology Florida State University
Tallahassee, Florida

Dr. Benjamin Hodgkins
Professor of Sociology
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II. Data Evaluation

Dr. Ralph Hall
Director, Educational Programming
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Dr. William Alexander
Professor of Education
College of Education
University of Florida
Gainesville, Florida
Mr. H. J. Waters
Coordinator of Planning
Department of Education
Tallahassee, Florida
Mr. Leo H. Howell, Jr.
State Coordinator, Title III, ESEÁ
Department of Education
Tallahassee, Florida

Dr. Hazen Curtis Professor of Education Florida State University Tallahassee, Florida

Dr. I. M. Wade Chief, Bureau of Research Department of Education Tallahassee, Florida

Mr. Ed R. Allen
Research Associate
Department of Education
Tallahassee, Florida
Dr. Ronald M. Pavalko Professor of Sociology Florida State.University Tallahassee, Florida

Dr. J. B. White
Executive Secretary
Florida Educational Research and Development Council 604 Lake Shore Towers Gainesville, Florida

Mr. Shouppe Howell Consultant in Curriculum ESEA III PAEC Center 412 S. Boulevard Chipley, Florida

Dr. James C. Impara
Research Associate
Department of Education Tallahassee, Florida

Dr. Joseph W. Crenshaw Bureau Chief, Curriculum and Instruction Department of Education Tallahassee, Florida

Mr. William Cecil Golden Associate Commissioner for Planning and Coordination Department of Education Tallahassee, Florida


[^0]:    ${ }^{1}$ Swanson, James R., "Need Assessment: First Step to Real Answers," Florida

[^1]:    Source Code: BaC-1 1970. FSA, 1968

[^2]:    '1972 Kiplinger Forecast of Florida Growth from The Kiplinger Washington Editors

[^3]:    Source Code: BOC-3 1970
    'White
    2Nonwhite

[^4]:    ${ }^{2}$ The data reported in Tables 2.21, 2.24, 2.28, 2.29, 2.30, 2.33, 2.35, 2.36, and 3.21 which follow are based upon information from the 1960 census. Data for 1970 were not available for use at the time of printing.

[^5]:    Source Code: BOC-4 1970

[^6]:    Source Code: BOC-3 1970

[^7]:    ${ }^{2}$ bid.

[^8]:    Sinis table is besed upon the number referred and does not adjust for cases dismissed ${ }^{2}$ Rank-order of offense is given in parentheses.

[^9]:    ${ }^{1}$ This survey is based on the analysis of data derived from all sixty-seven school districts in Florida.
    2The distinction between "conventional" and "nonconventional" output is based on whether or not the output can be viewed as academic or school related (test scores, promotion, etc.) or socioeconomic (crime rates, unempioyment, etc.)

[^10]:    3NOTE: Throughout this chapter, a correlation coefficient of $\pm 0.316$ was chosen as the "cut off" point for determining the strength of the relationship between variables. Correlations closer to zero than $\pm 0.316$ indicate less than ten percent shared variance, which was taken to indicate a weak relationship.

