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ABSTRACT

A study was conducted to assess the impact of the Florida State Student Assessment Test (FSSAT) (Functional Literacy Test) on the enrollment in secondary-level vocational education courses. The 67 school districts in Florida were grouped according to population density into three levels of urbanization (low, medium, and high). Ten percent of the public high schools in each level of urbanization were randomly selected to participate in the study. Intact twelfth grade classes were randomly selected, and students in these classes were divided into vocational and nonvocational education groups. These students and county vocational education directors, vocational education teachers, and principals were surveyed. Contrary to the beliefs of vocational educators, vocational education enrollments increased. Disproportionate enrollment trends did exist: that is, while secondary-level vocational enrollments increased in Florida, total secondary-level enrollment declined. Very few students were deterred from enrolling in vocational courses because of the requirement to be remediated in order to pass the FSSAT. However, a substantial proportion of vocational students who failed the FSSAT did not re-enroll in vocational education courses. The overall effectiveness of the remedial practices was found to be low. It was recommended that (1) systematic, standardized remedial efforts be made; (2) procedures for measuring effectiveness of remedial practices be established; and (3) the reasons that students who failed the FSSAT did not re-enroll in vocational courses be studied. (KC)

Final Report

Project No. DVE 0-1C19

From July 1, 1979 to June 30, 1981

A Study to Determine the Impact of Basio Skills and Functional Literacy Requirements on Meeting the Vocational Needs of Secondary Students

The Florida State University

Tallahassee, Florida 32306

By

Project Director: Hollie B. Thomas

The project reported herein was conducted pursuant to a grant from the Division of Vocational Education, Florida Department of Education. Contractors undertaking such projects are encouraged to express freely their professional judgements in the conduct of the project. Points of view or opinions, stated do not, therefore, necessarily represent the official position or policy of the Florida Department of Education.

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Sincerely,

Hollie B. Thomas

Hollie B. Thomas
Project Director

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Abstract

Problem

Many vocational educators believed that the Florida State Student Assessment Test (FSSAT) was responsible for a decline in secondary level vocational education enrollments because of the requirement that students who failed the exam must enroll in remedial courses, thus reducing their opportunity to take a vocational elective. It is also believed that vocational education offers a viable alternative for preparing students for the exam.

Objective

The objective of this study was to assess the impact of the Florida State Student Assessment Test (Functional Literacy Test) on the enrollment in secondary level vocational education courses. Answers to the following questions were sought: (1) What are the practices for achieving remediation in each county in Florida? (2) Are students deterred from taking vocational education classes because of a need to prepare for the FSSAT? (3) Was enrollment in vocational classes increased or decreased disproportionately to the total school enrollment since the implementation of the FSSAT? (4) Are differences in the rate of increase or decrease in vocational programs dependent upon practices employed for remediation? (5) Does the strength of the vocational program have an effect on the holding power of students who failed the exam? (6) Did the procedures employed for remediation work? and (7) What remedial procedures are worth repeating?

Procedures

The 67 school districts in Florida were grouped according to population density into three levels of urbanization (low, medium, and high). Ten percent of the public high schools in each level of urbanization were randomly selected, to participate in this study. Intact twelfth grade classes were randomly selected, and students in these classes were divided into vocational and non-vocational education groups. Vocational education teachers were randomly selected from the participating schools, while school principals and county vocational education directors were requested to participate in the study. This procedure resulted in the following number of participants: 1181 students, 215 vocational education teachers, 27 principals, and 20 county vocational education directors.

Three survey instruments were developed: one for administration to all 67 county vocational education directors, the second for administration to the students, and the third for administration to vocational education teachers, principals, and county vocational education directors from the sample schools and counties.

Results and Potential Utilization

Contrary to the beliefs of vocational educators, vocational education enrollments increased. Disproportionate enrollment trends did exist, that is, while secondary level vocational enrollments increased in Florida, total secondary level enrollments declined. Very few students were deferred from enrolling in vocational courses because of the requirement to be remediated in order to pass the FSSAT. However, a substantial portion of vocational students who failed the FSSAT decided not to re-enroll in vocational education courses. Two of twenty remedial practices identified were found to be predictive of enrollment increases. The overall effectiveness of the remedial practices was found to be low, and there was no assurance that any remedial practices would be repeated in the following year.

It is recommended that attention be given to the systematic development of remedial instruction, and to the standardization of remedial practices. In addition, procedures for measuring effectiveness of remedial practices should be established; and the reasons why students who fail the FSSAT do not re-enroll in vocational courses, and the "holding power" of vocational courses should be investigated.

Introduction

The Florida State Student Assessment Test (FSSAT), formerly the Basic Skills Test and Functional Literacy Test, is a minimum competency test which evolved from the 1971 Educational Accountability Act (229.57 F.S.). The 1976 Educational Accountability Act (229.55 F.S.), an amended version of the 1971 legislation, established the FSSAT on a statewide basis. The Educational Accountability Act requires that students master basic skills, complete a specific number of course credits, and perform satisfactorily on the Functional Literacy Test (State Student Assessment Test, Part II) which serves as the basic criterion for graduation (Tesolowski, 1979).

Statement of the Problem

The implementation of the FSSAT has had the expected impact on students; i.e., there is more concern with acquiring the skills needed to pass the FSSAT, or at least concern for passing the test. The rate of test failure, especially at the eleventh grade level, has created an awareness on the part of the public for the problems relevant to functional literacy and the acquisition of basic academic skills. These effects are, for the most part, positive, for it would seem desirable for students to be concerned with acquiring the basic survival skills in reading and math. The question addressed in the research was: "What has been the impact of the Florida State Student Assessment Test and subsequent remediation practices on enrollment in vocational education programs at the secondary level?"

Many vocational educators believed that the FSSAT has been responsible for enrollment decline in vocational education programs within the state. Reduction in enrollment was purported to have occurred as a consequence of the requirement that students who had failed the FSSAT must enroll in remedial instruction, thus depriving them of an opportunity to take a vocational education elective. Each school district has implemented a variety of remedial practices; however, it appears that few school administrators have considered the alternative of utilizing vocational education as a vehicle for delivering the educational experiences necessary for students to develop the competencies required to pass the FSSAT.

Many vocational educators recognize that vocational education offers a viable alternative in which students could prepare for a retake of the exam. In fact, because of the applied nature of vocational education, it is felt that "real world" experiences could be provided that would better facilitate the development of functional literacy. This would enable the students to utilize their knowledge for everyday living --not just for passing an exam.

Need

The impact of the State Student Assessment Test on vocational education enrollment was a matter of speculation and isolated observations. Although it is unlikely that what has been observed are isolated instances, the question of what the impact has been on vocational enrollments remained unanswered. Thus, vocational educators were placed in the position of needing to know what the impact was, but did not have adequate information to speak authoritatively. In addition, a county-by-county review of the impact was needed to determine if the practices employed to assist students in passing the State Student Assessment Test in the various counties had a differential impact on meeting vocational program needs of secondary students.

Purpose

As noted in the statement of the problem, the purpose of the study was to assess the impact of the Florida State Student Assessment Test on the participation of secondary students in vocational education classes. In order to accomplish this purpose, answers to the following questions were sought.

1) What were the practices for achieving remediation in each county in Florida?

2) a. Were students deterred from taking vocational education classes because of anticipated need for preparing for the test prior to taking the 11th grade test?

   b. Did students who failed the test in their junior year enroll in remedial courses in lieu of vocational courses?

3) Did enrollment in vocational education classes increase or decrease disproportionately to the total enrollment after the implementation of the procedures to measure functional literacy for remediation?

4) Were the differences in rate of increase or decrease in vocational programs dependent upon the practices employed for remediation?

5) Did the strength of the vocational program have an effect on the holding power of students who failed the exam, i.e., are students who enrolled in a strong vocational program more likely to re-enroll in that program after failure than are students who were enrolled in weak programs?

6) Did the procedures employed for remediation work?

7) What procedures employed for remediation did the administration feel were worth repeating for a second year?

Method

Participants

County vocational education directors, vocational education teachers, school principals, and vocational and non-vocational education students participated in the study. Students were categorized as vocational and non-vocational based upon their course concentration. That is, students who were not enrolled in any vocational education courses, or who had selected tracks that did not require vocational education courses, or who had enrolled in only one or two vocational education courses in order to satisfy elective requirements constituted the group labeled, "non-vocational students." The vocational education student group was composed of all those students who were enrolled in vocational education courses. The selection procedures employed to determine the participants in this study are described in the following section.

Selection of schools. The 67 counties of the state of Florida were assigned to one of three levels of urbanization (low, medium, and high) based upon population density figures for each county recorded in the 1970 census. The public high schools from each level of urbanization were randomly selected to participate in this study. The distribution of population, counties, high schools, and sample high schools by level of urbanization is presented in Table 1.

Table 1

Distribution of Population, Counties, High Schools, and Sample High Schools by Level of Urbanization

Level of Urbanization	Population	No. of Counties	No. of High Schools in Each Level	No. of High Schools in Study
Low	0-29,999	26	43	4
Medium	30,000-99,999	20	62	6
High	Over 100,000	21	179	18

The counties participating in this study are identified by specific markings which correspond to population densities (Figure 1). The unmarked counties were not selected for inclusion in this study.

POPULATION DISTRIBUTION

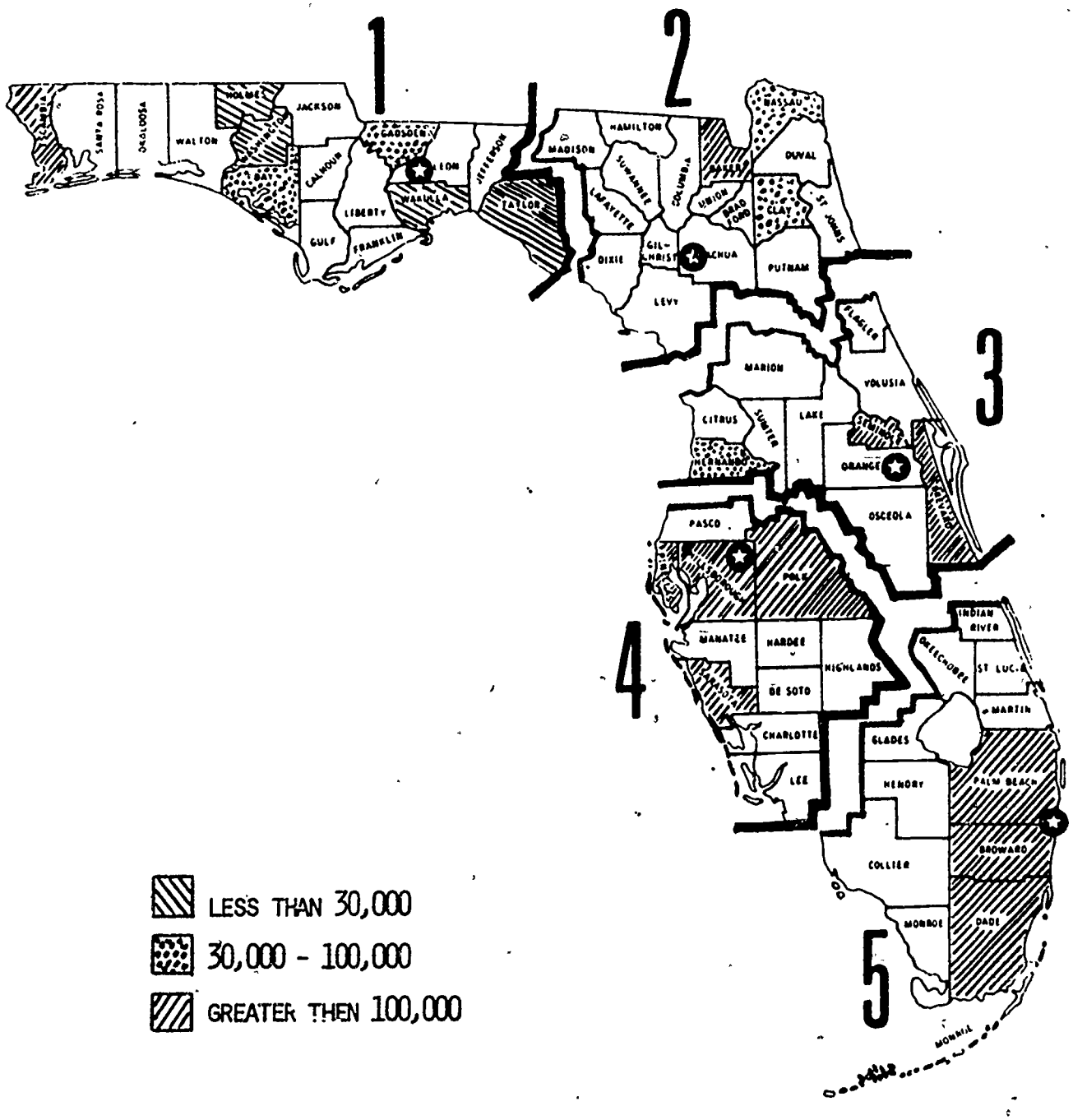

Figure 1. Population Densities for the Counties in Florida from which Sample Schools were Randomly Selected

After the high schools had been selected, it was then necessary to gain the support of the county and school administrators. The superintendents of schools were notified by telephone that specific schools within their jurisdiction had been selected to participate in this study. A brief explanation about the purpose of the study, the procedures for school and student selection, and the type of commitment required of the participants was offered during the telephone conversation. During the same conversation, it was requested that a meeting be convened which would include the superintendent of schools (or his representative), the principal of the schools asked to be involved in this study, and the county vocational education director. The purposes of this meeting were (1) to seek the support of the superintendent and principals, (2) to allay any misgivings regarding the purpose and future use of the data gathered during this study, and (3) to respond to questions about the content of the survey instruments. In several instances the superintendent acknowledged interest in the study and then delegated the responsibility for overseeing the process to a staff member. Appointments with the superintendent or the staff representative were also scheduled at this time.

Subsequent to the telephone dialogue, a letter was dispatched to each superintendent confirming the interview date (Appendix A). This correspondence also identified the funding source, the project director, capsulized the intent of the study, and briefly described the role of the research assistant.

The prearranged meetings were usually convened in the principal's office with the principal, the vocational education director, and the representative of the superintendent in attendance. During these sessions the purpose of the study was reiterated, the survey instrument reviewed and critiqued, and questions were answered relevant to the content of the instruments. Assurances were also given that confidentiality would be maintained, and that participants would not be required to provide any demographic data other than sex, race, and age. A manual detailing pertinent features of the project was given to those attending the meeting (Appendix B). Finally, dates and times for the administration of the survey instrument were scheduled and procedures for selecting participants for the study were discussed.

Students. Three alternative approaches were employed for selecting both the non-vocational and vocational education student participants. The choice of alternatives was dependent upon class scheduling, class size, availability of students, and the administrative policies of the participating school. The three alternatives included:

1) A random selection of students from the twelfth grade who had taken the FSSAT.

2) Twelfth grade students were divided into two groups, those who passed and those who failed the FSSAT, and then a random selection of students from the two groups was made.

3) A random selection of an intact twelfth grade class to which students had been more or less randomly assigned, and which contained students who passed and failed the FSSAT.

The third alternative was the choice preferred by the principals of the 28 high schools participating in this study. A total of 1,223 twelfth grade students, who had purportedly taken the FSSAT in the eleventh grade, were selected. Forty-two students were excused from the study because they had not taken the FSSAT in the 11th grade. Of the remaining 1181 participants 546 (46.1%) were vocational students. The distribution of students by student category and level of urbanization, and by student category, race, and sex are presented in Table 2 and Table 3 respectively.

Table 2

Distribution of Student Participants by Student Category and Level of Urbanization

Level of Urbanization	Students[a]		
	Non-vocational	Vocational	Total
Low	83(13.1)	45(8.3)	128(10.8)
Medium	122(19.2)	105(19.3)	227(19.2)
High	431(67.7)	395(72.4)	826(70.0)

[a]Numbers in parentheses are percents of the total number of participants

Table 3

Distribution of Student Participants by Student Category, Race, and Sex

Student Category	Sex		Race				
	Male	Female	White	Black	Hispanic	Asian	Indian
Non-Vocational	304	322	418	131	43	2	1
Vocational*	248	279	342	134	38	5	5

*One school neglected to include sex and race data on vocational educational students

Selection of vocational education teachers. Two options were available to the researcher for selecting vocational education teachers to participate in this study.

1) A random selection of ten vocational education teachers from the total vocational education faculty.

2) Inviting all vocational education teaching faculty to participate if there were fewer than ten vocational education teaching faculty at the participating school.

Both options were exercised and resulted in the selection of 230 vocational education teachers. Fifteen teachers, who felt unqualified to respond to several items on the instrument due to their limited teaching experience in vocational education were excused from the study.

Selection of vocational education directors and school principals. The vocational education directors for the counties in which the 28 schools were selected, and the principals of these schools, were requested to participate in the data collection process. The 20 county vocational education directors, and the 26 school principals agreed to participate in the study. The responses of one principal were disallowed because he had used a vocational education director survey instrument. The distribution of all participants by county, school, occupation, and student category are summarized in Table 4.

Instruments

Three survey instruments were designed for use in this study. These instruments were administered to vocational and non-vocational education students, teachers, principals, and county vocational education directors. The format and purpose of each of these instruments is described next.

The first questionnaire, designed for administration to each of the 67 district vocational education directors in the state, consisted of 13 yes-no items and two open-ended items (Appendix C). The purpose of this instrument was threefold; (1) to ascertain the types of remediation practices used in Florida following the implementation of the FSSAT, (2) to gather suggestions for new methods of remediation, and (3) to determine if the remediation practices in the various counties had any impact on meeting vocational program needs of secondary students.

Two questionnaires were designed to measure the impact of the FSSAT and subsequent remediation practices upon vocational education enrollment at the secondary level. An eight-part questionnaire,

Table 4

Distribution of Participants by County, School, Position, and Student Category

Population	County	School	Students		Total		VE Teachers		Principals		V.E. Directors	Total Subjects	
			Non VE	VE	School	County	School	County	School	County	County	School	County
Rural	Holmes	Holmes County	25	11	36	36	5	5	1	1	1	43	43
	Taylor	Taylor County	12	18	30	30	6	6	1	1	1	38	38
	Wakulla	Wakulla County	23	4	27	27	9	9	1	1	1	38	38
	Washington	Chipley High	23	12	35	35	3	3	1	1	1	40	40
Middle	Bay	A. Crawford Mosley	29	23	52	52	9	9	1	1	1	63	63
	Clay	Clay County	25	16	41	41	10	10	1	1	1	53	53
	Gadsden	Greensborough	10	20	30	30	3	4	1	2	1	34	76
		Chattahoochee	22	17	39	39	1		1			41	
	Hernando	Hernando	19	17	36	36	8	8	1	1	1	46	46
	Nassau	W. Nassau	17	12	29	29	8	8	1	1	1	39	39
Metropolitan	Baker	Baker County	35	17	52	52	10	10	1	1	1	64	64
	Brevard	Merritt Island	18	24	42	42	8	8	1	1	1	52	52
	Broward	McArthur	9	25	34	80	7	14	1	2	1	42	97
		Dillard	24	22	46		7		1			54	
	Dade	Miami Jackson	14	25	39	103	9	18	1	2	1	49	124
		Hialeah	29	35	64		9		1			74	
	Escambia	Escambia	26	13	39		10		1			50	
		Pensacola	21	25	46	145	10	30	1	3	1	57	179
		W. J. Woodham	30	30	60		10		1			71	
	Hillsborough	Jefferson	27	15	42	42	10	10	1	1	1	54	54
	Palm Beach	Twin Lakes	21	15	36	89	10	15	1	1	1	47	106
		Palm Beach Gardens	33	20	53		5		-			58	
	Pinellas	Dixie Hollins	16	15	31	75	9	18	1	2	1	41	96
		Clearwater	26	18	44		9		1			54	
	Polk	Mulberry Jr.- Sr.	20	27	47	86	7	11	1	2	1	55	100
		Bartow	23	16	39		4		1			44	
	Sarasota	Sarasota	30	33	63	63	10	10	1	1	1	75	75
	Seminole	Seminole	20	29	49	49	9	9	1	1	-	59	59
Totals	20	28	636	545	1181	1181	215	215	27	27	19	1442	1442

which was administered to vocational and non-vocational education students, consisted of 65 items (27 yes-no and 38 Likert type items) (Appendix D). The questionnaire requested students to evaluate: (1) how they prepared for the FSSAT, (2) the effect of the FSSAT on them as students, (3) their attitude toward the FSSAT, (4) how their school assisted them in preparing for the FSSAT, (5) how they rated their school in assisting them to prepare for the FSSAT, (6) the effect of the FSSAT on their enrollment in vocational education courses, (7) the effect of the FSSAT upon their individual performances and attitudes toward school, (8) the opportunity to remain in, or enroll in vocational education courses, and finally, whether or not they passed the FSSAT in the eleventh grade. The student questionnaires were color coded (blue for vocational education students, and white for non-vocational education students) in order to facilitate handling.

The second questionnaire, designed to be administered to vocational education teachers, principals, and district vocational education directors, consisted of 50 Likert type items (Appendix E). Additional items were included in the survey instrument that addressed such issues as the development of remedial materials, budgeting and administrative support, and availability of human and material resources.

Procedures

The fifteen item remedial practices questionnaire was mailed to each of the 67 county vocational education directors in the state of Florida. Responses from the questionnaire served as a guide for the development of the survey instruments employed in the study. Two weeks after the 15 item survey instrument had been mailed, follow-up telephone calls were placed to non-respondents.

In the interim, informal interviews were conducted by the researcher with school principals and county vocational education directors in order to delineate factors other than the FSSAT that might contribute to a declining vocational education enrollment. Questions for the survey instruments were solicited from those who were interviewed. The questions suggested were reviewed for commonalities, and were either consolidated, rephrased, or retained unrevised for incorporation into the final survey instruments.

A draft of the student survey instrument was completed and permission obtained from the county school board to field test the instrument with twelfth graders in local high schools. Two high schools provided a cross-section of students to review the instrument. Based upon these field testing sessions some of the items were either eliminated or rewritten. A number of items suggested by the students were incorporated into the questionnaire. No data were collected during these field testing sessions.

The student questionnaire was designed and developed prior to the questionnaire for vocational education directors, vocational teachers, and school principals. Questions appearing in the student questionnaire were included in the survey instrument administered to vocational education directors, vocational education teachers, and school principals. The instrument underwent an intensive review by the personnel of the Division of Vocational Education and local school administrators who were not involved in the actual study.

Administration of the questionnaire. The researcher conducted the preliminary meetings and interviews, and also administered the survey instrument to the participating students. In circumstances where it was deemed impossible to administer the survey instrument to the vocational education teachers and principals simultaneously with the students, the questionnaires were left with one individual who assumed responsibility for delivering and retrieving the completed instruments from the teachers and principals. The questionnaires were then mailed to the researcher, or retrieved by him on a predetermined date. Teachers and principals were usually unable to participate at the same time as the students because of class schedules, or previously arranged administrative commitments. These unforseen circumstances did not interfere with the data collection schedule or the results of the study.

Administration of the questionnaire occurred at the same time for all students. Students were separated into two groups; non-vocational and vocational education students. This was done to facilitate distribution and collection of the instruments. It also permitted the researcher to conduct a visual check on the total number of participants, and to record race and sex data. The visual observations of sex and race were recorded in order to confirm data provided on the student questionnaires.

The purpose of the survey was explained to the students. Instructions for responding to the instrument were given and questions answered. All of the participants were requested to acknowledge whether or not they had taken the FSSAT in the 11th grade. Students who had not taken the FSSAT in the 11th grade were excused. The participants were requested to write their sex, race, and age in years and months on the top center of the first page of the instrument. All instruments were coded with the official county number and with the numbers 1,2, or 3. The latter numbers served to identify the sample schools within a given county.

Upon completing the questionnaire, which required about 20 minutes, the students were either dismissed by their respective teachers, advised to go to the next class period, or requested to remain until the time of the current period had elapsed. No problems were encountered in administering the student questionnaire.

Results

The purpose of this study was to assess the impact of the FSSAT and subsequent remediation practices on vocational education enrollments at the secondary level. In order to determine the impact of the FSSAT, survey instruments were developed and administered to vocational education teachers, county vocational education directors, school principals, and students. As previously stated, the survey instruments were designed to (1) determine if vocational education enrollments had increased or decreased disproportionately to total school enrollments since the implementation of the FSSAT, (2) identify remedial practices implemented because of the FSSAT, (3) determine if students were deterred from entering vocatio al education programs in order to prepare for the FSSAT, (4) determine if the rate of increase or decrease in vocational education programs was dependent upon remedial practices employed, (5) assess the strength (holding power) of vocational education programs, (6) determine if the remedial practices worked, and (7) if these remedial practices would be repeated the following year.

The results section is divided into two parts. The first part provides some insights about the FSSAT and the effects of the FSSAT as perceived by all the participants. The second part is furt sub-divided into seven subparts which correspond to the seven quest s regarding enrollments addressed in this study. The insights derived from the responses on the student questionnaire are discussed next, followed by a brief discussion of the general information obtained from the instrument administered to vocational teachers, principals, and county vocational directors.

The Student Questionnaire

The student questionnaire generated additional information about the FSSAT which was not requested in the original funding proposal. It was anticipated that the additional information might help to explain recent enrollment trends in vocational education. Enrollment changes will be treated later in this report; however, a brief summary of the results of the student questionnaire is appropriate at this time.

Preparation for the FSSAT. More than 80% of the student participants expressed no personal need for remediation. In fact, over 90% of the students made no changes in their class schedules in order to prepare for the FSSAT. Sixty-one percent of the students indicated that they prepared for the test in their general education classes, while 47% of the students studied and reviewed the material on their own.

Personal effect of FSSAT on students. The students for the most part reported that the FSSAT did not interrupt learning, did not impede the attainment of personal goals, did not deter participation in social

activities, and did not interfere with vocational education programming. Several students credited the FSSAT with diagnosing academic weaknesses and with providing guidance in selecting courses that might be useful in preparing for graduation in their careers. An equal number of students (38%) had either no opinion or disagreed that the FSSAT assisted them academically in their vocational education courses.

Student feelings about the FSSAT. Positive responses were registered by the students about the FSSAT. They felt it was a good test, useful, and an accurate measure of educational achievement.

School assistance in preparing and remediating students for the FSSAT. The majority of student respondents (85%) indicated that assistance in preparing for the FSSAT occurred in their school. While the frequency of use of various remedial practices differed, it was noted that a number of students were unaware of this support. Most remediation occurred during regularly scheduled classes, although some students reported that assistance was available at other times. A more detailed discussion on remedial practices appears later in this report.

Student ratings of the school. Students were also requested to evaluate their respective schools on preparing them for the FSSAT, the quality of that preparation, and the availability and quality of counseling prior to the FSSAT. Forty-six (46%) percent of the respondents indicated that their school prepared students to take the FSSAT. Many students rated their schools as only "average" in these areas. The quality of the counseling and the programming for preparing students for the test fared less well than would be expected.

A section of the student questionnaire considered the effects of the FSSAT on enrollment in vocational education courses; that is, whether or not a student was able to continue in, or was prevented from taking; a vocational education course in order to prepare for the FSSAT. These data are described in the section on enrollments.

Students failing the FSSAT. Specific questions were posed for those students who failed the FSSAT (N = 196 or 16.6 percent of sample population) in the 11th grade. While 81 percent of the students who reported failing did not drop a vocational course to prepare for the test, 55 percent indicated no preference to re-enroll in a vocational education course.

The total frequency, and percentage, of responses to items on the student questionnaire concerning the FSSAT are presented in Appendix F. These data include the responses by all the students collectively, and according to student category (vocational and non-vocational). Appendix G presents these data by sex and by student category.

Questionnaire Prepared for Vocational Education Teachers, Vocational Education Directors, and School Principals

The questionnaire prepared for the vocational education teachers, vocational education directors, and school principals concerning the FSSAT contained 50 five point Likert items (strongly agree, agree, undecided, disagree, and strongly disagree). The combined percentage of responses for the three groups of participants were condensed under three headings, Agree (A), Undecided (U), and Disagree (D) in order to facilitate interpretation of the results (Table 5) and reading of the table. These same data, grouped according to vocational education teachers, vocational directors, and principals are presented in Table 6.

The items in this instrument can be clustered into the following categories: (1) effects of the FSSAT on enrollment, (2) overall effects of the FSSAT on the school, (3) quality of counseling, (4) remedial practices, and (5) recommendations. These categories will be discussed briefly in terms of the data presented in Table 5 and Table 6.

There does not appear to be a clear perception among the participants regarding the effect of the FSSAT on enrollment. Only a few respondents (28.0%) attributed the decline in enrollment to the FSSAT. A majority (80%) of the respondents concurred that students who failed the FSSAT are permitted to enroll in vocational education courses. No clear pattern emerges when the responses are compared according to occupational category; that is, teacher, director, or principal.

Some positive effects were observed by teachers and administrators since the implementation of the FSSAT. Learner performance has improved, programming efforts are more successful, and the quality of instruction has improved. While these data are not conclusive, they do reflect a positive trend toward excellence. The vocational education directors and school principals reflect a much more positive outlook toward the effect of the FSSAT in the schools than do the vocational education teachers.

In terms of remediation, it was clear that vocational education teachers did not provide the remedial assistance needed by the students to prepare for the FSSAT, and that vocational education classes are not the vehicle for remediation. A more detailed discussion on remedial practices is presented later in the report. However, it is important to note that a significant number of the participants were either unfamiliar with, or unaware of, the remedial practices available to the students.

As the questions posed for this study are addressed, references will be made to the specific item(s) in the survey instrument that is (are) relevant to the topic under discussion. The first issue to be addressed disproportionate enrollments will be introduced by a brief

Table 5

Response Ratings of Vocational Education Teachers, Vocational Education Directors, and Principals by Percentage to Survey Questions Concerning the Florida State Student Assessment Test

CODE: Agree (A); Undecided (U); Disagree (D)

	A	U	D
1) Enrollment in vocational education classes in this school has declined as a consequence of the Florida State Student Assessment Test (FSSAT).	28.0	16.1	56.0
2) Enrollment in vocational education classes has declined in this school because students who fail the FSSAT must participate in a remediation program.	34.0	12.2	53.9
3) Enrollment in vocational education courses has decreased at a greater rate than the enrollment in other elective courses since the implementation of the FSSAT.	17.6	24.0	58.4
4) Enrollment in vocational education courses has increased at a greater rate than the enrollment in other elective courses since the implementation of the FSSAT.	13.5	30.0	56.5
5) Students who fail the FSSAT are permitted to enroll in vocational education courses.	80.4	12.3	7.4
6) Students who fail the FSSAT are permitted to enroll in elective courses other than vocational education courses.	69.1	20.2	10.7
7) The increase or decrease in vocational education enrollment has been due to factors other than the FSSAT.	72.5	18.5	8.8
8) Our school has encouraged students to participate in remedial opportunities offered through area vocational education centers.	42.1	34.0	23.9

Table 5
(continued)

	A	U	D
9) The FSSAT is an appropriate test for measuring basic skill competencies.	60.2	28.4	11.5
10) As a result of the FSSAT, students in this school have improved their performance in basic skills.	69.3	23.0	7.7
11) The FSSAT has helped teachers to develop more effective courses for their students.	59.7	32.0	10.3
12) The FSSAT as a diagnostic tool influences the programming efforts in this school in a positive way.	65.2	26.0	8.8
13) The quality of instruction has improved in this school as a result of the implementation of the FSSAT.	53.1	34.7	12.2
14) The quality of counseling in this school for students preparing to take the FSSAT is excellent.	54.5	31.7	13.8
15) The quality of counseling in this school for preparing students who failed the FSSAT for a retake is excellent.	64.3	27.2	8.4
16) The quality of remediation programs in this school that prepare students for a retake of the FSSAT is excellent.	72.2	20.6	7.2
17) The counseling procedures used in this school to assist students in preparing for the FSSAT have been successful.	58.1	34.6	7.4
18) Students should be counseled into vocational education courses if there is a likelihood that they will fail the FSSAT.	28.6	15.6	55.7
19) Students from this school who have been counseled on how to prepare for the FSSAT have been successful in their retake exam.	69.0	29.4	1.6
20) Students choose to enroll in vocational education courses to learn basic skills rather than remain in regular academic classes.	32.7	22.8	44.4
21) Remediation materials are developed by the teachers in this school.	51.4	33.7	14.9

Table 5

(continued)

	A	U	D
22) The Florida Department of Education should be responsible for preparing all remedial materials.	36.5	10.9	44.5
23) Teachers always have sufficient budget for preparing remedial materials.	15.6	30.8	53.6
24) Sufficient qualified teaching personnel are available to conduct remediation classes.	64.3	18.6	17.1
25) The FSSAT deters many students from obtaining the vocational training they need for job entry.	23.6	27.0	49.4
26) Providing remediation for students who failed the FSSAT has interfered with course goals established by teachers.	29.7	26.2	44.1
27) The FSSAT has interfered with the overall curriculum goals of this school.	16.7	25.5	57.8
28) The FSSAT has created more work for me.	29.6	13.8	56.6
29) Students who fail the FSSAT are withdrawn from vocational education classes in order to prepare for the FSSAT.	38.9	16.8	44.3
30) The rate of student withdrawal from electives other than vocational education courses has increased in this school since the implementation of FSSAT.	29.0	43.1	27.8
31) The rate of student withdrawal from vocational education courses has increased in this school since the implementation of FSSAT.	28.5	30.4	41.0
32) Teachers are expected to teach remedial classes during regularly scheduled hours.	65.4	17.5	17.1
33) New teachers are expected to teach remedial classes during regularly scheduled hours.	56.1	24.8	19.1
34) Volunteer aides are utilized to assist teachers in conducting remedial classes.	23.2	33.5	43.3
35) Teachers are often released from regularly assigned classes in order to conduct remedial classes.	21.3	21.3	57.4

Table 5
(continued)

		A	U	D
36)	Students are offered remedial assistance outside of regular class hours.	40.2	26.8	32.9
37)	Practices used for remediation are reviewed routinely with appropriate revisions made.	50.2	43.7	6.0
38)	Teachers in this school provide practice sessions using questions comparable to those on the FSSAT to assist students in preparing for the FSSAT.	59.6	35.4	5.0
39)	Our school has encouraged students to participate in remedial opportunities offered through area vocational education centers.	33.7	38.0	28.3
40)	Our school works cooperatively with other schools in the area (county) to develop and provide quality remedial assistance for students who failed the FSSAT.	46.5	45.4	8.0
41)	Some students are delaying their vocational preparation until after high school in order to allow time for preparing for the FSSAT.	21.4	38.5	40.1
42)	Remedial practices used in this school year will be repeated again next year.	55.9	42.6	1.6
43)	The remediation prodecures utilized in this school are successful.	70.1	26.1	3.9
44)	The requirement for remedial instruction for students to pass the FSSAT will cause vocational education course offerings to be reduced at the high school level.	28.4	24.9	46.7
45)	Vocational education teachers in this school conduct most of the remediation classes for students who fail the FSSAT.	3.8	11.0	85.2
46)	Vocational education courses are often utilized in this school to teach the basic skills necessary for students to pass the FSSAT.	28.1	8.0	63.9
47)	More vocational education courses should be added to the curriculum in this school in order to meet the needs of students who fail the FSSAT.	38.5	20.6	40.8

Table 5

(continued)

		A	U	D
48)	Vocational education programs, because of their ability to provide "real world" experiences, are able to facilitate the development of competencies needed in the basic skills more readily than regular academic classes.	58.9	20.2	20.9
49)	Remediation for the FSSAT can be incorporated into the existing vocational education programs in this school.	51.9	21.8	26.4
50)	Students are now able to receive the remedial instruction they need to pass the FSSAT by enrolling in vocational education courses.	21.0	26.3	52.7

Table 6

Response Ratings of Principals, Vocational Education Teachers and Directors by Percentage to Survey Questions Concerning the Florida State Student Assessment Test

Items	Vocational Teachers (N=215)			Vocational Directors* (N=20)			Principals (N=27)		
	A	U	D	A	U	D	A	U	D
1) Enrollment in vocational education classes in this school has declined as a consequence of the Florida State Student Assessment Test (FSSAT).	26.6	18.2	55.2	45.0	5.0	50.0	25.9	7.4	66.6
2) Enrollment in vocational education classes has decline in this school because students who fail the FSSAT must participate in a remediation program.	33.5	13.5	53.1	50.0	0.0	50.0	25.9	11.1	63.0
3) Enrollment in vocational education courses has decreased at a greater rate than the enrollment in other elective courses since the implementation of the FSSAT.	18.2	27.4	54.4	20.0	5.0	75.0	11.1	11.1	77.8
4) Enrollment in vocational education courses has increased at a greater rate than the the enrollment in other elective courses since the implementation of the FSSAT.	12.6	33.3	54.0	20.0	10.0	70.0	14.8	18.5	66.7
5) Students who fail the FSSAT are permitted to enroll in vocational education courses.	77.1	14.5	8.4	94.7	0.0	5.3	96.3	3.7	0.0
6) Students who fail the FSSAT are permitted to enroll in elective courses other than vocational education courses.	67.1	23.1	9.8	68.5	10.5	21.0	85.2	3.7	11.1

Table 6

(Continued)

Items	Vocational Teachers (N=215)			Vocational Directors* (N=20)			Principals (N=27)		
	A	U	D	A	U	D	A	U	D
7) The increase or decrease in vocational education enrollment has been due to factors other than the FSSAT.	72.4	19.2	8.4	68.5	15.8	15.8	76.9	15.4	7.7
8) Our school has encouraged students to participate in remedial opportunities offered through area vocational education centers.	40.6	38.8	20.5	47.4	10.5	42.1	50.0	11.5	38.4
9) The FSSAT is an appropriate test for measuring basic skill competencies.	57.9	29.0	13.1	50.0	35.0	5.0	77.8	18.5	3.7
10) As a result of the FSSAT, students in this school have improved their performance in basic skills.	63.3	28.8	8.8	80.0	15.0	5.0	85.2	14.8	0.0
11) The FSSAT has helped teachers to develop more effective courses for their students.	53.5	34.9	11.7	75.0	20.0	5.0	77.8	18.5	3.7
12) The FSSAT as a diagnostic tool influences the programming efforts in this school in a positive way.	61.4	29.3	9.2	75.0	15.0	10.0	88.9	7.4	3.7
13) The quality of instruction has improved in this school as a result of the implementation of the FSSAT.	51.6	35.3	13.0	70.0	25.0	5.0	51.9	37.0	11.1
14) The quality of counseling in this school for students preparing to take the FSSAT is excellent.	53.1	33.5	13.5	40.0	25.0	35.0	77.8	22.2	0.0

Table 6

(Continued)

Items	Vocational Teachers (N=215)			Vocational Directors* (N=20)			Principals (N=27)		
	A	U	D	A	U	D	A	U	D
15) The quality of counseling in this school for preparing students who failed the FSSAT for a retake is excellent.	63.6	28.0	8.4	35.0	45.0	20.0	92.6	7.4	0.0
16) The quality of remediation programs in this school that prepare students for a retake of the FSSAT is excellent.	70.3	22.7	7.0	60.0	20.0	20.0	96.3	3.7	0.0
17) The counseling procedures used in this school to assist students in preparing for the FSSAT have been successful.	55.4	36.6	8.0	50.0	40.0	10.0	85.2	14.8	0.0
18) Students should be counseled into vocational education courses if there is a likelihood that they will fail the FSSAT.	27.5	16.3	56.3	25.0	10.0	65.0	40.7	14.8	44.4
19) Students from this school who have been counseled on how to prepare for the FSSAT have been successful in their retake exam.	68.4	30.2	1.4	60.0	35.0	5.0	81.5	18.5	0.0
20) Students choose to enroll in vocational education courses to learn basic skills rather than remain in regular academic classes.	35.6	24.1	40.3	30.0	10.0	60.0	11.1	22.2	66.7
21) Remediation materials are developed by the teachers in this school.	47.9	39.1	13.0	63.2	15.8	21.0	70.4	3.7	25.9

Table 6

(Continued)

Items	Vocational Teachers (N=215)			Vocational Directors* (N=20)			Principals (N=27)		
	A	U	D	A	U	D	A	U	D
22) The Florida Department of Education should be responsible for preparing all remedial materials.	39.8	21.3	38.9	15.0	15.0	70.0	25.9	3.7	70.3
23) Teachers always have sufficient budget for preparing remedial materials.	11.5	35.2	53.3	25.0	10.0	65.0	55.5	11.1	48.1
24) Sufficient qualified teaching personnel are available to conduct remediation classes.	62.0	22.7	15.3	65.0	0.0	35.0	81.5	0.0	18.5
25) The FSSAT deters many students from obtaining the vocational training they need for job entry.	24.1	31.5	44.5	25.0	15.0	60.0	18.5	0.0	81.5
26) Providing remediation for students who failed the FSSAT has interfered with the course goals established by teachers.	29.6	27.3	43.1	30.0	25.0	45.0	29.6	18.5	45.0
27) The FSSAT has created more work for me.	24.3	15.9	59.8	25.0	10.0	65.0	76.9	0.0	23.1
28) The FSSAT has interfered with the overall curriculum goals of this school.	17.6	28.7	53.7	15.0	15.0	70.0	11.1	7.4	81.5
29) Students who fail the FSSAT are withdrawn from vocational education classes in order to take remedial work.	41.4	19.1	39.6	30.0	5.0	65.0	22.2	7.4	70.4
30) The rate of student withdrawal from electives other than vocational education courses has increased in this school since the implementation of FSSAT.	27.4	48.8	23.7	40.7	7.4	51.8	30.0	30.0	40.0

Table 6

(Continued)

Items	Vocational Teachers (N=215)			Vocational Directors* (N=20)			Principals (N=27)		
	A	U	D	A	U	D	A	U	D
31) The rate of student withdrawal from vocational education courses has increased in this school since the implementation of FSSAT.	28.2	34.7	37.0	35.0	5.0	60.0	25.9	14.8	59.2
32) Teachers are expected to teach remedial classes during regularly scheduled hours	61.6	20.8	17.6	85.0	5.0	10.0	81.5	0.0	18.5
33) New teachers are hired to conduct remedial classes in this school.	54.2	28.7	17.1	57.9	15.8	26.4	70.4	0.0	29.6
34) Volunteer aides are utilized to assist teachers in conducting remedial classes.	22.3	37.5	40.3	30.0	35.0	35.0	25.9	0.0	74.1
35) Teachers are often released from regularly assigned classes in order to conduct remedial classes.	21.8	25.0	53.2	15.0	10.0	75.0	22.2	0.0	77.8
36) Students are offered remedial assistance outside of regular class hours.	36.9	31.3	31.8	45.0	10.0	45.0	63.0	3.7	33.6
37) Practices used for remediation are reviewed routinely with appropriate revisions made.	40.7	51.9	7.4	90.0	10.0	0.0	96.3	3.7	0.0
38) Teachers in this school provide practice sessions using questions comparable to those on the FSSAT to assist students in preparing for the FSSAT.	58.8	38.0	3.3	33.3	50.0	16.7	84.6	3.8	11.5

Table 6

(Continued)

Items	Vocational Teachers (N=215)			Vocational Directors* (N=20)			Principals (N=27)		
	A	U	D	A	U	D	A	U	D
39) Our school has encouraged students to participate in remedial opportunities offered through area vocational education centers.	32.9	42.7	24.4	36.9	10.5	52.7	38.5	19.2	42.3
40) Our school works cooperatively with other schools in the area (county) to develop and provide quality remedial assistance for students who failed the FSSAT.	39.7	51.4	8.9	73.7	21.1	5.3	81.5	14.8	3.7
41) Some students are delaying their vocational preparation until after high school in order to allow time for preparing for the FSSAT.	22.3	41.4	36.3	20.0	25.0	65.0	14.8	25.9	59.2
42) Remedial practices used in this school year will be repeated again next year.	49.3	49.1	1.4	75.0	20.0	5.0	92.6	7.4	0.0
43) The remediation procedures utilized in this school are successful.	67.2	28.0	4.6	75.0	25.0	0.0	88.9	11.1	0.0
44) The requirement for remedial instruction for students to pass the FSSAT will cause vocational education course offerings to be reduced at the high school level.	29.9	29.0	41.1	25.0	5.0	70.0	18.5	7.4	74.1
45) Vocational education teachers in this school conduct most of the remediation classes for students who fail the FSSAT.	4.6	13.0	82.4	0.0	5.0	95.0	0.0	0.0	100

Table 6

(Continued)

Items	Vocational Teachers (N=215)			Vocational Directors* (N=20)			Principals (N=27)		
	A	U	D	A	U	D	A	U	D
46) Vocational education courses are often utilized in this school to teach the basic skills necessary for students to pass the FSSAT.	30.6	9.7	59.7	10.0	0.0	90.0	22.0	0.0	77.8
47) More vocational education courses should be added to the curriculum in this school in order to meet the needs of students who fail the FSSAT.	42.5	20.9	36.8	20.0	20.0	60.0	22.2	18.5	59.2
48) Vocational education programs, because of their ability to provide "real world" experiences, are able to facilitate the development of competencies needed in the basic skills more readilty than regular academic classes.	64.3	20.4	15.2	50.0	15.0	35.0	22.2	22.2	55.6
49) Remediation for the FSSAT can be incorporated into the existing vocational education programs in this school.	37.5	21.9	23.7	45.0	25.0	30.0	37.0	18.5	44.4
50) Students are now able to receive the remedial instruction they need to pass the FSSAT by enrolling in vocational education courses.	22.6	29.6	47.6	10.6	15.8	73.6	14.8	7.4	77.8

* The phrase "in this school" was replaced in the vocational education director's questionnaire with the phrase "in schools in this county."

review of recent enrollment trends at the secondary level, both nationally and in the state of Florida.

Enrollments

To properly assess the impact of the FSSAT on enrollments in secondary level vocational education, it was necessary to review enrollment figures for the nation and the state of Florida in order to determine enrollment trends. A brief description of the total public secondary level and total secondary level vocational education enrollment trends for the nation is presented next.

Secondary Level Public School Enrollment

National enrollment figures for secondary level public schools have remained above 14 million since 1972, however, total enrollments were projected to fall below 14 million in 1979, to a level less than that of 1974 (U.S. Department of Health, Education, and Welfare, Office of Education; National Center for Education Statistics; Statistics of Public and Secondary Day Schools, 1979). The decline of secondary level enrollments in public schools, approximately one percent between 1975-1978, has been attributed to a drop in birth rates during the 70s (National Center for Research in Vocational Education, 1979).

Enrollments at the secondary level in Florida Public Schools have paralleled the national trend. Secondary level enrollments in Florida rose 8.1 percent between 1972 and 1977; however, in 1978 enrollments dropped and were projected to decline a total of 5.1 percent by 1979 (State of Florida Department of Education, Public Schools, MIS, 1979).

Secondary Level Vocational Education Enrollment

Although an enrollment decline is evident nationally at the secondary level in public schools, there appears to be a constant growth in vocational education enrollment at the secondary level. An enrollment increase of 21 percent since 1974 has been reported (Department of Health, Education, and Welfare; National Center for Educational Statistics, Statistics of Public and Secondary Day Schools, 1979).

Secondary level vocational education enrollments in Florida declined 8.87 percent between 1974-1975; a total of 5 percent between 1974-1978. The drastic drop in enrollments for the year 1974 might be accounted for by inconsistencies in the reporting scheme (Dryenfurth, 1980), reclassification of core programs, or programming modifications within the schools. Florida averaged a 1.5 percent annual recovery in vocational education enrollment since 1975, slightly below the average annual rate of increase (2.9 percent) in national vocational education enrollments for the same time period.

Time Frame of this Study

The period between 1975 and 1978 is treated in this study. Reasons for selecting this time frame include: (1) data prior to 1975 were duplicated, ambiguous, and inconsistent as evidenced in various agency reports, (2) no data on vocational enrollment was available from governmental state agencies for 1979 in 1980, and (3) the main issue in this study is the effect of the FSSAT and subsequent remediation practices upon vocational education enrollments. Thus, to include data prior to 1975 would have served no purpose in assessing enrollment trends after the administration of the first FSSAT. A summary of enrollment figures, and graphs depicting enrollment trends in the nation and the state of Florida for both total school and secondary level vocational education enrollments are presented in Table 7 and Figures 2 through 7.

Disproportionate Enrollment Changes

Assessing enrollment changes, particularly disproportionate enrollment increases or decreases in vocational education at the secondary level, was one of the charges of this study. In this study, the term "disproportionate" refers to opposite and unequal enrollment trends. For example, vocational education enrollment might increase at a greater percentage than the percentage of total enrollment decline for a given school or county. In order to accomplish this task, enrollment data for each vocational education program offered at the sample high schools, and at all the other high schools within the county were tabulated. In addition, sex and race data for each program at the county and high school level were collected. These data are presented in Appendix H in order to provide the reader with an opportunity to review the enrollment trends by programs for the 28 sample schools, and the 20 counties in which the schools were located.

Enrollment changes were computed as percentage changes in order to determine if disproportionate enrollment trends occurred between 1975 and 1978. As previously indicated, the FSSAT was administered in 1977. Any immediate effects in enrollment changes would be reflected in the data on enrollments for 1978. Unfortunately, at this writing data on vocational education enrollments for 1979 which would support or reject any enrollment trends were not available from state or government agencies.

When viewed in the context of level or urbanization, vocational education enrollment increases were found in only those high schools identified as belonging to the high level of urbanization (Table 8).

Table 7

Secondary Level Public School and Vocational Education Enrollments,

and Percentage of Enrollment Changes by Year

Code	Enrollment Area	Enrollment by Year						Percent change by Year				
		1974	1975	1976	1977	1978	1979	1974-75	1975-76	1976-77	1977-78	1978-79
A	U. S. Secondary Level	14,125,000	14,293,744	14,231,000	14,299,000	14,156,000	13,671,000	1.19	0.19 (0.19)	-0.15 (0.03)	-1.00 (0.9)	-3.42 (-4.35)
B	Florida Secondary Level	493,320	490,091	493,000	499,256	486,667	474,763	2.24	0.59 (0.54)	1.26 (1.87)	-2.52 (-0.69)	-2.44 (-3.12)
C	U. S. Vocational Education (Total)	13,512,060	15,332,447	15,128,060	16.125,559	17,598,619		13.47	-1.33 (-1.33)	6.59 (5.12)	9.13 (14.78)	
D	U. S. Vocational Education (Secondary)	8,433,750	9,426,376	8,560,947	9,562,836	10,236,117		11.76	-5.99 (5.99)	7.91 (1.44)	7.04 (8.59)	
E	Florida Vocational Education	938,019	917,368	920,655	962,985	997,309		-2.2	0.35 (0.35)	4.59 (4.97)	3.56 (8.71)	
F	Florida Vocational Education (Secondary)	625,162	569,657	577,820	573,990	595,521		-8.87	1.43 (1.43)	-0.66 (0.76)	3.90 (4.54)	

The numbers in parantheses are percent changes in enrollment using the 1975 figures as a baseline.

Code: A. DHEW, NCES. Statistics of Public Elementary and Secondary Day Schools
B. DOE, MIS Public Schools
C. National Center for Research in Vocational Education, Ohio State University, Ohio
D. National Center for Research in Vocational Education, Ohio State University, Ohio + AVA, Virginia
E. USOE, Form 346-3, U.S. DHEW
F. USOE, Form 346-3, U.S. DHEW

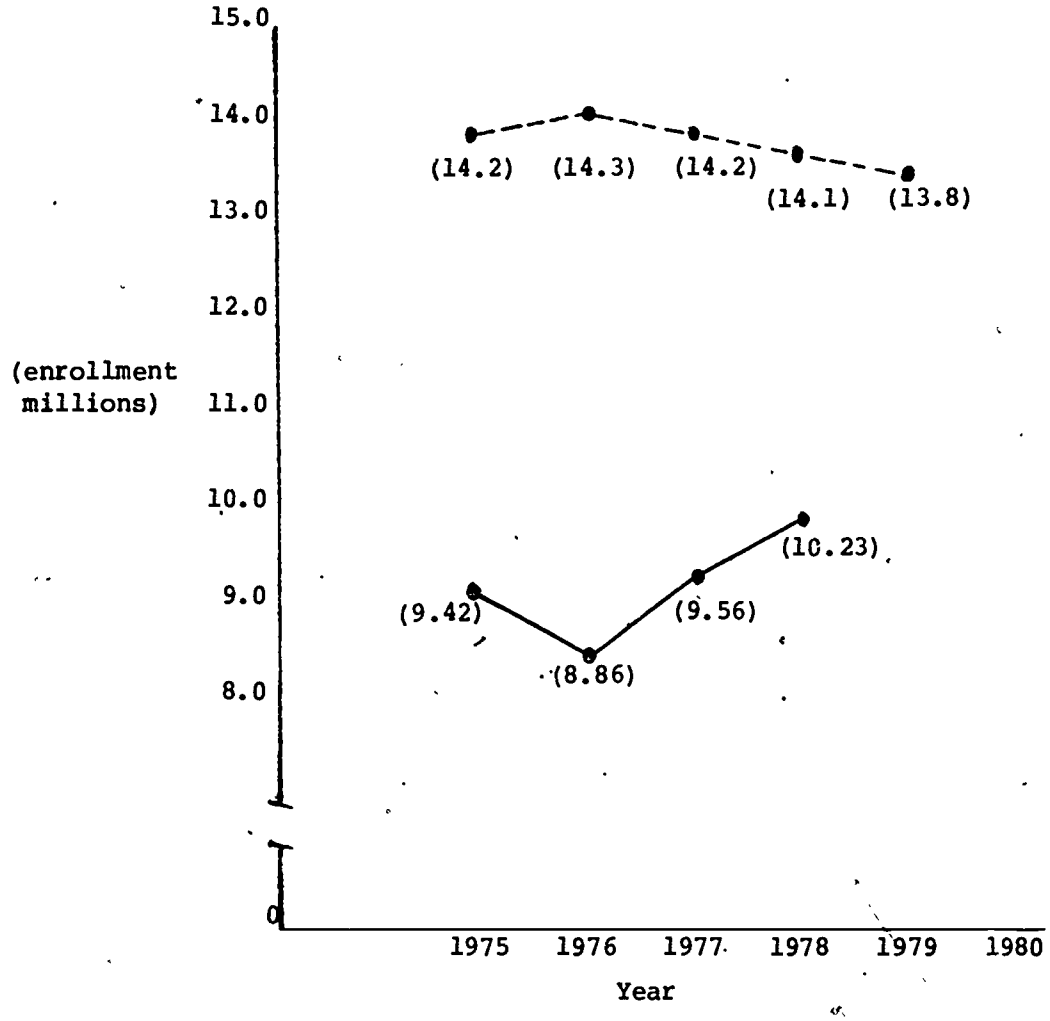

Figure 2: Total public school secondary enrollment versus total vocational education enrollments at the secondary level in the United States by year

Source: U.S. Department of Health, Education, and Welfare; National Center for Educational Statistics, Statistics of Public Elementary and Secondary Day Schools, 1979; The National Center for Research in Vocational Education; The Status of Vocational Education, No. 193, Ohio State University, 1979.

-------total public school secondary enrollment
_____total vocational education enrollment

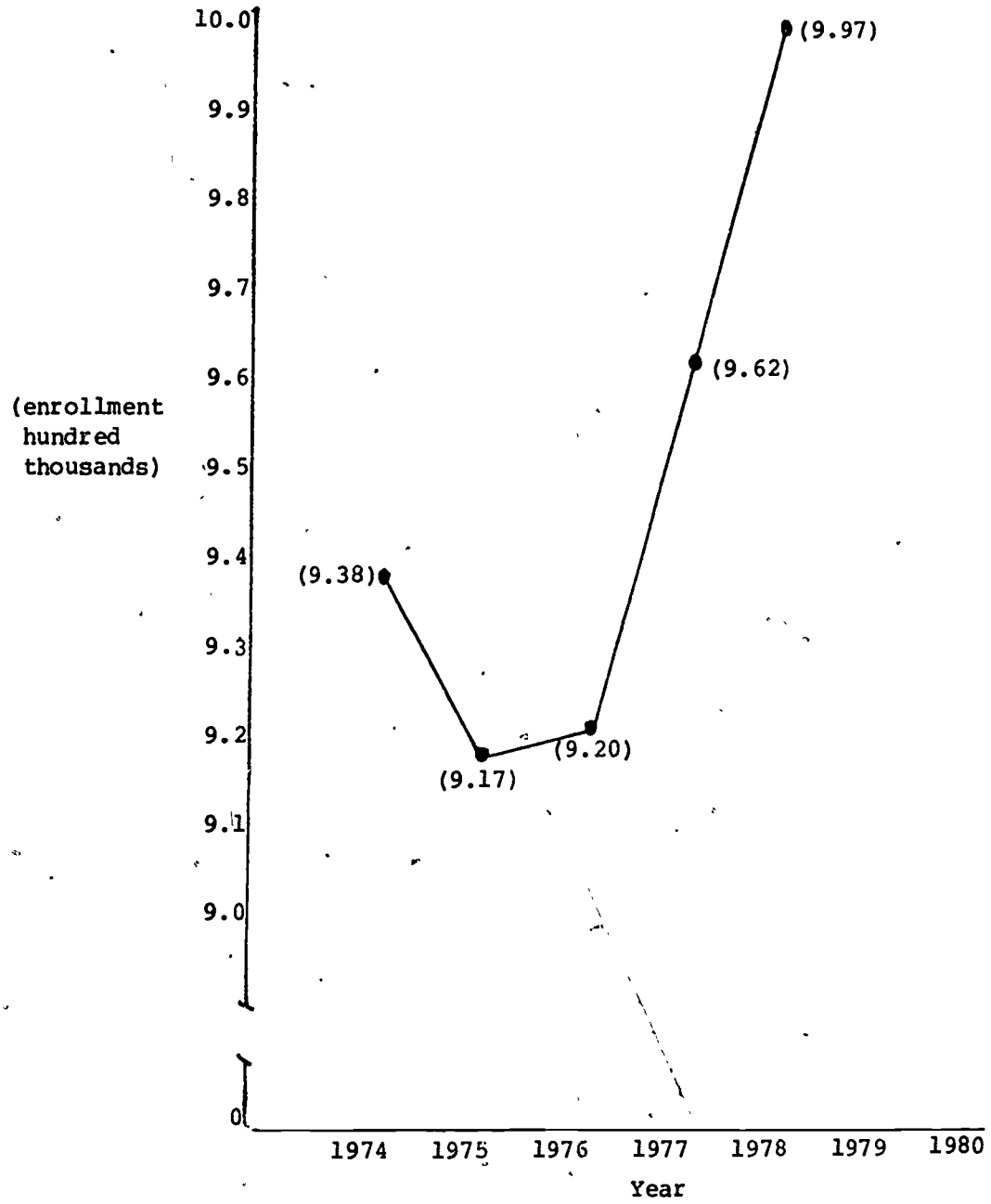

Figure 3: Vocational education enrollment for all grade levels in Florida by year

Source: U.S. Office of Education, Form No. 346-3 U.S. Department of Health, Education, and Welfare, Washington, D.C. FY 1974 through FY 1979.

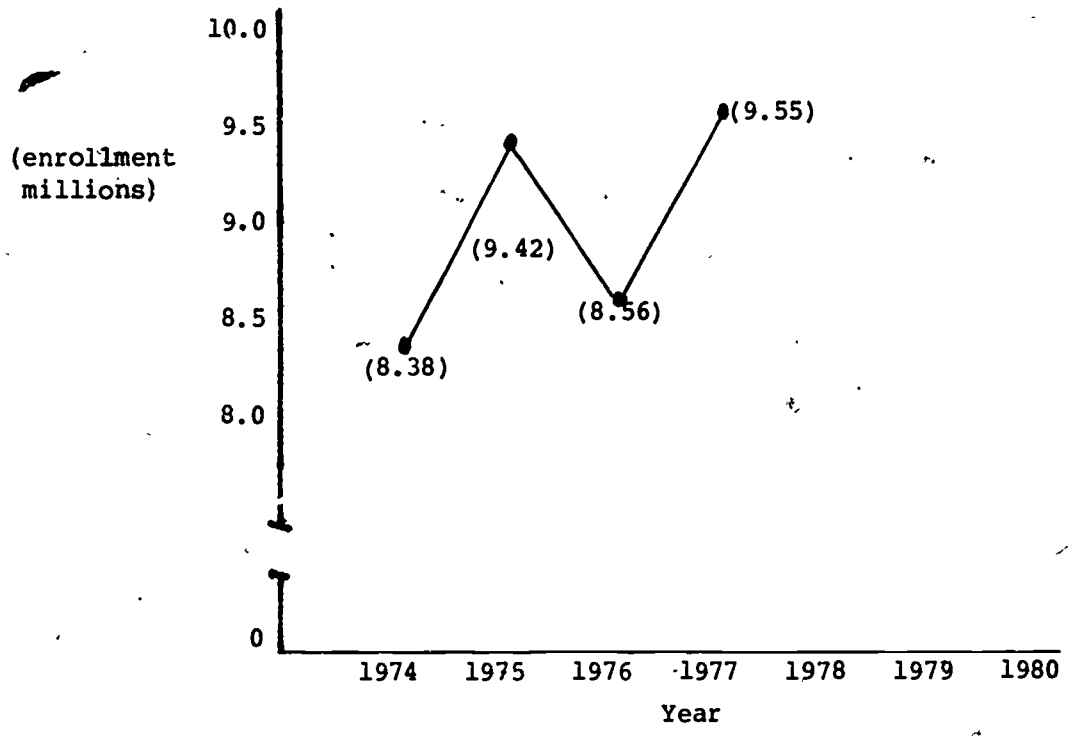

Figure 4: Vocational education enrollments at the secondary level in the United States by year

Source: State of Florida, Department of Education Division of Public Schools, Management Information Services, Tallahassee, FL

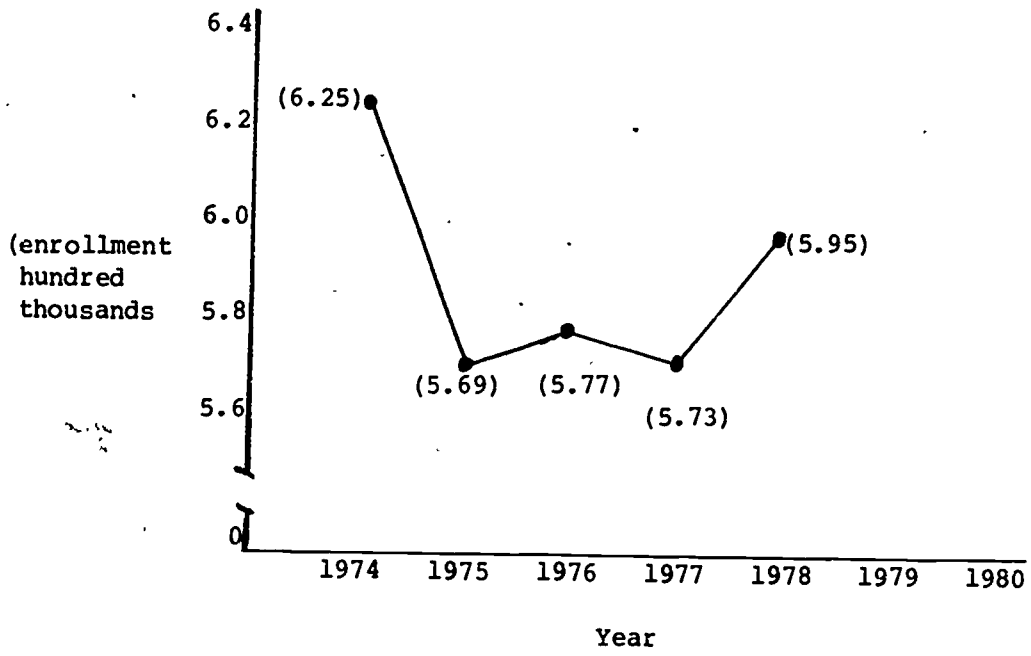

Figure 5: Vocational education enrollments at the secondary level in Florida Public Schools by year

Source: U.S. Office of Education, Form No. 346-3 U.S. Department of Health Education, and Welfare, Washington, D.C., FY 1974 through FY 1979

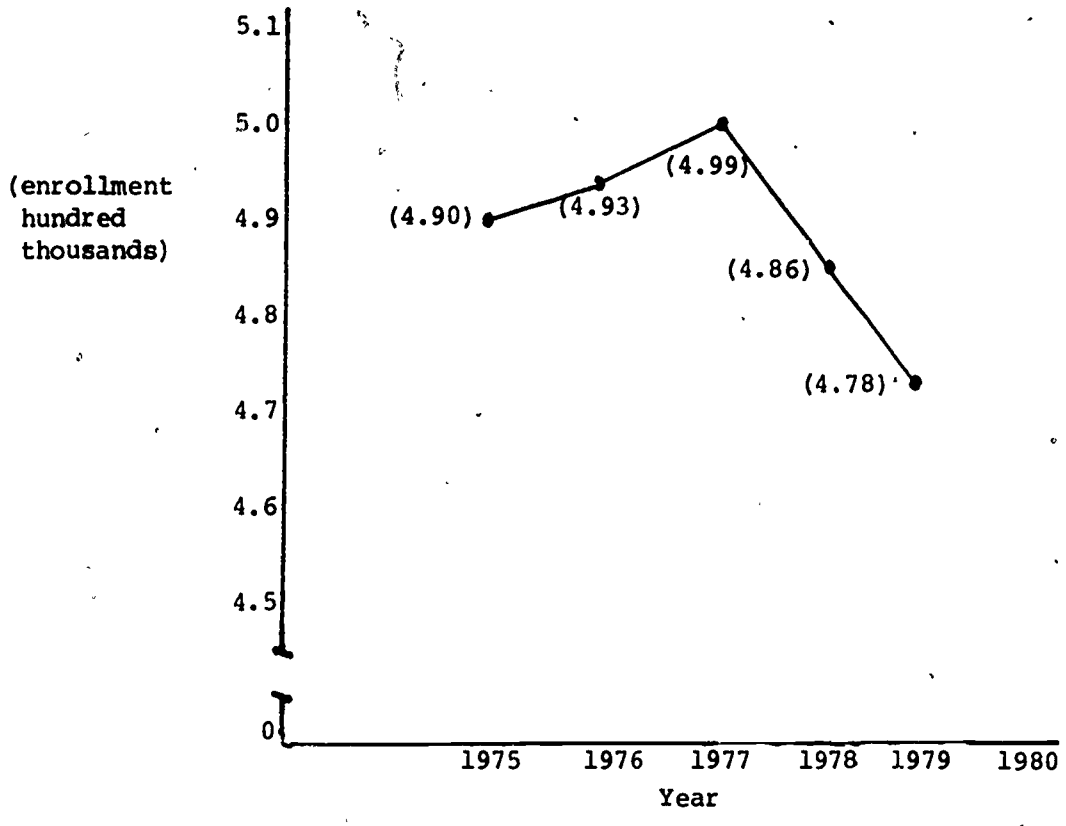

Figure 6: Secondary level enrollments in Florida public schools by year

Source: State of Florida, Department of Education, Division of Public Schools; Management Information Service, Tallahassee, Florida

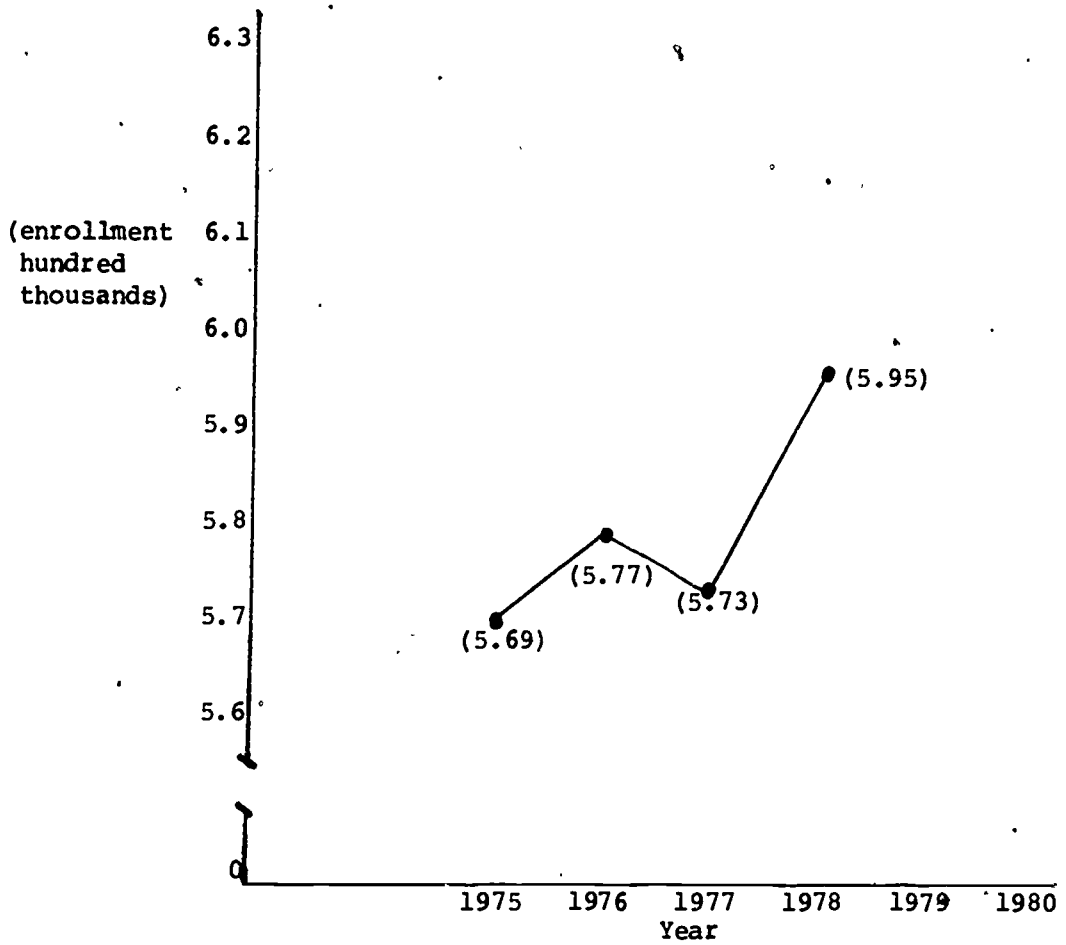

Figure 7: Vocational education enrollments at the secondary level in Florida public schools

Source: State of Florida, Department of Education, Division of Public Schools; Management Information Service, Tallahassee, Florida

Table 8

Program Enrollment Changes by Level of Urbanization Between 1975 and 1978

Level of Urbanization	Enrollments[a] Total	Vocational
Low	+4.4	-5.9
Medium	-15.6	-14.3
High	-5.8	+2.0

[a]Numbers represent enrollment changes in percent

While the data presented in Table 8 can be interpreted as reflecting an overall vocational education enrollment decline in the 28 sample schools, total county vocational education enrollments increased between 1975 and 1978 (Table 9).

Table 9

Percentage of Change in Total School and Vocational Education Enrollment by Year for the 20 Counties in Which the 28 Sample High Schools were Located

Year	County Enrollment Change Total School	Vocational[a]
1975-1976	-0.9	-4.8
1976-1977	-0.6	8.7
1977-1978	-1.7	12.2
1978-1979	-0.5	

[a]No data available for vocational education enrollment in 1978-1979

Results of the 1977-1978 enrollment data analysis for the state of Florida following the first administration of the FSSAT revealed a 2.5 percent decline in total secondary enrollments, and a 3.8 percent enrollment increase in vocational education programs. Secondary level enrollments declined one percent nationally during the same period while vocational education enrollments rose by seven percent. Therefore, Florida underwent a secondary level enrollment decline two and one-half times greater than that of the national enrollment between 1977 and 1978, while vocational enrollments in the state increased at about one-half as much as those in the nation.

Total enrollments declined 4.8 percent in the 20 sample counties, and 3.2 percent in the 28 schools participating in this study between 1977 and 1978. However, vocational education enrollment rose 12.2 percent at the county level, and 2.5 percent in the schools in this study. These data reflect disproportionate enrollment increases in vocational education during the first year after the first administration of the FSSAT. A comparison of enrollment trends between 1975-1978 and 1977-1978 are presented in Table 10.

Table 10

Total Secondary Level Enrollment and Vocational Education Enrollment Changes Nationally, in Florida, and in the Sample Counties and Schools Between 1975 and 1978 Compared with Enrollment Changes Between 1977 and 1978 Following the First Administration of the FSSAT

Groups	Enrollment Changes by Years[a]	
	1975-1978	1977-1978
National		
Total	-1.0	-1.0
Vocational	8.6	7.0
Florida		
Total	-0.7	-2.5
Vocational	4.5	3.8
20 Counties		
Total	-3.3	-4.8
Vocational	7.2	12.2
28 Schools		
Total	-6.3	-3.2
Vocational	-1.9	2.5

Note: FSSAT administered in 1977 for the first time

[a]Enrollment changes are expressed in percentages

Data for the 1975-1978 period also provided some insights into enrollment shifts among races. Asian and native American enrollments in schools participating in the study were either rare or non-existent. Enrollment changes by student category, by race and by year for each level of urbanization is presented in Tables 11, 12 and 13.

Table 11

Percentage of Enrollment Changes Between 1975 and 1978 by Student Category and Race in the Low Level by Urbanization Category

Race	Students	
	Non-Vocational	Vocational
White	2.6	-1.7
Black	-3.2	-20.2

Table 12

Percentage of Enrollment Changes Between 1975 and 1978 by Student Category and Race in the Middle Level of Urbanization

Race	Students	
	Non-Vocational	Vocational[a]
White	-15.6	-17.1
Black	-14.0	-23.8

[a]Clay County school data not available

Table 13

Percentage of Enrollment Change between 1975 and 1978 by Student Category and Race in High School of Urbanization Category

Race	Students	
	Non-Vocational	Vocational
White	-8.0	-7.5
Black	-8.2	-6.0
Hispanic	+9.4	+382.0

The data from Tables 11, 12, and 13 are combined in Table 14 to show the overall enrollment changes for the 28 sample schools by race for the period between 1975 and 1978.

Table 14

Summary of Percentage of Enrollment Changes by Race Between 1975 and 1978 in 28 Sample High Schools

Race	Students	
	Non-Vocational	Vocational
White	-8.3	-8.6
Black	-8.5	-8.1
Hispanic	+9.2	+380.7

The decline in White and Black vocational education enrollments between 1975 and 1978 in the 28 sample high schools was greater than in the counties from which these schools were drawn. Black and Asian total school enrollments increased while White, Hispanic, and American Indian enrollments declined (Table 15).

Table 15

Percentage of Enrollment Change Between 1975 and 1978 for Total School and Vocational Education Enrollment in 20 Counties of the 28 Schools by Race

Race	Enrollment	
	Total School	Vocational Education
White	-5.1	3.1
Black	0.3	5.6
Hispanic	-0.7	378.7
Asian	7.2	156.9
American Indian	-43.7	-55.0

Some changes in total school and vocational education enrollments did occur in the 20 counties in which the 28 schools were located following the first administration of the FSSAT in 1977. The percentage of enrollment changes between 1977 and 1978 are presented in Table 16.

Table 16

Percentage of Change in Total School and Vocational Education Enrollment Following the Administration of the First FSSAT in 1977 in the 20 Counties of the 28 Sample Schools by Race

Race	Enrollment Changes	
	Total School	Vocational Education
White	-2.3	8.5
Black	-4.9	8.4
Hispanic	-0.8	4.2
Asian	25.8	61.7
American Indian	-17.1	-52.6

Summary

Perceptions or beliefs about vocational education enrollment trends held by vocational education teachers, county vocational directors, and school principals varied. Some teachers (26.6%), principals (25.9%), and county vocational education directors (45%) believed that the enrollments in vocational education had declined as a consequence of FSSAT. These data do not support that belief. The majority of teachers (72.4%), principals (76.9%), and vocational directors (68.5%) attributed vocational education enrollment declines to factors other than the FSSAT. Vocational education directors (50.0%), more than teachers (33.5%), or principals (25.0%) indicated that enrollment in vocational education courses declined because students who failed the FSSAT were required to participate in remediation programs. Only a small percentage of the respondents, teachers (18.7%), principals (11.1%), and vocational education directors (20.9%) believed that enrollments in vocational education courses had decreased at a greater rate than enrollment in other elective courses since the implementation of the FSSAT. Fewer teachers (12.6%) than principals (14.8%) indicated that enrollments in vocational education courses had increased at a greater rate than in elective courses following the implementation of the FSSAT.

Perceptions of the extent of student withdrawal from vocational education courses as a consequence of the FSSAT did not appear to differ very much among teachers (28.2%), principals (25.9%), and directors (35.0%). Very few students indicated they withdrew from vocational education courses (items 3 and 56) until after they had failed the FSSAT (item 63). Student responses for items 3, 56, and 63 required a "Yes" or "No" response. These items and the percentage of responses by students are presented in Table 17.

Table 17

Percentage of Responses by Vocational and Non-Vocational Students to Questions Concerning Withdrawal from Vocational Education Courses

	Yes	
	Vocational	Non-Vocational
1. Dropped the vocational education courses in which I was enrolled in order to take a special (remedial) course.	3.4	5.4
2. Helped me decide to drop out of vocational education courses.	5.4	5.1
3. Did you drop out of vocational education courses in order to prepare for a retake of the Functional Literacy Test?	16.1	21.0

It was the common perception that most vocational educators believed that vocational education enrollments had decreased disproportionately after the implementation of the FSSAT. However, less than 20% of the teachers, principals, and vocational education directors indicated that there was a disproportionate increase or decrease in enrollments in vocational education courses, or in other elective courses. Disproportionate enrollment changes did occur between 1975 and 1978, not only in the sample schools and counties, but in the state of Florida and nationally. These disproportionate enrollment changes cut across schools, programs, and races. Increases in vocational education enrollments did occur contrary to the beliefs of some vocational educators. Why vocational education personnel within the schools and counties involved in this study should hold such divergent views on the state of vocational education enrollments should be the subject of additional research. Those school administrators who disclaimed any reduction in enrollment numbers did, in fact, experience the greatest enrollment decline in their schools.

The question posed in this study concerning the disproportionate enrollment change between vocational and total school enrollments following the administration of the FSSAT is answered. That is, while total school enrollments declined, vocational education enrollments increased. Although no definite causal relationship can be established, it appears that a possible relationship exists between the FSSAT and enrollment changes, however, the FSSAT was not a strong deterrent.

Identification of Remedial Practices

Another purpose of this study was to identify remedial practices used in Florida public schools at the secondary level. During the introductory interviews with superintendents, principals, and vocational education directors, a question was posed that requested the identification of the various remedial practices in use at that time in the schools. Based upon those responses, a list of remedial practices currently employed in the schools was prepared. The remedial practices include:

- enrollment in special remedial courses,
- enrollment in vocational courses to learn basic skills,
- withdrawal from vocational courses,
- withdrawal from electives other than vocational courses,
- remediation presented during regular classes,
- remediation presented outside of regularly scheduled classes,
- counseling on how to pass the FSSAT,

- classroom guidance on how to pass the FSSAT,
- special skills classes,
- vocational education teachers conducted remedial classes,
- new teachers are hired to conduct remedial classes,
- volunteer aides are utilized to conduct remedial classes,
- workshops sponsored by the county in order to assist teachers in preparing remedial curricula,
- area vocational education centers provided remediation courses, tutoring,
- individual manpower training systems (IMTS) provided remediation in mathematics and reading programs,
- summer school remedial courses,
- alternative education programs for students unsuccessful in specific courses,
- remediation conducted in adult education centers,
- teachers use questions comparable to those on the FSSAT to prepare students for the test, and
- schools within a district work cooperatively to develop and provide quality remedial assistance

In order to ascertain the extent to which these, or other remedial practices were employed, the sixty-seven county vocational education directors in Florida were requested to complete a fifteen item survey instrument which sought general information about remedial practices implemented in secondary level public schools for those students who failed the FSSAT. The final two items on the instrument were open-ended questions requesting the participant to list additional remedial practices not covered in the instrument, and to propose new remedial practices that might be implemented. Ninety three (93%) percent of the vocational education directors responded to the question.

The survey instrument is presented in Table 18 with the percent responses on each item. A list of currently employed remedial practices follows the survey instrument.

Table 18

Percentage of Use of Remedial Practices at the Secondary Level in the 67 School Districts as Perceived by Vocational Education Directors

1.	New remedial courses were designed and implemented for students who failed the FSSAT.	92% Yes	8% No
2.	New teachers were hired to conduct remedial courses.	84% Yes	16% No
3.	Volunteer aides were used to conduct remedial courses.	23% Yes	77% No
4.	Teachers incorporated new remedial materials into their regular classes.	75% Yes	25% No
5.	Teachers taught remedial courses after school.	23% Yes	77% No
6.	Teachers developed their own remedial materials.	74% Yes	26% No
7.	Students withdrew from vocational education courses in order to take remedial courses.	44% Yes	56%No
8.	Students withdrew from elective courses other than vocational education courses in order to take remedial courses.	54% Yes	46% No
9.	Students were offered remedial assistance outside of regular class hours.	48% Yes	52% No
10.	Students who fail the FSSAT are permitted to enroll in elective courses other than vocational education courses.	94% Yes	6% No
11.	Students who fail the FSSAT are permitted to enroll in vocational education courses.	95% Yes	5% No
12.	Remediation was not offered because of budgetary constraints.	2% Yes	98% No
13.	Remediation was not offered because of a lack of qualified personnel.	2% Yes	98% No

The remedial practices currently employed in secondary public schools in Florida according to county vocational education directors as reported in the 15 item questionnaire include:

1. Remediation through adult education,
2. Basic skills in science and social studies programs,
3. Special remedial classes,
4. Periodic remedial classes,
5. Tutoring outside of regular classes,
6. Small group sessions outside of regular classes,
7. Students expected to require remediation are identified in grades 9 and 10 and then placed in courses designed to prepare them for the mathematics and reading sections of the FSSAT,
8. Aides are hired with compensatory education funds,
9. Individual Manpower Training Systems,
10. Summer sessions
11. Peer assitance
12. Remediation acquired through area vocational education centers,
13. Vocational education teachers provide instruction in areas relevant to vocational education courses,
14. Teacher workshops for developing appropriate remedial materials, and
15. Remediation part of regular classes.

The remedial practices proposed for adoption by some vocational education directors were already being practiced in the schools in some counties. In fact, an overlap existed between the remedial practices currently used, and those proposed for adoption. Among the remedial practices proposed for adoptions were: summer sessions, expansion of the IMTS laboratories, recruit more volunteer aides, and commence preparation for the FSSAT in the earlier grades.

A review of responses by vocational education teachers, prin-

cipals, and vocational education directors regarding the use of remedial practices revealed some discrepancies in their assessment of the frequency of use of these practices. The specific items addressing the use of remedial practices, and the percent response by teachers, principals, and directors found in the original survey instrument administered to the vocational teachers, principals, and county vocational directors are presented in Table 19. In general, principals believed that remedial practices are being used more often than did vocational education teachers and vocational directors. There was wide variation among the responses of the participants regarding the utilization of vocational education courses for remediation (item 46), whereas the responses were almost identical concerning the use of vocational education teachers in remediation (item 45).

Table 19

Percentage of Usage of Remedial Practices as Reported by Vocational Education Teachers, Vocational Directors, and Principals

Variable	Remedial Practices	Percentage of Use		
		Teachers	Principals	County Vocational Directors
29	Students who fail the FSSAT are withdrawn from vocational education classes in order to take remedial work.	41.4	22.2	35.0
32	Teachers are expected to teach remedial classes during regularly scheduled hours.	61.6	29.6	15.5
33	New teachers are hired to conduct remedial classes in this school.	54.2	70.4	57.9
34	Volunteer aides are utilized to assist teachers in conducting remedial classes.	22.3	25.9	30.0
35	Teachers are often released from regularly assigned classes in order to conduct remedial classes.	21.8	22.2	15.0
36	Students are offered remedial assistance outside of regular class hours.	36.9	63.1	45.0

Table 19
(continued)

Variable	Remedial Practices	Percentage of Use: Teachers	Principals	County Vocational Directors
38	Teachers in this school provide practice sessions using questions comparable to those on the FSSAT to assist students in preparing for the FSSAT.	58.8	84.6	33.3
39	Our school has encouraged students to participate in remedial opportunities offered through area vocational education centers	32.9	38.5	36.9
40	Our school works cooperatively with other schools in the area (county) to develop and provide quality remedial assistance for students who failed the FSSAT.	39.7	80.5	73.7
41	Some students are delaying their vocational preparation until after high school in order to allow time for preparing for the FSSAT.	21.3	14.8	20.0
45	Vocational education teachers in this school conduct most of the remediation classes for students who fail the FSSAT.	4.6	0.0	0.0
46	Vocational education courses are often utilized in this school to teach the basic skills necessary for students to pass the FSSAT.	30.6	22.2	10.0

Remedial Practices and Student Use

Some remedial practices were used more frequently than others by the students; for example, receiving remediation outside regular class The frequency with which thirteen remedial practices were used is summarized according to level of urbanization (Table 20) and student category (Table 21).

Table 20

Remedial Practices and Percentage of Use as Reported by All Students by Level of Urbanization

Variable	Remedial Practices	Level of Urbanization		
		Low (N=110)	Medium (N=174)	High (N=639)
V1	Enrolled in special remedial courses	4.1	22.3	22.0
V2	Enrolled in vocational education courses for remediation	9.4	20.1	20.0
V3	Withdrew from vocational education courses	3.1	3.6	3.9
V4	Withdrew from electives other than vocational education	3.1	6.7	11.7
V5	Received remediation in general education courses	33.1	45.2	37.9
V9	Did not receive remediation	1.6	3.6	7.4
V10	Studied and reviewed material on my own time	40.9	47.1	47.8
V35	Received remediation outside regular class time	43.7	50.7	49.2
V36	Remediation a part of vocational education courses	33.5	39.6	37.2
V38	Counseling prior to taking the FSSAT	57.0	62.4	60.0
V39	Counseling for students who failed the FSSAT	67.2	69.1	67.5
V40	Received information about FSSAT before taking test	70.0	73.5	70.0
V63	Dropped vocational education to prepare for retake of FSSAT	11.8	17.9	20.7

Table 21

Remedial Practices and Percentage of Use as Reported by Vocational and Non-Vocational Students

Variable	Remedial Practices	Students	
		Vocational (N=537)	Non-vocational (N=634)
V1	Enrolled in special remedial courses	20.9	21.5
V2	Enrolled in vocational education courses for remediation	22.0	16.2
V3	Withdrew from vocational educati courses	3.4	5.4
V4	Withdrew from an elective other than vocational education	9.9	9.7
V5	Received remediation in a general education course	39.3	38.4
V9	Did not receive remediation	5.8	6.2
V10	Studied and reviewed material on my own	49.8	44.5
V35	Received remediation outside of regular class time	51.0	47.0
V36	Remediation a part of vocational education courses	36.0	38.0
V38	Counseling prior to taking the FSSAT	62.0	59.0
V39	Counseling for students who fail the FSSAT	67.0	69.0
V42	Received information prior to taking the FSSAT	75.0	66.0
V63	Dropped vocational education to prepare for retake of FSSAT	16.5	21.1

Remedial Practices and Use by Students According to Race

The remedial practices appeared to be used with equal frequency by both vocational and non-vocational students; however, this was not the case among the students of various races (Tables 22 and 23). The use of remedial practices was not independent of ($p < .05$) student race for eleven of the thirteen remedial practices listed. For example, among vocational education students more Blacks and Hispanics obtained remediation in vocational education courses than did White, Asian, or American Indian students. A greater percentage of Black and Hispanics than Whites among non-vocational education students indicated that no remediation was provided.

Black and Hispanic vocational education students indicated a greater use of most of the remedial practices than did White students. The amount of remedial practices use was even more pronounced among non-vocational students of the same races. It should be pointed out that the values recorded for Asian and American Indian students are greatly exaggerated because so few students of these races participated in the study.

It is worth noting that while a low percentage of students (4.4%) withdrew from vocational courses to prepare for the FSSAT, a higher percentage (19.9%) of students who failed the FSSAT dropped vocational courses in order to prepare for a retake of the test. This practice occurred more among Black and Hispanic vocational students, and White and Hispanic non-vocational students. Some non-vocational education students selected vocational education courses as electives in order to satisfy credit requirements for graduation. Participation in those elective vocational education courses was usually discontinued when non-vocational education students failed the FSSAT.

Remedial Practices and the Use by Students According to Sex

When the responses of vocational and non-vocational education students were compared on the basis of sex regarding the frequency of use of various remedial practices, it was determined that the remedial practices were used with similar frequency by both males and females (Table 24).

Teachers out-numbered principals and vocational education directors (64%, 22%, and 50% respectively) in feeling that vocational education programs could facilitate the development of competencies needed in basic skills because of the "real world" approach in vocational education. However, fewer principals and vocational education directors than teachers (22%, 20%, and 42% respectively) would support the idea of adding more vocational education courses to school curriculum in order to meet the needs of students who fail the FSSAT.

Table 22

Remedial Practices and Percentage of Use by Vocational Education Students According to Race

Variable	Remedial Practices	RACE					X^2	Significance
		White (N=338)	Black (N=134)	Hispanic (N=38)	Asian (N=5)	Indian (N=5)		
V 1	Enrolled in a special remedial course	11.0	47.8	15.8	40.0	25.0	79.6	.000
V 2	Enrolled in vocational education courses for remediation	18.5	30.1	23.7	40.0	0.0	9.8	.042
V 3	Withdrew from vocational education courses	1.2	8.8	2.6	20.0	0.0	21.1	.003
V 4	Withdrew from an elective other than vocational education	4.2	23.7	10.5	0.0	0.0	43.1	.000
V 7	Received remediation in a general education course	32.9	56.3	34.2	60.0	40.0	9.6	.04
V 9	Did not receive remediation	3.3	10.3	15.8	0.0	0.0	15.9	.003
V10	Studied and reviewed material on my own	47.6	51.1	68.4	80.0	40.0	8.4	.39
V35	Received remediation outside of regular class time	52.5	45.8	44.8	80.0	40.0	30.4	.01
V36	Remediation a part of vocational education course	32.2	44.1	39.5	25.0	40.0	31.1	.01
V38	Counseling prior to taking the FSSAT	58.6	71.1	57.9	50.0	40.0	33.8	.005
V39	Counseling for students who fail the FSSAT	67.7	68.4	55.3	80.0	60.0	30.0	.01
V40	Received information about the FSSAT prior to taking the test	74.0	77.2	78.9	60.0	100	30.7	.01
V63	Dropped out of vocational education to prepare for retake of FSSAT	7.7	24.2	25.0	0.0	0.0	5.0	.28

Note: V35 through V40 were Likert items and the SA and A responses were combined.

Table 23

Remedial Practices and Percentage of Use by Non-Vocational Students According to Race

Variables	Remedial Practices	RACE					X^2	Significance
		White (N=459)	Black (N=126)	Hispanic (N=42)	Asian (N=4)	Indian (N=1)		
V 1	Enrolled in a special remedial course	14.2	51.2	11.9	0.0	100.0	88.0	.0000
V 2	Enrolled in vocational courses for remediation	12.7	28.3	16.7	25.0	100.0	23.5	.0003
V 3	Withdrew from vocational education courses	3.3	13.4	4.8	0.0	0.0	20.4	.001
V 4	Withdrew from an elective other than vocational education	5.7	25.0	7.1	0.0	100.0	51.7	.0000
V 7	Received remediation in a general education course	31.9	56.8	50.0	50.0	100.0	37.5	.0000
V 9	Did not receive remediation	4.2	10.2	16.7	0.0	0.0	15.1	.01
V10	Studied and reviewed material on my own	43.4	42.9	64.3	25.0	0.0	9.2	.10
V35	Received remediation outside of regular class time	47.7	46.8	43.0	50.0	0.0	54.0	.0001
V36	Remediation part of vocational education course	35.2	50.8	33.3	25.0	0.0	26.7	.140
V38	Counseling prior to taking the FSSAT	54.7	65.4	83.3	75.0	0.0	60.0	.0000
V40	Received information prior to taking the FSSAT	61.3	77.8	73.9	78.0	0.0	56.0	.0000
V63	Dropped out of Vocational education to prepare for retake of FSSAT	20.6	16.7	75.0	0.0	0.0	3.1	.53

Note: V35 to V40 were Likert items and the SA and A responses were combined

Table 24

Percentage of Use of Remedial Practices by Student Category by Sex

Variable	Remedial Practices	Students			
		Vocational		Non-Vocational	
		Male	Female	Male	Female
V 1	Enroll in special remedial course	20.3	22.4	16.9	25.8
V 2	Enroll in vocational education courses for remediation	19.9	23.9	16.0	16.0
V 3	Withdrew from vocational education courses	2.4	4.4	5.5	5.2
V 4	Withdrew from an elective other than vocational education	11.8	7.7	7.5	11.7
V 7	Received remediation in general education courses	41.0	39.7	36	40.4
V 9	Did not receive remediation	7.3	4.8	5.9	6.5
V10	Studied and reviewed material on my own	51.0	49.5	44.8	44.6
V35	Received remediation outside of regular class time	53.1	48.9	47.1	47.8
V36	Remediation a part of vocational education courses	34.9	36.5	34.1	47.8
V38	Counseling prior to taking the FSSAT	62.8	60.6	59.3	58.6
V39	Counseling for students who fail the FSSAT	71.8	63.1	68.4	69.0
V40	Received information about the FSSAT prior to taking the test	76.1	74.7	68.2	62.8
V63	Dropped out of vocational education courses to prepare for retake of FSSAT	13.2	17.4	23.3	20.0

Although vocational education courses are not primary sources of remediation, 19 percent of all the students in this study enrolled in vocational education courses in order to learn the basic skills. In fact, 22 percent of the vocational education students and 16 percent of the non-vocational education students indicated that they enrolled in vocational education courses in order to acquire the basic skills required for graduation.

Vocational education teachers and county vocational education directors believed that each of the remedial practices were employed with essentially the same frequency; however, principals rate the frequency of use higher in most cases. This may be due to the fact that the principals are considering the total school population and not just vocational education students.

The withdrawal of students from vocational education courses for remediation has been cited as one of the more common practices occurring in Florida schools. It seems logical to inquire about the feasibility of using vocational education courses as a source of remediation, while at the same time continuing to develop specific vocational skills in the students. While only a few vocational teachers (23%), principals (37%), and vocational education directors (11%) stated that students could receive remediation in vocational courses, more teachers (54%) believed that remedial practices could be incorporated in existing vocational education courses.

In fact, 36 percent of the vocational teachers stated that students chose to enroll in vocational courses in order to learn the basic skills required to pass the FSSAT. Thirty percent of the vocational education directors concurred with the teacher's position, however, only 11 percent of the principals sampled agreed.

Remedial Practices as Predictors of Enrollment

The data afforded an opportunity to explore the possibility that the remedial practices considered in this study might serve as predictors of future vocational education enrollment trends. Thirteen commonly employed remedial practices were identified for analysis. They are:

V 5 Students who fail the FSSAT are permitted to enroll in vocational education classes

V 8 Students are encouraged to participate in remedial programs offered at area vocational education centers

V17 Counseling prior to taking the FSSAT

V29 Students are withdrawn from vocational education classes for remediation

V32 Remediation is provided during regularly scheduled classes

V33 New teachers are hired to conduct remediation classes

V34 Volunteer aides are utilized to provide remediation

V35 Teachers are released from regular duties in order to provide remediation

V36 Remediation is offered outside regular class time

V38 Questions comparable to those on the FSSAT are used in preparing students for the FSSAT

V40 County schools cooperate to provide remediation

V46 Vocational courses are used to provide remediation

Stepwise regression analyses were conducted in which percentage of enrollment change between 1977 and 1978 was the criterion variable and the thirteen remedial practices were the predictor variables. The data were derived from the responses to the thirteen questions addressing types of remedial practices which appeared on the questionnaire administered to the school principals and county vocational education directors. The percentage of change in enrollment between 1977 and 1978 was coded as 1, 0, -1 (enrollment increase, no change, enrollment decrease respectively). The stepwise regression procedure was used in order to isolate variables (remedial practices) that might serve as predictors of enrollment trends. In this procedure the variable that explains the greatest amount of variance about enrollments is identified first. The remaining predictor variables (remedial practices) are introduced in the order of their importance, that is, each predictor variable that is introduced accounts for a portion of the variance about enrollments. The variables accounting for the most variance are introduced first and therefore are the important variables.

The results of the analyses on the responses of the principals and vocational education directors differed markedly. For the ratings of remedial practices of principals, the single best enrollment change predictor was V29(students are withdrawn from vocational education courses for remediation) ($r = .43$, $p < .05$). The second step indicated that V29 and V38 (questions comparable to those on the FSSAT are used to prepare students for the FSSAT) ($R^2 = .27$) was the best combination. Thus, adding V38 to V29 raised the R^2 values from .19 to .27 with the remaining variables accounting for an additional

20 percent of the variance. All thirteen of the variables accounted for 47 percent of the variance.

As previously stated, V29 (students are withdrawn from vocational education courses for remediation) is the single best predictor of enrollment change. This information is obtained from the beta weight (-.3560). In this study, a negative beta weight is interpreted to predict an enrollment increase; whereas a positive beta weight reflects an enrollment decline. Therefore, based upon the responses of principals, withdrawing students from vocational classes in order to take remediation (V29) was predictive of enrollment increases; however, using questions comparable to those found on the FSSAT in order to prepare students for the test (V38) was predictive of enrollment decreases.

The extent to which a particular remedial practice contributes to enrollment increases or decreases can also be ascertained. The values appearing in the "additional variance" column under the heading Principals in Table 25 reflect the percentage of variance enrollment that can be accounted for by V29 and V38. Withdrawing students from vocational education courses for remediation accounts for 18.94 percent of the variance in enrollment increases, while 7.81 percent of variance in enrollment decline was associated with the remedial practices of providing students with questions like those found on the FSSAT in order to prepare them for the test (V38). The R^2 values are cumulative; that is, adding .0781 to .1894 results in .2673. Therefore, V29 and V38 in combination account for 26.7 percent of the variance in vocational enrollment.

The single best enrollment change predictor for the ratings of remedial practices obtained from the vocational education directors was also V29 (R^2 = .27). The second step added V34 (volunteer aides are used to provide remediation) (R^2 = .36), the third step added V38 (questions comparable to those used on the FSSAT are used in preparing students for the FSSAT) (R^2 = .47), the fourth step added V21 (remedial materials are developed by teachers) (R^2 = .67), and the fifth step added V33 (new teachers are hired to provide remediation) (R^2 = .79). The remaining steps explained an additional 20 percent of the total variance.

The beta weights for two of the five variables (V29 and V38) presented in Table 25 are negative. Therefore, based upon the response of county vocational education directors, withdrawing students from vocational classes for remediation (V29), and using questions comparable to those found in the FSSAT in order to prepare students for the FSSAT (V38), resulted in enrollment increases. The remaining three remedial practices: V34 (volunteer aides are used to provide remediation), V21 (teachers prepare their own remedial materials), and V33 (new teachers are hired to provide remediation) were predictive of enrollment declines.

Table 25

Remedial Practices as Predictors of Enrollment in Vocational Education Courses
Based Upon Responses by School Principals and County Vocational Directors

Principals						County Vocational Education Directors					
Predictor Variables	Beta Weights	Additional Variance	R^2	Probability of F to Enter	Significance	Predictor Variables	Beta Weights	Additional Variance	R^2	Probability of F to Enter	Significance
V29	-.3560	.1894	.1894	5.13	.034	V29	-.4134	.2693	.2693	5.53	.033
V38	.4246	.0781	.2673	2.24	.038	V34	.3052	.0877	.3570	1.90	.045
						V38	-.5387	.1179	.4749	2.91	.034
						V21	.6081	.2017	.6767	7.48	.006
						V33	.3582	.1164	.7931	6.19	.002

Thus, two of the thirteen remedial practices were found to be predictors of enrollment when data obtained from principals were employed in the analysis; however, the other remedial practices in combination did not contribute significantly as predictors of future enrollment trends. On the other hand, all of the variance (99%) in enrollment is accounted for by the ratings of the remedial practices given by vocational education directors. This would imply that the remedial practices are additive in accounting for variance in enrollment change. The precision in predicting the direction of enrollment change is more reliable based upon responses made by the vocational education directors than by the principals. Thus, beta weights can be used in the process of selecting remedial practices that will enhance enrollments. That is, as beta weights, (regression coefficients) of a particular variable (remedial practice) increase or decrease there will be a corresponding increase or decrease in vocational enrollment.

An additional stepwise regression analysis was performed using percent enrollment change as the criterion variable and the remedial practices as the predictor variables. The responses provided by the principals and vocational education directors served as the data source. In this analysis the remedial practices were used to predict vocational education enrollment. While only one remedial practice was identified as a predictor variable for vocational education enrollments based on response data gathered from principals, three remedial practices were identified as enrollment predictors using the response data of the directors. The single best vocational education enrollment predictor was V8 (students are encouraged to participate in remedial programs offered at area vocational education centers) ($r = .53$, $p < .05$). The second step added V34 (volunteer aides are utilized to provide remediation) ($R^2 = .49$) and the third step added V21 (remedial materials are developed by teachers themselves) ($R^2 = .62$). All thirteen variables accounted for 98.9 percent ($R^2 = .9891$) of the total variance. The results of the second regression analysis are presented in Table 26.

In the second regression analysis the beta weights for the predictor variables (remedial practices) were positive. Therefore, V8 (students are encouraged to participate in remedial programs offered at area vocational centers), V34 (the use of volunteer aides), and V21 (teachers preparing their own remedial materials) were predictive of enrollment declines.

The second regression analysis was based on percent change in enrollment as opposed to the coded (1, 0, -1) enrollment changes used in the first regression analysis. Only V34 (use of volunteer aides) was a common predictor of enrollment changes for vocational education enrollments using principal and director response data. Variable 34 did not appear as a predictor variable in the first analysis using

Table 26

Remedial Practices as Predictors of Enrollment in Vocational Education Courses Based Upon Responses by School Principals and County Vocational Education Directors by Percent Changes in Enrollments

Principals						County Vocational Education Directors					
Predictor Variables	Beta Weights	Additional Variance	R^2	Probability of F to Enter	Significance	Predictor Variable	Beta Weights	Additional Variance	R^2	Probability of F to Enter	Significance
V34	3.159	.2889	.2889	8.94	.007	V 8	6.4763	.2830	.2830	5.92	.028
						V34	7.1414	.2088	.4918	5.75	.031
						V21	5.9775	.1277	.6195	4.36	.057

responses by principals. Four variables (V8, V21, V33, and V34) appeared in both analyses as predictors of enrollment based on response rating of county vocational education directors. As in the first analysis, the precision in predicting the direction of enrollment change is more reliable using vocational education director responses than those made by principals.

Holding Power of Vocational Education Programs

Principals and vocational education teachers from the schools participating in this study were requested to rank order the three most outstanding vocational education programs in their school. County vocational education directors were requested to do the same for the programs in their county. The program rankings were to be analyzed in conjunction with enrollment changes in order to determine the "holding power" of vocational education programs; that is, are students who enroll in a "strong" vocational education program more likely to re-enroll in that program after failing the FSSAT, than are students who enrolled in "weak" programs?

The vocational education programs ranked as outstanding by vocational education teachers (Table 27), by principals (Table 28), and vocational education directors (Table 29) were redefined as "strong" and coded (1). The programs that were not ranked were defined as "weak" and were coded (0).

Enrollments in seven vocational education program areas were computed for 1977 and 1978, and the percent change coded (1) for enrollment increases and (0) for enrollment decreases. A computer analysis (SPSS) was performed in order to assess program strength on enrollment by using the coded program strengths (1,0), enrollment changes (1,0), and the outstanding program rankings (1, 2, 3) by the principals, teachers, and vocational education directors (Table 30). The results of this analysis showed that among programs rated as "strong" by school principals, those programs appeared to have little influence in maintaining or increasing enrollment in vocational education. However, of the programs ranked "weak" by the same principals, enrollment increases occurred in over twice as many programs as decreases. The " trong" rank was assigned by principals more often than a "weak" rank to the vocational programs.

The programs rated as "strong" by vocational teachers did not appear to influence enrollments. Enrollment increases were double the enrollment decreases in programs rated as "weak" by vocational teachers. The Business Office program experienced the greatest enrollment decrease among those programs rated as "strong", while Home Economics increased significantly.

Programs rated as "strong" by vocational education directors were comparable to those of principals, and also appear to have little influence on enrollment changes.

Table 27

Vocational Program Ratings by Vocational Teachers and Enrollment Changes by Program Strengths

Vocational Programs	Program Ratings by Vocational Teachers		Number of Teachers	Enrollment Changes by Program Strength			
				No. of Weak Programs		No. of Strong Programs	
	Weak	Strong		Decrease	Increase	Decrease	Increase
AG	55	53	108	4	51	17	36
BO	64	141	205	50	14	96	45
HE	51	158	209	19	32	43	115
DE	80	38	118	25	55	7	31
HO	41	19	60	10	31	8	11
IA	76	60	136	42	34	41	19
T&I	64	94	158	13	51	20	74

Table 28

Vocational Program Ratings by Principals and Enrollment Changes by Program Strengths

Vocational Programs	Program Ratings by Principals		Number of	Enrollment Changes by Program Strengths			
				No. of Weak Programs		No. of Strong Programs	
	Weak	Strong	Principals	Decrease	Increase	Decrease	Increase
AG	6	8	14	1	5	2	6
BO	1	26	27	0	1	19	7
HE	8	19	27	3	5	5	14
DE	11	4	15	2	9	2	2
HO	5	2	7	2	3	0	2
IA	6	10	16	3	3	7	3
T&I	7	11	18	2	5	2	9

Table 29

Vocational Program Ratings by County Vocational Directors and Enrollment Changes by Program Strengths

Vocational Programs	Program Ratings by County Vocational Directors		Number of County Vocational Directors	Enrollment Changes by Program Strength			
				No. of Weak Programs		No. of Strong Programs	
	Weak	Strong		Decrease	Increase	Decrease	Increase
AG	12	6	18	5	7	0	6
BO	0	19	19	0	0	17	2
HE	9	10	19	2	7	2	8
DE	9	4	13	4	5	1	3
HO	6	4	13	4	2	1	3
IA	11	6	17	4	7	4	2
T&I	2	12	14	1	1	3	9

Table 30

Vocational Education Programs Ranked as Outstanding by Vocational Teachers, County Vocational Directors, and Principals in Three Choices

Choice	Program[a] Rankings by Vocational Teachers			Program Rankings by Vocational Directors			Program Rankings by Principals		
	1	2	3	1	2	3	1	2	3
1	BO(34)	T&I(18)	HE(16)	BO(42)	T&I(26)	IA(11)	BO(56)	AG(19)	DE(7) IA(7)
2	BO(33)	HE(23)	DE(10)	BO(32)	T&I(26)	HE(11) HO(11) IA(11)	HE(26)	BO(22) T&I(22)	DE(7) DA(7)
3	BO(21)	HE(18) IA(18)	AG(9) DE(9)	HE(37)	T&I(21)	Others(5)	HE(33)	BO(19) IA(19)	T&I(7)

Note: Numbers in parentheses represent percent of times program chosen to be ranked

[a]program abbreviations are BO(Business Office), HE(Home Economics, T&I (Trades and Industry), AG(Agriculture), HO(Health), IA(Industrial Arts), DE(Distributive Education).

The results of the Chi Square analysis (program strengths by enrollments) (Table 31) indicate that vocational programs perceived as "strong" do not appear to influence vocational enrollments or re-enrollments. Actually, more enrollment increases occurred in programs identified as "weak" by respondents. The one program rated "strong" by all respondents which experienced the greatest declines in enrollment was Business Office. However, enrollment increased in AG, DE, and T&I although these programs had been ranked as being "weak" by a number of vocational education teachers.

Vocational teachers, principals, and county vocational directors responded affirmatively (77%, 96%, and 95% respectively) when asked if students who failed the FSSAT were permitted to enroll in vocational education courses. However 55 percent of the vocational education students who failed the test indicated that they would not enroll in vocational education courses again, and 61 percent of the non-vocational education students who failed indicated that they would not enroll in any vocational education courses. In fact, 78 percent of vocational education students stated that remediation was unavailable in vocational education courses. This might contribute to the perception that vocational education courses do not appear to possess a "holding power" that will influence enrollment positively.

Students Deterred from Vocational Education Courses

The question of whether or not students are deterred from enrolling in vocational education courses because of the anticipated need to prepare for the FSSAT revealed that only 5.1 percent of the students participating in the study were deterred. This result appears to agree with the perception of teachers, principals, and county directors who reported that not many students were deterred, the percentages being 76.4, 82.5, and 74.1 respectively.

Preparation requirements for taking the FSSAT accounted for 40 percent of the reasons why students were deterred from continuing in vocational education programs. Students indicated that requirements to prepare for the FSSAT left insufficient time to prepare for vocational education courses (item 19), to complete vocational courses (item 22) to work in cooperative education programs (item 21). Consequently, some students (the 18.8 percent who failed the FSSAT) dropped vocational education courses, while other students (7.0%) decided not to enroll in vocational courses, in order to satisfy preparation requirements for a re-examination on the FSSAT. Included among those who dropped vocational education courses were some non-vocational education students who had enrolled in one, or even two, vocational courses to satisfy elective requirements. These data are summarized in Table 32.

Table 31

Chi Square Analysis of the Influence of Program Strength on Vocational Enrollments

Based on Program Rankings by Vocational Teachers, Principals

and County Vocational Directors

Statistics	Programs and Participant Rankings																				
	AG			BO			HE			DE			HO			IA			T&I		
	T (108)	P (14)	D (18)	T (205)	P (27)	D (19)	T (209)	P (15)	D (19)	T (118)	P (15)	D (13)	T (50)	P (7)	D (10)	T (136)	P (16)	D (17)	T (158)	P (18)	D (14)
χ^2	9.0	0	0	1.7	.20	0	1.4	.01	0	1.5	0	0	1.1	0	0	1.8	0	0	0	0	0
Significance	.00	0	0	.19	.64	0	.23	.90	0	.21	0	0	.27	0	0	.16	0	0	1.0	0	0

Note: Abbreviations: T (Teacher), P (Principal), D (Vocational Director)

Numbers in parentheses represent the number of respondents

AG (Agriculture), BO (Business Office), HE (Home Economics), DE (Distributive Education), HO (Health), IA (Industrial Arts), T & I (Trades and Industry)

Table 32

Percentage of Student Determent from Vocational Education Courses
by Total Enrollment, by Student Category, and
by Level of Urbanization

Variable	Reasons for Student Determent From Vocational Education Courses	Students			Levels of Urbanization		
		Total	Vocational	Non-Vocational	Low	Medium	High
V3	Dropped vocational courses	4.4	3.4	5.4	3.1	3.6	4.9
V6	Voluntarily withdrew from vocational courses	18.8	18.4	19.2	13.3	15.8	20.5
V19	Insufficient time to prepare for vocational courses	9.5	8.9	10.4	7.8	6.6	10.5
V21	Unable to work on cooperative vocational programs	5.9	7.8	4.1	3.2	5.3	6.4
V22	FSSAT preparation requirement	8.0	8.5	7.6	6.2	6.2	8.8
V26	FSSAT requirement interfered with training opportunities	16.6	17.1	16.0	10.2	19.4	18.6
V49	Unable to continue in vocational course in order to prepare for the FSSAT	5.4	5.8	5.1	4.8	6.2	5.3
V50	Did not enroll in vocational course	4.0	3.9	4.1	0	3.1	4.9
V63	Dropped vocational course to take remediation	18.8	16.5	21.1	11.8	17.9	20.7

*Students who failed FSSAT (N=191)

Effectiveness of Remedial Practices

Teachers, principals, and vocational directors differed in their evaluation of the effectiveness of remedial practices used in the schools. Pearson product-moment correlations were computed relating the extent of remedial practices when used to the survey responses of the teachers, principals, and vocational directors. The correlations between remedial practices and the response were generally low. Counseling prior to the FSSAT, releasing teachers from their regular duties in order to provide remediation, and conducting remediation outside of classes were considered to be moderately effective. The correlations for the effectiveness of the remedial practices are presented in Table 33.

Repetition of Remedial Practices

Pearson product-moment correlations were computed relating the extent of use of remedial practices to the response by the participants as to whether or not the remedial practices employed by the school will be repeated the following year. The correlations were generlly low (Table 34). Based on a comparison of the data in Tables 33 and 34 it appears that some of the remedial practices even though considered to be effective, e.g., releasing teachers from regular duties in order to provide remediation, or providing remediation outside of regular class time, might not be repeated the following year.

Discussion

The purpose of this study was to assess the impact of the FSSAT and subsequent remediation practices upon enrollment in vocational education programs at the secondary level. The study was specifically designed to investigate types of remedial practices utilized as a consequence of the FSSAT, whether or not students were deterred from taking vocational education courses in order to prepare for the FSSAT, if disproportionate enrollment increases or decreases occurred in vocational education as a consequence of the FSSAT, if enrollment increases or decreases in vocational education were dependent upon practices employed for remediation, if the "strength" of vocational education courses was sufficient to entice students who failed the FSSAT back into vocational education courses, and if the remedial practices worked, would they be worth repeating in the following year.

While total secondary level enrollments continue to decline in Florida, enrollments in vocational education programs rose although not at a pace comparable to that on the national level. The expected enrollment decline in vocational education programs anticipated by vocational education administrators did not materialize after the implementation of the FSSAT. In 1978, the first year after the

Table 33

Pearson Product Moment Correlations for the Extent of Use of Remedial Practices with the Overall Effectiveness of Remedial Practices Utilized

	Remedial Practices	Teachers (N=215)	Principals (N=27)	County Vocational Directors (N=20)
V 5	Students who fail the FSSAT are permitted to enroll in vocational education classes	.13*	.29	-.10
V 8	Students are encouraged to participate in remedial programs offered at area vocational education centers	.22***	-.08	.30
V17	Counseling prior to taking the FSSAT	.44***	.38	.68***
V29	Students are withdrawn from vocational education classes for remediation	-.04	.29	-.39*
V32	Remediation is provided during regularly scheduled classes	-.09	-.08	-.26
V33	New teachers are hired to conduct remediation classes	.08	.31	-.03
V34	Volunteer aides are utilized to provide remediation	.01	.44	-.31
V35	Teachers are released from regular duties in order to provide remediation	-.08	.07	-.42
V36	Remediation is offered outside regular class time	.07	.07	-.45
V38	Questions comparable to those on the FSSAT are used in preparing students for the FSSAT	.33***	.11	-.24
V40	County schools cooperate to provide remediation	.15*	.00	.22
V46	Vocational courses are used to provide remediation	-.02	.15	-.25

*P< .05
***P< .001

Table 34

Pearson Product Moment Correlations for the Extent of Use of Remedial Practices with the Repeat Ability of Remedial Practices Utilized

	Remedial Practices	Teachers (N=215)	Principals (N=27)	County Vocational Directors (N=20)
V 5	Students who fail the FSSAT are permitted to enroll in vocational education classes	.15*	.27	-.20
V 8	Students are encouraged to participate in remedial programs offered at area vocational education centers	-.01	-.11	.21
V17	Counseling prior to taking the FSSAT	.09	.24	-.06
V29	Students are withdrawn from vocational education classes for remediation	.03	.14	.26
V32	Remediation is provided during regularly scheduled classes	.09	-.38	.62
V33	New teachers are hired to conduct remediation classes	.18	-.05	.12
V34	Volunteer aides are utilized to provide remediation	-.13*	-.07	-.19
V35	Teachers are released from regular duties in order to provide remediation	.08	-.19	.11
V36	Remediation is offered outside regular class time	-.05	-.17	.23
V38	Questions comparable to those on the FSSAT are used in preparing students for the FSSAT	.27***	-.04	.20
V40	County Schools cooperate to provide remediation	.19	-.15	.35
V46	Vocational Courses are used to provide remediation	.12*	-.19	.16

* $P < .05$
*** $P < .001$

administration of the FSSAT, Business Office enrollments increased while Home Economics and Trade and Industry enrollments declined across the state. Vocational education enrollment increases were spread across all vocational programs among the sample schools participating in this study. In fact, disproportionate enrollment changes did occur when vocational education enrollments were compared to total secondary level enrollments, that is, vocational education enrollments increased as total school enrollments declined.

It was also revealed that less than 20 percent of the students leave vocational education programs in order to prepare for the FSSAT, a larger percentage (55%) of those students who failed the FSSAT on their first attempt, indicated that they would not re-enroll in vocational education courses after retaking the FSSAT. This negative response supports the findings that even vocational programs rated as "strong" do not have sufficient "appeal" to entice students back into vocational education programs. In fact, vocational education teachers, county vocational education directors, and school principals appear to perceive the strengths of vocational programs to be of greater influence on enrollments than they were in reality.

A wide range of remedial practices are being utilized in Florida. While some remedial practices were reported to work by teachers and principals, there was no assurance that these practices would be repeated in the following year. The failure to repeat remedial practices suggests the need for continuation of, and standardization of, remedial practices. Variability in student performance on the FSSAT could be the result of the teacher, the instructional approach (remedial practice), or the remedial materials themselves. It is important that similar remedial practices be employed under comparable situations in order to identify learning problems for which new remediation can be prescribed. The effectiveness of individual remedial practices, as well as their influence on enrollment, needs to be investigated.

The quality and effectiveness of remedial materials is often influenced by situational factors; for example, by the number of students to be remediated in a class, by the complexity of the subject matter, by the learning environment, by the experience of the teacher as an instructional designer, and by the availability of resources. While 50 percent of the teachers indicated that they prepared their own remedial materials, approximately one-third of them believed that the Florida Department of Education should not be responsible for the design and development of the materials. Only 29.6 percent of the teachers indicated that the preparation of remedial materials was a source of extra work. While this may be the case, the effectiveness of these materials is subject to question. For instructional materials to be effective they should be designed systematically (Briggs and Wager, 1981). Such a syscematic approach

virtually insures that the intended learning outcomes will be achieved. The effectiveness of the materials should be assessed periodically through formative evaluation in order to determine if revisions are necessary, if the materials are obsolete, or if new materials need to be developed (Dick and Carey, 1978).

One of the difficulties encountered in this study was the lack of consistency in recording enrollment data at the state level. Three different formats for collecting enrollment data were used during the five year period under consideration. It has been only recently that unduplicated enrollment data has been recorded. Unduplicated data would be useful in future efforts to investigate the influence of the FSSAT on enrollments.

Recommendations

It is only possible to speculate that enrollment trends in vocational education which occurred in Florida between 1975 and 1978 will continue. Vocational education enrollment data is often duplicated, inconsistent between state agencies, and current data are not always accessible. An inclusive data collection instrument (one that is not changed every three years) is needed. This instrument should be available to all high schools and should include space for comprehensive demographic data as well as unduplicated enrollment data for both the total school and the vocational education programs within each school. These data should be made available for use more quickly than is currently the practice. At this writing, Florida vocational education enrollment data for the academic years of 1979-1980 and 1980-1981 were not available.

Additional questions were generated as a result of this study which need to be addressed. For example, why are the views among vocational education personnel so divergent regarding the numbers of students enrolled in their course? Why don't vocational education teachers or principals repeat remedial practices from one year to the next? How is the effectiveness of remedial practices determined? Why do vocational education programs perceived to be "strong" (outstanding) by vocational teachers, principals, and county vocational education directors lack the "holding power" to attract students or to maintain enrollment levels. Each of these questions needs to be addressed in future studies.

The learning difficulties experienced by students who fail the FSSAT need to be identified so that appropriate remedial instruction can be prescribed. Remedial instruction designed by teachers is subject to considerable variability if the teachers are unfamiliar with the principles of instructional design, or if needed resources,

such as time, funds, and support services are not available. It is recommended that teams of instructional designers, rather than teachers, be responsible for developing and evaluating remedial instruction.

In addition to systematically designing remedial instruction, some consideration should be given to standardizing remedial practices within the schools. To accomplish such a task it would be necessary to determine under what learning conditions, and with what type of learner, the remedial practices are effective. While evidence is lacking that anyone of the remedial practices, which resulted in increased vocational education enrollment, is more effective than another, two practices were identified that were predictive of enrollment increases: (1) withdrawing students from vocational education classes to take remediation, and (2) using questions comparable to those found in the FSSAT to prepare students for the FSSAT. It is recommended that those practices predictive of enrollment increases be continued, and that efforts be made to focus on only a few remedial practices that will lead to test success, rather than attempt to employ a variety of remedial practices. While students may learn the skills to pass the FSSAT, one wonders what other remedial practices might be found that are effective for increasing test success and learning. Thus the standardization of remedial practices should result in the uniform implementation of those practices across the state; that is, certain types of learners possessing specific learning difficulties in particular subject matter areas will have equal opportunities to achieve success on the FSSAT. It is further recommended that most remediation occur outside of regularly scheduled class time. The ramifications of such recommendations are extensive.

Finally, the fact that a substantial portion of vocational education students decide not to re-enroll in vocational education courses after failing the FSSAT needs to be investigated. Possibly the idea of incorporating the learning of basic skills in vocational education programs should be reconsidered.

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Appendix A

Follow-up Letter to School Superintendent

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206 South Woodward
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The Florida State University
Tallahassee, Florida 32306

As promised at the conclusion of our recent telephone conversation, a brief written statement outlining the research endeavor we discussed is being provided.

The Department of Educational Leadership/Vocational Education from the Florida State University is conducting a research project under the direction of Dr. Dollie B. Thomas. This research is being funded by the Division of Vocational Education of the state of Florida Department of Education. The purpose of this study is to assess the effect of the Florida State Student Assessment Test, and the differential impact of subsequent remediation practices in Florida, on changes in vocational education enrollment at the secondary level. Perceptions and experiences of students, vocational education teachers, principals, and county vocational education directors regarding the effects of the Florida State Student Assessment Test and remedial practices are also being sought.

Schools participating in this study throughout the state have been randomly selected. Twelfth grade classes, vocational education classes, and vocational education teachers will be randomly selected prior to the administration of the data collection instruments. Principals and county vocational education directors will be asked to complete the survey instrument. The survey instruments designed for each group of participants contain parallel items.

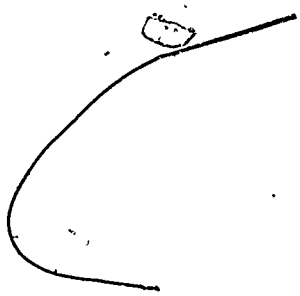
The individual responses provided by each participant will remain confidential; however, counties and schools will be coded for statistical purposes. A summary of the results of the study will be made available to the superintendent of schools and the principal of each participating school.

This letter is to confirm our arrangements for an appointment on
1980 with you and other appropriate members of your staff to discuss the possibility of your participation in this activity.

Sincerely,

Henry Maher
Research Assistant

/jks



Appendix B

Manual Presented to County Vocational Education Directors, School Superintendents, and Principals

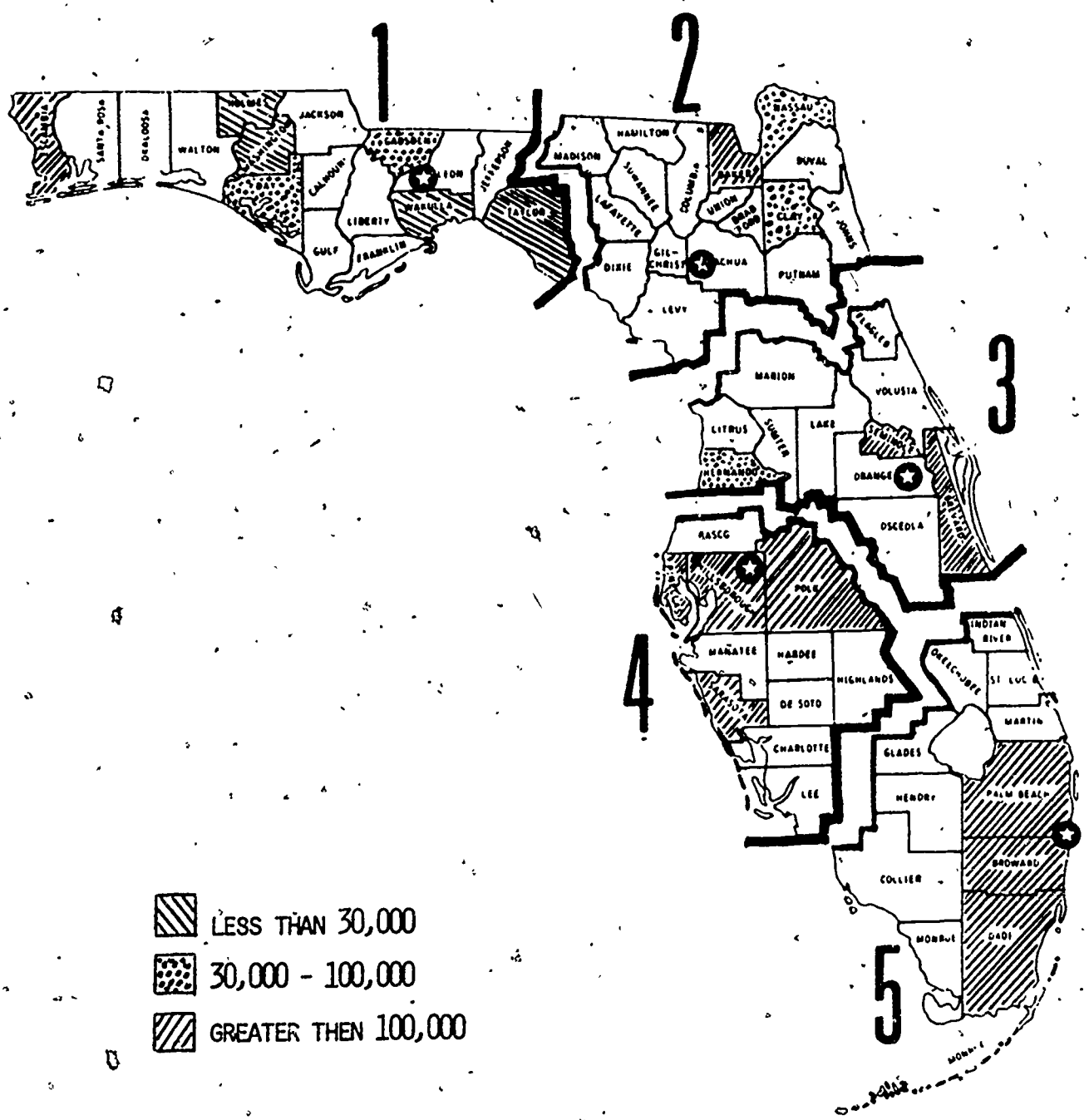
IMPACT OF THE FLORIDA STATE STUDENT ASSESSMENT TEST AND REMEDIATION PRACTICES ON ENROLLMENT IN VOCATIONAL EDUCATION PROGRAMS AT THE SECONDARY LEVEL

PURPOSE OF STUDY

THE PURPOSE OF THIS STUDY IS TO DETERMINE THE IMPACT OF THE FLORIDA STATE STUDENT ASSESSMENT TEST, AND SUBSEQUENT REMEDIATION PRACTICES ON CHANGES IN VOCATIONAL EDUCATION ENROLLMENT AT THE SECONDARY LEVEL.

THIS STUDY IS BEING FUNDED BY THE DIVISION OF VOCATIONAL EDUCATION OF THE STATE OF FLORIDA DEPARTMENT OF EDUCATION.

POPULATION DISTRIBUTION



SAMPLE SELECTION

TOTAL STUDENT POPULATION

COOPERATING SCHOOLS MAY CHOOSE FROM THREE ALTERNATIVE PROCEDURES FOR SELECTING STUDENTS TO PARTICIPATE IN THIS RESEARCH PROJECT. THEY ARE:

1) A RANDOM SELECTION OF STUDENTS FROM THE TWELFTH GRADE WHO HAVE TAKEN THE FLORIDA STATE STUDENT ASSESSMENT TEST (FSSAT).
2) TWELFTH GRADE STUDENTS WILL BE DIVIDED INTO TWO GROUPS, THOSE WHO PASSED AND THOSE WHO FAILED THE FSSAT. A RANDOM SELECTION OF STUDENTS FROM THE TWO GROUPS WILL BE ASKED TO RESPOND TO THE DATA COLLECTION INSTRUMENT.
3) A RANDOM SELECTION OF AN INTACT TWELFTH GRADE CLASS FROM THE CLASSES TO WHICH STUDENTS HAVE BEEN MORE OR LESS RANDOMLY ASSIGNED AND WHICH CONTAINS STUDENTS WHO PASSED AND FAILED THE FSSAT.

SAMPLE SELECTION

VOCATIONAL EDUCATION STUDENTS

COOPERATING SCHOOLS MAY CHOOSE FROM TWO ALTERNATIVE PROCEDURES FOR SELECTING VOCATIONAL EDUCATION STUDENTS TO PARTICIPATE IN THIS RESEARCH PROJECT. THEY ARE:

1) A RANDOM SELECTION OF AN INTACT TWELFTH GRADE VOCATIONAL EDUCATION CLASS CONTAINING STUDENTS WHO HAVE TAKEN THE FSSAT.
2) A RANDOM SELECTION OF TWELFTH GRADE VOCATIONAL EDUCATION STUDENTS WHO HAVE TAKEN THE FSSAT.

SAMPLE SELECTION

VOCATIONAL EDUCATION TEACHERS

OPTIONS FOR SELECTING VOCATIONAL EDUCATION TEACHERS TO PARTICIPATE IN THIS STUDY INCLUDE:

1) RANDOM SELECTION OF A SPECIFIC NUMBER OF PARTICIPANTS FROM THE TOTAL VOCATIONAL EDUCATION FACULTY.

2) INVITING ALL VOCATIONAL EDUCATION TEACHING FACULTY TO PARTICIPATE IF THERE ARE FEWER THAN TEN VOCATIONAL EDUCATION TEACHING FACULTY AT THE SCHOOL.

SAMPLE SELECTION

VOCATIONAL EDUCATION DIRECTORS AND PRINCIPALS

COUNTY VOCATIONAL EDUCATION DIRECTORS, AND PRINCIPALS OF THE RANDOMLY SELECTED SCHOOL WILL BE REQUESTED TO PARTICIPATE IN THE DATA COLLECTION PROCESS.

SUBJECT PROTECTION

THE NATURE OF THIS STUDY DOES NOT REQUIRE IDENTIFICATION OF THE PARTICIPANTS. STUDENTS WILL NOT BE REQUIRED TO PROVIDE EITHER THEIR NAME OR SOCIAL SECURITY NUMBER. THE SEX, RACE, AND WHETHER OR NOT THE STUDENT PASSED THE FSSAT, WILL BE REQUESTED IN ORDER TO DETERMINE PERCENTAGES OF PARTICIPANTS BY CATEGORIES.

RESPONSES FROM VOCATIONAL EDUCATORS, VOCATIONAL EDUCATION DIRECTORS, AND PRINCIPALS WILL BE CODED IN ORDER TO IDENTIFY SCHOOL AND COUNTY. ONCE AGAIN NAMES AND SOCIAL SECURITY NUMBERS WILL NOT BE REQUIRED.

LENGTH OF TIME FOR SURVEY

THE ACTUAL TIME REQUIRED FOR RESPONDING TO THE SURVEY RANGES FROM 15 TO 50 MINUTES, DEPENDING ON THE RESPONDENT'S READING SPEED.

College of Education
Department of Educational
Leadership
Vocational Education
206 South Woodward
(904) 644-6298

The Florida State University
Tallahassee, Florida 32306

As promised at the conclusion of our recent telephone conversation, a brief written statement outlining the research endeavor we discussed is being provided.

The Department of Educational Leadership/Vocational Education from the Florida State University is conducting a research project under the direction of Dr. Holli[illegible] Thomas. This research is being funded by the Division of Vocational Education of the state of Florida Department of Education. The purpose of this study is to assess the effect of the Florida State Student Assessment Test, and the differential impact of subsequent remediation practices in Florida, on changes in vocational education enrollment at the secondary level. Perceptions and experiences of students, vocational education teachers, principals, and county vocational/education directors regarding the effects of the Florida State Student Assessment Test and remedial practices are also being sought.

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Sincerely,

Henry Maher
Research Assistant

/jks

The survey instruments included in the administrators manual appear elsewhere in this report. The titles, recipients, and location of these instruments are listed below.

Instrument	Recipient	Location
Remediation Practices Implemented Following the Florida State Student Assessment Test	67 County Vocational Directors	Appendix C
Impact of the Florida State Student Assessment Test and Remediation Practices on Enrollment in Vocational Education Programs at the Secondary Level	Vocational and Non-Vocational Students	Appendix D
Impact of the Florida State Student Assessment Test and Remediation Practices on Enrollment in Vocational Education Programs at the Secondary Level	Vocational Education Teachers, Principals, and County Vocational Education Directors from Sample Schools and Counties	Appendix E

Appendix C

Survey Instrument Administered to All

Sixty-Seven County

Vocational Education Directors

College of Education
Department of Educational
Leadership
Vocational Education
206 South Woodward
(904) 644-6298

The Florida State University
Tallahassee, Florida 32306

The Division of Vocational Education, the state of Florida Department of Education, is interested in determining the impact of remediation practices on the changes in vocational education programs at the secondary level in each county. This research endeavor is being directed by Dr. Hollie Thomas, Department of Educational Leadership, Vocational Education, The Florida State University. I am responsible for the data collection procedures.

The enclosed questionnaire, one of four parallel data collection instruments being employed in this research, is being mailed to each district vocational education director. Your participation in this research effort is vital. It is not necessary that you identify yourself; however, the questionnaire is coded in order to track districts from which responses are not received. Results of the study will be made available to you at a later date.

A stamped self-addressed envelope is enclosed for your convenience. Please complete the questionnaire and return it by July 30, 1980. Thank you.

Sincerely,

Henry Maher
Research Assistant

/jks

enclosure:

REMEDIATION PRACTICES IMPLEMENTED FOLLOWING THE FLORIDA STATE STUDENT ASSESSMENT TEST No._____

Please place a check in the space provided after each question indicating whether or not each practice was used in your county for remediating students who failed the Florida State Student Assessment Test (FSSAT).

1. New remedial courses were designed and implemented for students who failed the FSSAT. ___Yes ___No

2. New teachers were hired to conduct remedial courses. ___Yes ___No

3. Volunteer aides were utilized to conduct remedial courses. ___Yes ___No

4. Existing teachers incorporated new remedial materials in their regular classes. ___Yes ___No

5. Existing teachers taught remedial courses after school. ___Yes ___No

6. Teachers developed their own remedial materials. ___Yes ___No

7. Students withdrew from vocational education courses in order to take remedial courses. ___Yes ___No

8. Students withdrew from elective courses other than vocational education courses in order to take remedial courses. ___Yes ___No

9. Students were offered remedial assistance outside of regular class hours. ___Yes ___No

10. Students who fail the FSSAT are permitted to enroll in vocational education courses. ___Yes ___No

11. Students who fail the FSSAT are permitted to enroll in elective courses other than vocational education courses. ___Yes ___No

12. No remediation was offered because of budgetary constraints. ___Yes ___No

13. No remediation was offered because of the lack of qualified personnel. ___Yes ___No

14. Please state briefly what other remedial practices are being implemented in your district.

15. Indicate other remediation practices you would like to see implemented.

Appendix D

Survey Instrument Administered to

Vocational and Non-Vocational Students

IMPACT OF THE FLORIDA STATE STUDENT ASSESSMENT TEST AND REMEDIATION PRACTICES ON ENROLLMENT IN VOCATIONAL EDUCATION PROGRAMS AT THE SECONDARY LEVEL.

STUDENT QUESTIONNAIRE

A. Which of the following did you do to prepare for the Florida State Student Assessment Test (Functional Literacy Test)? (Circle one choice after each question)

		YES	NO
1)	Enrolled in a special (remedial) course in order to get help in preparing for the Functional Literacy Test.	1	0
2)	Enrolled in vocational education courses because they offered help in the basic skills required for graduation.	1	0
3)	Dropped the vocational education courses in which I was enrolled in order to take a special (remedial) course.	1	0
4)	Dropped an elective course other than a vocational education course in which I was enrolled in order to take a special (remedial) course.	1	0
5)	Received remedial assistance in a general education course.	1	0
6)	Decided to take a course other than a vocational education course in order to get ready for the Functional Literacy Test.	1	0
7)	Received remedial assistance in a general education course.	1	0
8)	I needed remedial assistance.	1	0
9)	Needed remedial assistance and did not receive it.	1	0
10)	Studied and reviewed the material on my own.	1	0

B. Which of the following explains the effect the Florida State Student Assessment Test (Functional Literacy Test) has had on you? (Circle one choice after each question)

Code: Strongly Agree (SA); Agree (A); No Opinion (N); Disagree (D); Strongly Disagree (SD)

	SA	A	N	D	SD
11) The Functional Literacy Test has not had any effect on me.	1	2	3	4	5
12) The Functional Literacy Test has caused a delay in my preparation for my career.	1	2	3	4	5
13) Preparing for the Functional Literacy Test has prevented me from learning many other things except the basic skills required to pass the test.	1	2	3	4	5
14) The Functional Literacy Test has prevented me from learning the skills I will need to get a job when I am out of school.	1	2	3	4	5
15) The Functional Literacy Test has helped me to become aware of the things I should learn in school.	1	2	3	4	5
16) The requirement for passing the Functional Literacy Test has motivated me to learn the basic skills.	1	2	3	4	5
17) The Functional Literacy Test has kept me out of sports and/or social activities in which I would have liked to participate.	1	2	3	4	5
18) The Functional Literacy Test has helped me to become more aware of the skills I need to learn in order to succeed in vocational education courses.	1	2	3	4	5
19) Preparing for the Functional Literacy Test did not allow me the time I needed to prepare for my vocational education courses.	1	2	3	4	5
20) The Functional Literacy Test helped me succeed in my vocational education courses.	1	2	3	4	5
21) The Functional Literacy Test kept me from leaving school in the afternoons to work on a cooperative vocational education program.	1	2	3	4	5

		SA	A	N	D	SD
22)	The requirements to pass the Functional Literacy Test will keep me from completing my vocational education courses in high school.	1	2	3	4	5
23)	The requirements to pass the Functional Literacy Test prevented me from learning many things I wanted to learn in school about my future career.	1	2	3	4	5
24)	The Functional Literacy Test showed me the areas of study in which I am weak.	1	2	3	4	5

C. Your reaction to the following statements will give us an idea about how students feel about the Functional Literacy Test. (Circle one choice after each question)

		SA	A	N	D	SD
25)	The Functional Literacy Test has improved the quality of education in our school.	1	2	3	4	5
26)	The requirements for the Functional Literacy Test keep a lot of students from getting the training they need.	1	2	3	4	5
27)	The Functional Literacy Test is a waste of time.	1	2	3	4	5
28)	Everyone should know how to do basic skills before they receive a diploma.	1	2	3	4	5
29)	The Functional Literacy Test is a good test.	1	2	3	4	5
30)	Students should learn a skill or prepare to enter college rather than have to worry about passing a test.	1	2	3	4	5
31)	Students should enroll in a vocational education course if they fail the Functional Literacy Test.	1	2	3	4	5
32)	The Functional Literacy Test is an accurate way to evaluate educational achievement in the basic skills.	1	2	3	4	5

D. Please answer the following questions regarding the way your school has helped prepare for the Functional Literacy Test.

My school has:	SA	A	N	D	SD
33) Offered remedial assistance to all students who needed help.	1	2	3	4	5
34) Offered the necessary remedial assistance during regularly scheduled academic classes.	1	2	3	4	5
35) Offered students who failed the test special remedial classes outside regular class time.	1	2	3	4	5
36) Offered remedial assistance as part of the vocational education courses.	1	2	3	4	5
37) Offered after school classes for those who failed the Functional Literacy Test.	1	2	3	4	5
38) Offered counseling about how to pass the Functional Literacy Test before students took the test.	1	2	3	4	5
39) Offered counseling for those students who failed the Functional Literacy Test.	1	2	3	4	5
40) Provided information about the Functional Literacy Test to all students before they ever took the test.	1	2	3	4	5

E. How do you rate your school on the following. (Circle one choice after each question)

Code: Very good (VG); Good (G); Average (A); Poor (P); Very Poor (VP)

	VG	G	A	P	VP
41) Preparing students to take the Functional Literacy Test.	1	2	3	4	5
42) Counseling before the Functional Literacy Test.	1	2	3	4	5
43) Counseling after the Functional Literacy Test.	1	2	3	4	5
44) Quality of counseling for students preparing for the Functional Literacy Test.	1	2	3	4	5
45) Quality of counseling for the Functional Literacy Test.	1	2	3	4	5

		VG	G	A	P	VP
46)	Providing vocational education courses that are adequate for career preparation.	1	2	3	4	5
47)	Providing programs to help students prepare for a retake of the Functional Literacy Test.	1	2	3	4	5
48)	Quality of the program provided students who are preparing for a retake of the Functional Literacy Test.	1	2	3	4	5

E. Vocational Education Enrollment (Answer each question as accurately as possible).

		YES	NO
49)	Were you enrolled in a vocational education course which you were unable to continue because you needed to prepare for the Functional Literacy Test?	1	0
	Name the vocational course you were unable to continue in: _____		
50)	Is there a vocational education course that you did not enroll in because of your need to prepare for the Functional Literacy Test.	1	0
	Name the vocational education course you were never able to enroll in: _____		

Appendix E

Survey Instrument Administered to County Vocational Education Directors, Vocational Education Teachers, and Principals in Participating Counties and Schools

NO.____

IMPACT OF THE FLORIDA STATE STUDENT ASSESSMENT TEST AND REMEDIATION PRACTICES ON ENROLLMENT IN VOCATIONAL EDUCATION PROGRAMS AT THE SECONDARY LEVEL

Please circle the choice following each statement which you feel best answers that statement.

CODE: Strongly Agree (SA); Agree (A); Undecided (U); Disagree (D); Strongly Disagree (SD).

	SA	A	U	D	SD
1) Enrollment in vocational education classes in this school has declined as a consequence of the Florida State Student Assessment Test (FSSAT).	1	2	3	4	5
2) Enrollment in vocational education classes has declined in this school because students who fail the FSSAT must participate in a remediation program.	1	2	3	4	5
3) Enrollment in vocational education courses has decreased at a greater rate then the enrollment in other elective courses since the implementation of the FSSAT.	1	2	3	4	5
4) Enrollment in vocational education courses has increased at a greater rate than the enrollment in other elective courses since the implementation of the FSSAT.	1	2	3	4	5
5) Students who fail the FSSAT are permitted to enroll in vocational education courses.	1	2	3	4	5
6) Students who fail the FSSAT are permitted to enroll in elective courses other than vocational education courses.	1	2	3	4	5

		SA	A	U	D	SD
7)	The increase or decrease in vocational education enrollment has been due to factors other than the FSSAT.	1	2	3	4	5
8)	Our school has encouraged students to participate in remedial opportunities offered through area vocational education centers.	1	2	3	4	5
9)	The FSSAT is an appropriate test for measuring basic skill competencies.	1	2	3	4	4
10)	As a result of the FSSAT, students in this school have improved their performance in basic skills.	1	2	3	4	5
11)	The FSSAT has helped teachers to develop more effective courses for their students.	1	2	3	4	5
12)	The FSSAT as a diagnostic tool influences the programming efforts in this school in a positive way.	1	2	3	4	5
13)	The quality of instruction has improved in this school as a result of the implementation of the FSSAT.	1	2	3	4	5
14)	The quality of counseling in this school for students preparing to take the FSSAT is excellent.	1	2	3	4	5
15)	The quality of counseling in this school for preparing students who failed the FSSAT for a retake is excellent.	1	2	3	4	5
16)	The quality of remediation programs in this school that prepare students for a retake of the FSSAT is excellent.	1	2	3	4	5
17)	The counseling procedures used in this school to assist students in preparing for the FSSAT have been successful.	1	2	3	4	5
18)	Students should be counseled into vocational education courses if there is a likelihood that they will fail the FSSAT.	1	2	3	4	5

		SA	A	U	D	SD
19)	Students from this school who have been counseled on how to prepare for the FSSAT have been successful in their retake exam.	1	2	3	4	5
20)	Students choose to enroll in vocational education courses to learn basic skills rather than remain in regular academic classes.	1	2	3	4	5
21)	Remediation materials are developed by the teachers in this school.	1	2	3	4	5
22)	The Florida Department of Education should be responsible for preparing all remedial materials.	1	2	3	4	5
23)	Teachers always have sufficient budget for preparing remedial materials.	1	2	3	4	5
24)	Sufficient qualified teaching personnel are available to conduct remediation classes.	1	2	3	4	5
25)	The FSSAT deters many students from obtaining the vocational training they need for job entry.	1	2	3	4	5
26)	Providing remediation for students who failed the FSSAT has interfered with course goals established by teachers.	1	2	3	4	5
27)	The FSSAT has interfered with the overall curriculum goals of this school.	1	2	3	4	5
28)	The FSSAT has created more work for me.	1	2	3	4	5
29)	Students who fail the FSSAT are withdrawn from vocational education classes in order to take remedial work.	1	2	3	4	5
30)	The rate of student withdrawal from electives other than vocational education courses has increased in this school since the implementation of FSSAT.	1	2	3	4	5
31)	The rate of student withdrawal from vocational education courses has increased in this school since the implementation of FSSAT.	1	2	3	4	5

		SA	A	U	D	SD
32)	Teachers are expected to teach remedial classes during regularly scheduled hours.	1	2	3	4	5
33)	New teachers are hired to conduct remedial classes in this school.	1	2	3	4	5
34)	Volunteer aides are utilized to assist teachers in conducting remedial classes.	1	2	3	4	5
35)	Teachers are often released from regularly assigned classes in order to conduct remedial classes.	1	2	3	4	5
36)	Students are offered remedial assistance outside of regular class hours.	1	2	3	4	5
37)	Practices used for remediation are reviewed routinely with appropriate revisions made.	1	2	3	4	5
38)	Teachers in this school provide practice sessions using questions comparable to those on the FSSAT to assist students in preparing for the FSSAT.	1	2	3	4	5
39)	Our school has encouraged students to participate in remedial opportunities offered through area vocational education centers.	1	2	3	4	5
40)	Our school works cooperatively with other schools in the area (county) to develop and provide quality remedial assistance for students who failed the FSSAT.	1	2	3	4	5
41)	Some students are delaying their vocational preparation until after high school in order to allow time for preparing for the FSSAT.	1	2	3	4	5
42)	Remedial practices used in this school year will be repeated again next year.	1	2	3	4	5
43)	The remediation procedures utilized in this school are successful.	1	2	3	4	5
44)	The requirement for remedial instruction for students to pass the FSSAT will cause vocational education course offerings to be reduced at the high school level.	1	2	3	4	5

		SA	A	U	D	SD
45)	Vocational education teachers in this school conduct most of the remediation classes for students who fail the FSSAT.	1	2	3	4	5
46)	Vocational education courses are often utilized in this school to teach the basic skills necessary for students to pass the FSSAT.	1	2	3	4	5
47)	More vocational education courses should be added to the curriculum in this school in order to meet the needs of students who fail the FSSAT.	1	2	3	4	5
48)	Vocational education programs, because of their ability to provide "real world" experiences, are able to facilitate the development of competencies needed in the basic skills more readily then regular academic classes.	1	2	3	4	5
49)	Remediation for the FSSAT can be incorporated into the existing vocational education programs in this school.	1	2	3	4	5
50)	Students are now able to receive the remedial instruction they need to pass the FSSAT by enrolling in vocational education courses.	1	2	3	4	5

Please rank order the TOP THREE OUTSTANDING vocational education programs in your school from the list below using the most outstanding program.

____Agriculture

____Business and Office

____Home Economics

____Industrial Arts

____Distribution

____Technical

____Health

____Trades and Industry

G. THE FOLLOWING QUESTIONS ARE ABOUT THE FUNCTIONAL LITERACY TEST (Circle One Choice after each statement)

	YES	NO
The preparation I had for the Functional Literacy Test has		
51) Improved my performance in other classes.	1	0
52) Improved my performance in vocational education courses.	1	0
53) Made me think more about basics.	1	0
54) Turned me off about school.	1	0
55) Helped me decide to go to an area vocational education center.	1	0
56) Helped me decide to drop out of vocational education courses.	1	0
57) Helped me decide to take vocational education courses instead of regular courses.	1	0
58) Helped me make a clearer decision about vocational education courses I need in order to obtain my career goals.	1	0

H. THE FOLLOWING QUESTIONS ARE ABOUT YOU (Circle One Choice after each question)

	YES	NO
59) Are you now enrolled in vocational education courses?	1	0
60) Have you ever enrolled in vocational education courses?	1	0
61) Were you successful in passing the 11th grade Functional Literacy Test?	1	0

NOTE: IF YOU ANSWERED "NO" TO QUESTION 61, THEN GO TO THE NEXT PAGE

IF YOU ANSWERED "YES" TO QUESTION 61, THEN STOP HERE...

IF YOU WERE UNSUCCESSFUL IN YOUR ATTEMPT TO PASS THE FUNCTIONAL LITERACY TEST, PLEASE ANSWER THE FOLLOWING QUESTIONS. (Circle One Choice after each question)

	YES	NO
62) Were you able to stay in the courses you planned to take even though you were unsuccessful on the 11th grade Functional Literacy Test?	1	0
63) Did you drop out of vocational education courses in order to prepare for a retake of the Functional Literacy Test?	1	0
64) If you were enrolled in vocational education courses before you took the Functional Literacy Test, do you plan to enroll in any future vocational education courses?	1	0
65) Have you ever enrolled in a course to help pass the Functional Literacy Test?	1	0

Appendix F

The Frequency and Percentage of Responses by

Vocational and Non-Vocational Education Student

on Items Concerning the FSSAT

in the Student Questionnaire

Appendix F.

Secondary Level Vocational and Non-Vocational Education Students' Responses

to Questions Concerning the FSSAT by Frequency and by Percentage

Items	STUDENTS											
	Vocational (N=545)				Non-vocational (N=636)				Total			
	Yes		No		Yes		No		Yes		No	
	f	%	f	%	f	%	f	%	f	%	f	%
A. Which of the following did you do to prepare for the Florida State Student Assessment Test (Functional Literacy Test)?												
1) Enrolled in a special (remedial) course in order to get help in preparing for the Functional Literacy Test?	112	20.9	425	79.1	136	21.5	498	78.5	240	21.2	923	78.8
2) Enrolled in vocational education courses because they offered to help in basic skill required for graduation.	118	22.0	419	78.0	103	16.2	531	83.8	221	18.9	950	81.1
3) Dropped the vocational education courses in which I was enrolled in order to take a special (remedial) course.	18	3.4	519	96.6	34	5.4	600	94.6	52	4.4	1119	95.6
4) Dropped an elective course orther than a vocational education course in which I was enrolled in order to take a special (remedial) course.	53	9.9	325	60.7	241	38.4	387	61.6	114	9.8	1052	90.2
5) Received remedial assistance in a general education course.	210	39.3	325	60.7	241	38.4	387	61.6	451	38.8	712	61.2
6) Decided to take a course other than a vocational education course in order to get ready for the Functional Literacy Test.	98	18.4	436	81.6	121	19.2	510	80.8	219	18.8	946	81.2
7) Received remedial assistance in a general education course.	215	40.2	320	59.8	241	38.3	388	61.7	456	39.2	708	60.8
8) I needed remedial assistance.	143	26.8	390	73.2	192	27.2	461	72.8	315	27.0	851	83.0
9) Needed remedial assistance and did not receive it.	31	5.8	505	94.2	39	6.2	592	93.8	70	6.0	1097	94.0
10) Studied and reviewed material on my own.	267	49.7	269	50.3	282	44.5	351	55.5	549	46.9	620	53.1

Appendix F

(continued)

Items	STUDENTS																	
	Vocational						Non-vocational						Total					
	A		N		D		A		N		D		A		N		D	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
B. Which of the following explains the effect of the Florida State Student Assessment Test (Functional Literacy Tests) has had on you?																		
Code: Agree (A): No Opinion (N): Disagree (D)																		
11) The Functional Literacy Test has not had any effect on me.	307	56.9	97	18.0	136	25.1	387	60.8	95	15.0	152	24.2	693	59.1	192	16.4	288	24.6
12) The Functional Literacy Test has caused a delay in my preparation for my career.	67	12.4	84	15.5	390	72.1	81	12.8	92	14.5	461	72.8	148	12.6	176	15.0	851	72.5
13) Preparing me for the Functional Literacy Test has prevented me from learning many other things except the basic skills required to pass the test.	78	14.5	85	15.7	378	69.9	127	20.0	73	11.5	434	68.5	205	17.5	158	13.4	812	69.2
14) The Functional Literacy Test has prevented me from learning the skills I will need to get a job when I am out of School.	60	11.3	69	12.9	405	75.8	78	12.3	80	12.7	474	75.0	138	11.8	149	12.8	879	75.4
15) The Functional Literacy Test has helped me to become aware of the things I should learn in school.	382	71.0	83	15.4	73	13.5	410	65.6	98	15.7	117	18.8	792	68.1	181	15.6	190	16.4
16) The requirement for passing the Functional Literacy Test has motivated me to learn the basic skills	320	59.1	109	20.1	112	20.7	346	54.6	137	21.6	150	23.7	666	56.7	246	21.0	262	22.3

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Appendix F

(Continued)

Items	STUDENTS																	
	Vocational						Non-vocational						Total					
	A		N		D		A		N		D		A		N		D	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
17) The Functional Literacy Test has kept me out of sports and/or social activities that I would have like to participate in.	37	6.9	72	13.4	429	79.7	33	5.6	61	9.7	536	84.8	72	6.2	133	11.4	965	82.4
18) Preparing for the Functional Literacy Test has helped me become more aware of the skills I need to learn in order to succeed in vocational education courses.	279	51.6	125	23.1	136	25.2	273	43.0	166	26.2	195	30.8	552	47.0	291	24.8	331	28.2
19) Preparing for the Functional Literacy Test did not allow me the time I needed to prepare for my vocational education courses.	48	8.9	104	19.3	386	71.8	411	26.4	160	37.3	63	36.3	111	9.5	264	22.5	797	68.0
20) The Functional Literacy Test helped me succeed in my vocational education courses.	143	26.4	242	37.3	196	36.6	138	21.8	253	40.0	241	38.2	281	23.9	455	38.8	437	37.3
21) The Functional Literacy Test kept me from leaving school in the afternoons to work in a cooperative vocational education program.	42	7.8	103	19.0	396	73.2	26	4.1	153	24.1	456	71.8	68	5.7	256	21.8	852	72.4
22) The requirements to pass the Functional Literacy	46	8.5	70	12.9	425	78.5	48	7.6	104	16.4	481	76.0	94	8.0	174	14.8	906	77.2

Appendix F

(continued)

Items	STUDENTS																	
	Vocational						Non-vocational						Total					
	A		N		D		A		N		D		A		N		D	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
23) The requirements to pass the Functional Literacy Test prevented me from learning many things I wanted to learn in school about my future career.	55	10.2	73	13.5	412	76.3	86	13.6	83	13.1	466	73.3	141	12.0	156	13.3	877	74.7
24) The Functional Literacy Test Showed me the areas of study in which I am weak.	410	82.0	46	8.6	51	9.5	506	79.8	49	7.7	79	12.4	946	80.8	95	8.1	130	11.1
C. Your reaction to the following statements will give us an idea about how students feel about the Functional Literacy Test.																		
25) The Functional Literacy Test has improved the quality of education in our school.	278	51.4	118	21.9	143	26.7	317	49.9	147	23.1	171	27.0	595	50.6	265	22.6	315	26.8
26) The requirements for the Functional Literacy Test keep a lot of students from getting the training they need.	108	20.1	132	24.5	298	55.4	101	16.0	168	26.5	365	57.5	209	17.8	300	25.6	663	56.5
27) The Functional Literacy Test is a waste of time.	122	22.7	89	16.5	328	60.9	129	20.4	119	18.8	385	60.8	251	21.4	208	17.7	713	60.8
28) Everyone should know how to do basic skills before they receive a diploma.	486	90.3	19	3.5	33	6.1	564	89.1	33	5.2	36	5.6	1050	89.6	52	4.4	69	5.8
29) The Functional Literacy Test is a good test.	332	62.4	115	21.6														

Appendix F

(continued)

Items	STUDENTS															
	Vocational						Non-vocational						Total			
	A		N		D		A		N		D		A		N		D	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
30) Students should learn a skill or prepare to enter college rather than have to worry about passing a test.	193	35.7	148	27.4	199	36.9	225	35.5	154	24.3	254	40.1	418	35.6	302	26.7	453	34.9
31) Students should enroll in a vocational education course if they fail the Functional Literacy Test.	163	30.4	190	35.4	184	34.3	191	30.1	219	34.5	225	35.4	354	30.2	409	34.9	409	34.9
32) The Functional Literacy Test is an accurate way to evaluate educational achievement in the basic skills.	318	68.3	101	18.7	170	13.0	404	63.7	131	20.6	100	15.7	772	65.7	232	19.8	170	14.4
D. Please answer the following questions regarding the way your school has helped prepare for the Functional Literacy Test. My school has:																		
33) Offered remedial assistance to all students who needed help.	459	84.9	50	9.2	32	5.9	537	84.6	53	8.3	45	7.1	996	84.7	103	8.8	77	6.6
34) Offered the necessary remedial assistance during regular scheduled academic classes.	391	72.3	87	16.1	63	11.6	465	73.2	98	15.4	72	11.3	856	72.8	185	15.7	135	11.5
35) Offered students who failed the test special remedial classes outside regular class time.	273	50.8	156	29.0	109	20.2	300	37.3	185	29.2	149	23.5	573	48.9	341	29.1	258.	22.0
36) Offered remedial assistance as part of the vocational education courses.	199	36.3	230	42.7	113	21.0	241	38.1	304	48.0	88	13.9	439	37.3	534	45.6	201	17.1

Appendix F

(continued)

Items	STUDENTS															
	Vocational						Non-vocational						Total			
	A		N		D		A		N		D		A		N		D	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
37) Offered after school classes for those who failed the Functional Literacy Test.	162	30.0	176	32.6	202	37.4	159	25.1	250	39.5	395	35.4	321	27.3	426	36.3	426	36.3
38) Offered counseling about how to pass the Functional Literacy Test before students took the test.	332	61.7	130	24.2	76	14.1	374	58.9	150	23.6	485	17.5	706	60.2	280	23.9	187	16.0
39) Offered counseling for those students who failed the Functional Literacy Test.	361	66.8	117	21.7	62	11.5	436	68.7	127	20.0	72	11.3	797	67.8	244	20.8	134	11.4
40) Provided information about the Functional Literacy Test to all students before they ever took the test.	403	74.5	73	13.5	65	12.0	415	65.6	110	17.4	108	17.1	818	69.7	183	15.6	173	14.8
E. How do you rate your school on the school on the following? Code: Good (G); Average (A); Poor (P)	G		A		P		G		A		P		G		A		P	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
41) Preparing students to take the Functional Literacy Test.	429	59.4	169	31.2	51	9.5	334	52.6	224	35.3	77	12.2	655	45.7	393	33.4	128	10.8
42) Counseling before the Functional Literacy Test.	234	43.4	208	38.6	97	18.0	242	38.2	247	39.0	144	22.8	476	40.6	455	38.8	243	20.5
43) Counseling after the Functional Literacy Test.	274	50.7	177	32.7	90	16.7	318	50.1	216	34.1	100	15.7	592	50.4	393	33.4	189	16.2
44) Quality of counseling for students preparing for the Functional Literacy Test.	240	44.3	215	39.7	86	15.9	252	39.9	252	39.8	129	20.4	492	41.9	467	39.8	215	18.3

Appendix F

(continued)

Items	STUDENTS																	
	Vocational						Non-vocational						Total					
	G		A		P		G		A		P		G		A		P	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
45) Quality of counseling for the Functional Literacy Test.	264	48.9	197	36.5	79	14.6	259	40.8	267	42.0	109	17.1	523	44.5	464	39.5	188	16.0
46) Providing vocational education courses that are adequate for career preparation.	360	66.5	128	23.7	53	9.8	358	56.4	200	31.5	76	11.9	718	61.1	328	27.9	129	10.9
47) Providing programs to help students prepare for a retake of the Functional Literacy Test.	570	63.9	144	21.7	51	9.4	384	60.8	186	29.4	62	9.8	728	62.2	330	28.2	113	9.6
48) Quality of the program provided students who are preparing for a retake of the Functional Literacy Test.	281	50.1	198	38.0	53	9.8	330	52.3	227	36.0	73	11.6	611	52.3	432	36.9	126	10.8

Items	STUDENTS									
	Vocational (N=545)				Non-vocational (N=636)				Total	
	Yes		No		Yes		No		Yes	
	f	%	f	%	f	%	f	%	f	%
F. Vocational Education Enrollment										
49) Were you enrolled in a vocational education course which your were unable to continue because you needed to prepare for the Functional Literacy Test?	31	5.8	507	94.2	32	5.2	595	94.7	63	5.4
50). Is there a vocational education course that you did not enroll in because of your need to prepare for the Functional Literacy Test?	21	3.9	515	96.1	26	4.1	601	95.9	47	4.0

Appendix F

(continued)

Items	STUDENTS											
	Vocational (N=545)				Non-vocational (N=636)				Total			
	Yes		No		Yes		No		Yes		No	
	f	%	f	%	f	%	f	%	f	%	f	%
G. The following questions are about the Functional Literacy Test.												
The preparation I had for the Functional Literacy Test has:												
51) Improved my performance in other classes.	272	50.3	269	49.7	293	46.1	342	53.9	565	48.0	611	52.0
52) Improved my performance in vocational education courses.	194	35.9	346	64.1	161	25.4	472	74.6	355	30.3	818	69.7
53) Made me think about basics.	416	76.9	125	23.1	460	72.7	193	27.3	876	74.6	288	25.4
54) Turned me off about school.	65	12.1	474	87.9	60	9.4	575	90.6	125	10.6	1049	89.4
55) Helped me decide to go to an area vocational education center.	101	18.7	440	81.3	83	13.1	551	86.9	184	15.7	991	84.3
56) Helped me decide to drop out of vocational education courses.	29	5.4	510	94.6	32	5.1	600	94.0	61	5.2	1110	94.8
57) Helped me decide to take vocational education courses instead of regular courses.	99	18.3	441	81.7	73	11.5	560	88.5	172	14.7	1001	85.3
58) Helped me make a clearer decision about vocational education courses I need in order to obtain my career goals.	229	42.3	312	57.7	235	37.1	399	62.9	464	39.5	711	60.5
H. The following questions are about you.												
59) Are you enrolled in vocational education courses?	415	76.7	126	23.3	184	29.1	399	62.9	599	51.1	574	49.9
60) Have you ever enrolled in vocational education courses?	408	75.6	132	24.4	319	50.5	313	49.5	727	62.0	445	38.0
61) Were you successful in passing the 11th grade Functional Literacy Test?	458	84.7	83	15.3	522	82.7	109	17.3	980	83.6	192	16.4

Appendix F

(continued)

Items	STUDENTS									
	Vocational (N=545)				Non-vocational (N=636)				Total			
	Yes		No		Yes		No		Yes		No	
	f	%	f	%	f	%	f	%	f	%	f	%
If you were unsuccessful in your attempt to pass the Functional Literacy Test, please answer the following questions. (N=196)												
62) Were you able to stay in the course you planned to take even though you were unsuccessful in the 11th grade Functional Literacy Test?	61	70.9	25	29.1	29	73.6	81	26.4	142	72.4	54	27.6
63) Did you drop out of vocational education courses in order to prepare for a retake of the Functional Literacy Test?	14	16.5	71	83.5	23	21.1	86	78.9	37	19.1	157	80.9
64) If you were enrolled in vocational education courses before you took the Functional Literacy Test, do you plan to enroll in any future vocational education courses?	45	54.2	38	45.8	42	38.9	66	61.1	87	45.5	104	54.5
65) Have you ever enrolled in a course to help pass the Functional Literacy Test?	43	50.6	42	49.4	51	46.8	58	53.2	94	48.5	100	51.5

Appendix G

The Frequency and Percentage of Responses by Vocational and Non-Vocational Education Students on Items Concerning the FSSAT in the Student Questionnaire by Sex

Appendix G

Percentage of Responses of Secondary Level Vocational and Non-Vocational Education Students to Questions Concerning the FSSAT by Sex

Item	STUDENTS							
	Vocational				Non-Vocational			
	Male		Female		Male		Female	
	Yes	No	Yes	No	Yes	No	Yes	No
A. Which of the following did you do to prepare for the Florida State Student Assessment Test (Functional Literacy Test)?								
1) Enrolled in a special (remedial) course in order to get help in preparing for the Functional Literacy Test.	20.3	79.7	22.4	77.6	16.9	83.1	25.8	74.2
2) Enrolled in vocational education courses because they offered help in the basic skills required for graduation.	19.9	80.1	23.9	76.1	16.0	84.0	16.3	83.7
3) Dropped the vocational educational courses in which I was enrolled in order to take a special (remedial) course.	2.4	97.6	4.4	95.6	5.5	94.5	5.2	94.8
4) Dropped an elective course other than a vocational education course in which I was enrolled in order to take a special (remedial) course.	11.8	88.2	7.7	92.3	7.5	92.5	11.7	88.3
5) Received remedial assistance in a general education course.	37.6	62.4	41.3	58.7	34.8	65.2	41.7	58.3
6) Decided to take a course other than a vocational education course in order to get ready for the Functional Literacy Test.	18.9	81.1	18.8	81.2	15.4	84.6	22.5	77.5
7) Received remedial assistance in a general education course.	41.0	59.0	39.7	60.3	36.0	64.0	40.4	59.6
8) I needed remedial assistance.	22.3	77.7	31.1	68.8	19.9	80.1	34.3	65.7
9) Needed remedial assistance and did not receive it.	7.3	92.7	4.8	95.2	5.9	94.1	6.5	93.5
10) Studied and reviewed the material on my own.	51.4	48.6	49.5	50.5	44.8	55.2	44.6	55.4

Appendix G

(continued)

Item	STUDENTS											
	Vocational						Non-Vocational					
	Male			Female			Male			Female		
	A	N	D	A	N	D	A	N	D	A	N	D
B. Which of the following explains the effect the Florida State Student Assessment Test (Functional Literacy Test) has had on you?												
Code: Agree (A); No Opinion (N); Disagree (D)												
11) The Functional Literacy Test has not had any effect on me.	57.8	17.1	25.2	56.3	17.8	25.8	66.5	13.7	19.9	55.7	16.3	27.6
12) The Functional Literacy Test has caused a delay in my preparation for my career.	15.0	15.0	70.0	10.5	15.6	73.9	14.7	17.3	68.0	11.0	12.0	77.0
13) Preparing for the Functional Literacy Test has prevented me from learning many other things except the basic skills required to pass the test.	18.7	17.9	63.4	10.5	14.1	75.4	21.6	13.4	65.0	18.7	9.8	71.5
14) The Functional Literacy Test has prevented me from learning the skills I will need to get a job when I am out of school.	13.2	17.7	69.2	9.2	8.8	82.0	15.0	13.7	71.3	9.9	11.7	78.4
15) The Functional Literacy Test has helped me to become aware of the things I should learn in school.	67.2	18.9	13.9	58.5	17.9	23.6	58.5	17.9	23.6	72.1	13.6	14.3
16) The requirement for passing the Functional Literacy Test has motivated me to learn the basic skills.	53.6	22.8	23.6	64.5	17.8	17.7	45.8	23.2	31.0	62.8	20.3	26.9

Appendix G

(continued)

Item	STUDENTS											
	Vocational						Non-Vocational					
	Male			Female			Male			Female		
	A	N	D	A	N	D	A	N	D	A	N	D
17) The Functional Literacy Test has kept me out of sports and/or social activities that I would liked to have participated in.	11.1	14.8	74.1	3.3	10.9	85.9	7.6	10.8	81.6	3.7	8.6	87.9
18) The Functional Literacy Test has helped me to become more aware of the skills I need to learn in order to succeed in vocational education courses.	46.9	24.1	29.0	54.4	22.8	22.8	36.5	26.1	37.5	48.9	26.5	24.6
19) Preparing for the Functional Literacy Test did not allow me the time I needed to prepare for my vocational education courses.	11.9	20.2	67.9	6.9	18.1	75.0	9.4	27.4	43.2	10.5	23.4	66.2
20) The Functional Literacy Test helped me succeed in my vocational education courses.	26.0	34.1	39.9	27.5	39.1	33.3	18.8	41.0	40.2	24.2	39.3	36.5
21) The Functional Literacy Test kept me from leaving school in the afternoons to work on a cooperative vocational education program.	8.5	20.7	70.7	6.9	18.1	75.0	4.3	26.4	69.4	4.0	22.1	74.0
22) The requirements to pass the Functional Literacy Test will keep me from completing my vocational education courses in high school.	9.8	16.7	73.5	7.2	9.8	83.0	8.2	16.7	75.1	7.1	16.3	76.6
23) The requirements to pass the Functional Literacy Test prevented me from learning many things I wanted to learn in school about my future career.	12.2	17.5	70.3	8.3	8.7	82.9	14.7	14.1	71.3	12.2	12.3	75.4

Appendix G

(continued)

Item	STUDENTS											
	Vocational						Non-Vocational					
	Male			Female			Male			Female		
	A	N	D	A	N	D	A	N	D	A	N	D
24) The Functional Literacy Test showed me the areas of study in which I am weak.	80.0	9.4	10.6	85.4	6.6	8.0	76.2	6.9	17.0	83.2	8.6	8.2
C. Your reaction to the following statements will give us an idea about how students feel about the Functional Literacy Test.												
25) The Functional Literacy Test has improved the quality of education in our school.	57.0	17.9	25.2	49.1	25.8	25.1	45.9	26.4	27.7	53.4	20.2	26.4
26) The requirements for the Functional Literacy Test keep a lot of students from getting the training they need.	21.2	30.6	48.1	18.3	19.0	62.8	15.3	26.5	58.1	16.3	26.7	57.0
27) The Functional Literacy Test is a waste of time.	20.0	16.7	63.3	22.2	16.7	61.0	23.5	15.7	60.8	17.5	21.8	60.6
28) Everyone should know how to do basic skills before they receive a diploma.	88.9	4.1	6.9	91.2	2.9	5.9	89.9	4.6	5.5	88.3	5.8	5.9
29) The Functional Literacy Test is a good test.	64.4	17.4	18.3	62.7	25.3	12.1	56.2	26.8	17.0	57.1	30.6	12.3
30) Students should learn a skill or prepare to enter college rather than have to worry about passing a test.	35.0	28.9	36.1	35.2	26.9	37.8	36.4	25.2	38.3	35.0	23.6	41.4

Appendix G

(continued)

Item	STUDENTS											
	Vocational						Non-Vocational					
	Male			Female			Male			Female		
	A	N	D	A	N	D	A	N	D	A	N	D
31) Students should enroll in a vocational education course if they fail the Functional Literacy Test.	28.7	32.8	38.5	65.0	36.9	31.4	28.6	35.8	35.5	31.6	33.4	35.0
32) The Functional Literacy Test is an accurate way to evaluate educational achievement in the basic skills.	70.3	17.1	12.6	68.0	20.4	11.6	61.3	23.1	15.6	65.7	18.4	15.9
D. Please answer the following questions regarding the way you school has helped prepare for the Functional Literacy Test.												
My school has:												
33) Offered remedial assistance to all students who needed help.	83.7	8.1	7.5	86.2	9.1	4.7	84.3	8.1	7.5	85.0	8.6	6.4
34) Offered the necessary remedial assistance during regular scheduled academic classes.	70.3	17.5	12.2	75.4	14.1	10.5	72.0	16.3	11.7	74.6	14.7	10.8
35) Offered students who failed the test special remedial classes outside regular class time.	53.1	29.8	17.2	48.9	28.8	22.3	47.1	31.0	21.9	47.6	27.6	24.9
36) Offered remedial assistance as part of the vocational education courses.	34.9	40.2	24.8	36.5	45.6	17.9	34.1	51.8	14.1	41.7	44.8	13.5
37) Offered after school classes for those who failed the Functional Literacy Test.	34.2	31.7	34.1	26.9	32.4	40.8	26.1	41.5	32.4	24.3	37.5	38.2

Appendix G

(continued)

Item	STUDENTS											
	Vocational						Non-Vocational					
	Male			Female			Male			Female		
	A	N	D	A	N	D	A	N	D	A	N	D
38) Offered counseling about how to pass the Functional Literact Test before students took the test.	62.8	24.1	13.1	60.5	24.5	15.0	59.3	23.8	17.0	58.6	23.6	17.8
39) Offered counseling for those students who failed the Functional Literacy Test.	71.8	17.6	10.6	63.1	24.3	12.6	68.4	21.2	10.4	69.0	19.0	12.0
40) Provided information about the Functional Literacy Test to all students before they ever took the test.	76.1	11.8	12.2	74.7	14.1	11.2	68.2	18.4	13.4	62.9	16.6	20.5
E. How do you rate you school on the following.												
Code: Good (G); Average (A); Poor (P)	G	A	P	G	A	P	G	A	P	G	A	P
41) Preparing students to take the Functional Literacy Test.	64.7	28.0	7.3	58.0	32.6	9.4	53.1	34.5	12.4	51.8	36.2	12.0
42) Counseling before the Functional Literacy Test.	46.4	37.3	16.4	43.1	39.5	17.4	37.4	41.3	21.3	38.7	37.1	24.2
43) Counseling after the Functional Literacy Test.	53.2	31.3	15.5	50.3	33.7	16.0	50.0	34.0	16.0	50.0	34.4	15.6
44) Quality of counseling for students preparing for the Functional Literacy Test.	45.9	38.6	15.5	45.3	39.5	15.2	42.4	37.5	19.2	36.1	42.3	21.6
45) Quality of counseling for the Functional Literacy Test.	54.1	32.5	13.4	46.5	39.3	14.2	43.7	41.0	16.3	37.7	44.2	18.1

Appendix G

(continued)

Item	STUDENTS											
	Vocational						Non-Vocational					
	Male			Female			Male			Female		
	G	A	P	G	A	P	G	A	P	G	A	P
46) Providing vocational education courses that are adequate for career preparation.	68.7	28.0	7.3	58.6	32.6	9.4	53.1	34.5	12.4	51.8	36.2	12.0
47) Providing programs to help students prepare for a retake of the Functional Literacy Test.	65.7	24.1	10.2	63.6	27.6	8.7	61.2	28.6	10.2	60.4	30.4	9.2
48) Quality of the program provided students who are preparing for a retake of the Functional Literacy Test.	57.2	32.7	10.2	49.4	40.7	9.8	50.8	36.3	12.9	53.7	35.9	10.4

E. Vocational Education Enrollment.

	Male		Female		Male		Female	
	Yes	No	Yes	No	Yes	No	Yes	No
49) Were you enrolled in a vocational education course which you were unable to continue because you needed to prepare for the Functional Literacy Test?	6.9	93.1	5.5	94.5	6.3	93.7	4.3	95.7
50) Is there a vocational education course that you did not enroll in because of your need to prepare for the Functional Literacy Test?	4.9	95.1	2.6	97.4	4.6	95.4	3.7	96.3

Appendix G

(continued)

Item	STUDENTS							
	Vocational				Non-Vocational			
	Male		Female		Male		Female	
	Yes	No	Yes	No	Yes	No	Yes	No
G. The following questions are about the Functional Literacy Test.								
The preparation I had for the Functional LIteracy has:								
51) Improved my performance in other classes.	52.0	48.0	51.8	48.2	43.0	57.0	48.8	51.2
52) Improved my performance in vocational education courses.	35.5	64.5	38.0	62.0	23.9	76.1	27.1	72.9
53) Made me think more about basics.	74.0	26.0	79.7	20.3	65.4	34.6	79.7	20.3
54) Turned me off about school.	15.9	84.1	8.4	91.6	9.1	90.9	9.8	90.2
55) Helped me decide to go to an area vocational education center.	19.5	80.5	18.5	81.5	13.4	86.6	12.9	87.1
56) Helped me decide to drop out of vocational education courses.	8.2	91.8	2.5	97.5	5.9	94.1	4.0	96.0
57) Helped me decide to take vocational education courses instead of regular courses.	19.5	80.5	17.5	82.5	10.1	89.9	12.7	87.3
58) Helped me make a clearer decision about vocational education courses I need in order to obtain my career goals.	39.8	60.2	44.9	55.1	33.6	66.4	40.3	59.7

Appendix G

(continued)

Item	STUDENTS							
	Vocational				Non-Vocational			
	Male		Female		Male		Female	
	Yes	No	Yes	No	Yes	No	Yes	No
H. The following questions are about you..								
59) Are you now enrolled in vocational education courses?	81.7	18.3	72.5	27.5	29.6	70.4	28.8	71.2
60) Have you ever enrolled in vocational education courses?	78.0	22.0	73.5	26.5	53.0	47.0	48.5	51.5
61) Were you successful in passing the 11th grade Functional Literacy Test?	85.0	15.0	83.7	16.3	86.8	13.2	79.1	20.9
If you were unsuccessful in your attempt to pass the Functional Literacy Test, please answer the following questions.								
62) Were you able to stay in the courses you planned to take even though you were unsuccessful on the 11th grade Functional Literacy Test?	69.2	30.8	73.9	26.1	74.4	25.6	74.2	25.8
63) Did you drop out of vocational education courses in order to prepare for a retake of the Functional Literacy Test?	13.2	86.8	17.4	82.6	23.3	76.7	20.0	80.0
64) If you were enrolled in vocational education courses before you took the Functional Literacy Test, do you plan to enroll in any future vocational education courses?	59.5	40.5	51.1	48.9	39.5	60.5	39.1	60.9
65) Have you ever enrolled in a course to help pass the Functional Literacy Test?	44.7	55.3	56.5	43.5				

Appendix H

Vocational Education Enrollments for the Total County and for Sample Schools Within These Counties by Program, by Race, by Sex

Table 35

Vocational Education Enrollment in Baker County Compared to the Vocational Education Enrollment in Baker High School by Program, by Race, by Sex, and by Year

Year	Total Baker County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	163	152	162	84	24					110			8		703
76-77	174	175	171	92	29		1			105					747
77-78	165	195	213	65	34		5			105					782
78-79	155	155	222	62	42					83					719
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	367	336	703	570	132	0	0	1
76-77	378	369	747	586	161	0	0	0
77-78	388	394	782	639	140	2	1	0
78-79	374	345	719	550	168		1	
79-80								

Year	Total Baker High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	163	152	162	1	24					110			8		620
76-77	174	175	171	92	29		1			105					747
77-78	165	195	213	65	34		5			105					782
78-79	155	155	222	62	42					83					719
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	357	263	620	507	112	0	0	1
76-77	378	369	747	586	161	0	0	0
77-78	388	394	782	639	140	2	1	0
78-79	374	345	719	550	168	0	1	0
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 36

Vocational Education Enrollment in Bay County Compared to the

Vocational Education Enrollment in A. Crawford Mosley High School

by Program, by Race, by Sex, and by Year

Year	Total Bay County Vocational Education Enrollment													
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	71	91[illegible]	899	623	33	153		84	937		54	17		13	3801
76-77	188	1016	917	652	44	181		107	877		73	16			4071
77-78	214	951	[illegible]932	658	51	137	4	89	936		102			14	4188
78-79	232	1304	7[illegible]	628	56	76	7	37	800		74	8		18	3997
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	1661	2140	[illegible]801	3074	705	2	17	3
76-77	1742	2329	407[illegible]	3356	685	4	26	0
77-78	1926	2262	4188	3389	757	8	28	6
78-79	1832	2165	3997	3255	693	7	41	1
79-80								

Year	Total A. Crawford Mosley High School Vocational Education Enrollment													
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		298	325	214	23	67		47	363		14				1351
76-77		522		186	25	63	61		349		24				1230
77-78		208	311	42	27	21		57	262		60				988
78-79		221	226	14	31		3	36	298		21				850

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	596	755	1351	1157	190	0	1	
76-77	593	637	1230	1108	120	1	1	0
77-78	475	513	988	839	145	0	0	4
78-79	439	411	850	731	117	0	2	0
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 37

Vocational Education Enrollment in Brevard County Compared to the

Vocational Education Enrollment In Merritt Island High School

by Program, by Race, by Sex, and by Year

Year	Total Brevard County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	80	998	883	2762	252	600		124	1192	2596	961	75	10	165	11058
76-77	101	1594	1170	2494	327	672	43	167	1159	2757	789	36	5		11317
77-78	85	1964	941	2570	270	727	34	147	1354	2248	738		1	50	11129
78-79	64	3812	796	2348	225	684	11	160	1279	1786	718			23	12142
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	5729	5329	11058	9538	1471	3	28	18
76-77	5586	5731	11317	9681	1491	54	33	58
77-78	5464	5665	11129	9563	1434	93	31	8
78-79	5725	6417	12142	10513	1438	96	87	8
79-80								

Year	Total Merritt Island High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		32	39	341		233				203	182				1030
76-77		182	86	242		269				189	114				1082
77-78		277	64	215		259				148	123				1086
78-79		199	56	197		193				149	147				941
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	472	558	1030	947	76	0	2	5
76-77	430	652	1082	991	89	12	0	0
77-78	445	641	1086	1005	71	8	1	1
78-79	401	540	941	874	51	13	2	1
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 38

Vocational Education Enrollment in Broward County Compared to the Vocational Education Enrollments in McArthur and Dillard High Schools by Program, by Race, by Sex, and by Year

Year	Total Broward County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	867	2809	4938	3041	582	1188		263	6273	1084	207	36	25	828	22148
76-77	1032	3359	3796	2346	508	1178	97	253	5354	1091	189	25	122	372	19722
77-78	719	7366	3603	1658	549	1119	46	291	4820	969	178	25	159	740	22242
78-79	155	5532	2197	1808	272	690	74	267	5059	658	107	24	1345	847	22747
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	11489	10659	22148	15998	5814	147	67	22
76-77	9877	9845	19722	14208	5085	364	51	14
77-78	10493	11749	22242	16331	5405	436	62	8
78-79	11147	11600	22747	16749	5376	510	94	18
79-80								

Year	Total McArthur High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	64	273	296	189	46	76		34	334	75	5			58	1451
76-77	75	253	304	118	41	70	5	28	262	51	4			27	1238
77-78	46	511	305	69	43	87	3	32	321	57	2			64	1540
78-79	38	427	264	115	52	61	14	22	417	4	6			94	1514
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	710	751	1451	1182	239	29	1	0
76-77	592	646	1238	1014	189	35	2	0
77-78	741	799	1540	1308	183	47	2	0
78-79	770	744	1514	1314	132	62	6	0
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 38

(continued)

Year	Total Dillard High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		230	56	315	45	72		33	137	140	9			51	1088
76-77		111	118	238	30	73	3	29	222	134	5		47	17	1027
77-78		215	152	140	21	65	1	34	305	197	9		99	46	1284
78-79		183	100	226	23	77	4	20	255	116	10	11		63	1088
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	524	564	1088	471	608	8	1	0
76-77	487	540	1027	337	669	15	4	1
77-78	650	634	1284	387	874	21	2	0
78-79	467	621	1088	355	712	15	5	1
79-80								

Table 39

Vocational Education Enrollment in Clay County Compared to the

Vocational Education Enrollment in Clay County High School

by Program, by Race, by Sex, and by Year

Year	Total Clay County Vocational Education Enrollment													
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		623	494	305	22	29		138	248	439			54	38	2388
76-77	64	848	529	101	23	40	8	100	89	458			39	42	2341
77-78	62	1031	560	92	24	66	2	109	84	460			47	54	2591
78-79	61	1264	572	48	30	67	2	60	59	467			71	62	2763
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	1098	1290	2388	2136	236	6	4	6
76-77	1066	1275	2341	2048	280	9	4	0
77-78	1187	1404	2591	2390	195	4	2	0
78-79	1171	1592	2763	2599	154	4	1	2
79-80								

Year	Total Clay County High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		145	88	62				68		72				14	
76-77	208	144		89			4	63		100			29	17	654
77-78		216	128	92				79		63			47	30	655
78-79		265	85	31				22		56		36		34	529
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76								
75-77	290	374	654	538	98	0	1	0
77-78	284	371	655	560	95	0	0	0
78-79	197	332	529	445	83	1	0	0
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 40

Vocational Education Enrollment in Dade County Compared to the

Vocational Education Enrollments in Hialeah and Miami Jackson High Schools

by Program, by Race, by Sex, and by Year

Year	Total Dade County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	1325	7165	8579	6297	2887	1124		1118	13957	7380	1071		869	4795	56567
76-77	1186	10189	6218	5206	3080	1192	1568	1270	12284	5687	1134		538	1425	50977
77-78	1235	13012	6807	5713	3077	1357	754	1526	15094	5544	1116	140	573	3646	59594
78-79	1005	24964	6139	6702	4262	1165	3884	1619	16950	5576	1612	422	563	4386	79299
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	29802	26765	56567	31151	20298	4794	189	135
76-77	26045	24932	50977	18216	17185	15148	354	74
77-78	30824	28770	59594	21731	19206	18133	394	130
78-79	37986	41313	79299	27576	24212	26828	565	118
79-80								

Year	Total Hialeah High School Vocational Education Enrollment													
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		201	478	69	46				332	400	88			102	1716
76-77		201	343	28	94	61	9	29	205	280				40	1290
77-78		625	333	14	75	43	14	17	255	268	63			42	1749
78-79		1309	196	47	147	56	84	30	472	193	107			50	2544
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	924	792	1716	1140	252	319	5	0
76-77	631	659	1290	577	94	619	0	0
77-78	748	1001	1749	656	63	1029	1	0
78-79	1074	1470	2544	579	76	1884	2	3
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 40
(continued)

Year	Total Miami Jackson High School Vocational Education Enrollment													
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		157	591	367	29				165	421	49			123	1902
76-77		107	253	434	274	28	24			347	52		107	53	1679
77-78		259	144	281	344	35	41			436	95		106	112	1853
78-79		706	215	271	522		201		17	327	51		47	192	2027
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	1023	879	1902	305	1566	27	4	0
76-77	773	906	1679	68	1416	190	5	0
77-78	917	936	1853	102	1486	265	0	0
78-79	838	1189	2027	18	1639	370	0	0
70-80								

Table 41

Vocational Education Enrollment in Escambia County Compared to the

Vocational Education Enrollments in Escambia, Pensacola, and W. J. Woodham High Schools

by Program, by Race, by Sex, and by Year

Year	Total Escambia County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	604	229	2724	1689	252	88			826	260	189				6861
76-77	811	272	2728	1488	204	159	8		702	246	168				6786
77-78	761	299	2981	1649	204	169	14		825	287	255				7444
78-79	553	3146	3396	7[illegible]	220	144	22		671	243	235				8706
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	2536	4325	6861	4654	2178	22	0	7
76-77	2612	4174	6786	4578	2179	15	7	7
77-78	3095	4349	7444	4913	2381	16	23	111
78-79	3372	5334	8706	6158	2451	32	54	11
79-80								

Year	Total Escambia High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		32	609	151	50				227	82	35				1186
76-77		66	489	92	23		1		174	52	27				924
77-78		82	520	268	29		3		202	99	54				1257
78-79		520	446	21	32		3		203	101	56				1382
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	473	713	1186	926	255	0	5	0
76-77	382	542	924	622	301	0	0	0
77-78	535	722	1257	802	424	6	3	22
78-79	542	840	1382	961	405	5	11	0
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 41
(continued)

Year	Total Pensacola High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		39	325	355	22	62				100	36				939
76-77		32	399	278	24	80				131	36				980
77-78		34	355	316	20	87				111	49				972
78-79	104	388	480	34	29	61	1		16	89	42				1244
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	228	708	939	489	442	0	5	0
76-77	315	665	980	563	404	10	3	0
77-78	305	667	972	593	368	3	7	1
78-79	501	743	1244	779	428	9	24	4
79-80								

Year	Total W. J. Woodham High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	100	73	592	377	24				173		33				1372
76-77	177	85	581	341	24		4		168		32				1412
77-78	247	90	669	335	29		4		185	56					1615
78-79	125	632	665		43		7		143		43				1658
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	476	896	1372	924	446	0	2	0
76-77	548	864	1412	923	357	2	1	0
77-78	708	907	1615	967	560	4	3	78
78-79	705	953	1658	1167	482	5	4	0
79-80								

Table 42

Vocational Education Enrollment in Gadsden County Compared to the

Vocational Education Enrollments in Greensboro and Chattahoochee High Schools

by Program, by Race, by Sex, and by Year

Year	Total Gadsden County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IH	JE	PS	SP	WE	Total
75-76	326	227	448	402		55			82	254			29		1823
76-77	266	246	631	288		46			64	256			48		1845
77-78	299	349	507	196		64			82	195			46		1738
78-79	196	673	383	200		59			80	171			24		1786
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	1011	812	1823	368	1454	1	0	0
76-77	933	912	1845	358	1487	0	0	0
77-78	835	903	1738	312	1422	1	3	0
78-79	831	955	1786	354	1423	2	0	2
79-80								

Year	Total Greensboro High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	77	24	17	31											149
76-77	65	17	40	25											147
77-78	82	14	38	14											148
78-79	28	79	35	7											149
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	70	79	149	75	74	0	0	0
76-77	74	73	147	65	82	0	0	0
77-78	58	90	148	53	94	0	1	0
78-79	55	94	149	60	89	0	0	0
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 42
(continued)

Year	Total Chattahoochee High School Vocational Education Enrollment												
	AG	BU	CH	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		19	50	26										95
76-77		58	49											107
77-78		42	40											82
78-79		114	32											146
79-80														

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	42	53	95	42	53	0	0	0
76-77	26	81	107	63	44	0	0	0
77-78	23	59	82	48	32	1	1	0
78-79	56	90	146	79	65	0	2	0
79-80								

Table 43

Vocational Education Enrollment in Hernando County Compared to the

Vocational Education Enrollment in Hernando High School

by Program, by Race, by Sex, and by Year

Year	Total Hernando County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	156	211	271	357		99		106	196	228			185		1809
76-77	212	202	250	142	27	121	6	67	278	172			80		1557
77-78	228	233	105	163		122		17	227	140			75		1310
78-79	186	354	159	117		109		27	258	77		1	64		1352
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	985	824	1809	1441	361	4	2	1
76-77	889	668	1557	1312	244	1	0	0
77-78	731	579	1310	1102	201	5	2	
78-79	684	668	1352	1178	167	6	0	1
79-80								

Year	Total Hernando High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	99	139	251	237		49		40	127	170			30		1202
76-77	173	187	241	35	27	53	6	33	138	172			24		1089
77-78	173	194	105	52		48			140	140			18		870
78-79	126	257	155	48		67			149	76			9		887
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	633	569	1202	956	240	1	4	1
76-77	601	488	1089	913	176	0	0	0
77-78	500	270	870	712	152	3	3	0
78-79	440	447	887	759	124	3	1	0
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 44

Vocational Education Enrollment in Hillsborough County Compared to the

Vocational Education Enrollment in Jefferson High School

by Program, by Race, by Sex, and by Year

Year	Total Hillsborough County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	1861	6189	2934	3183	686	803		252	5005	1801		141	49	1866	24770
76-77	2294	7385	2864	3261	589	932	431	232	5086	1628		85	2	765	25554
77-78	2775	8118	2848	3174	757	1013	394	266	5725	1588		96	3	1366	28132
78-79	2528	8322	2930	2732	805	1017	339	264	5656	1519		92	1	1356	27556
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	12243	12527	24770	19705	4883	998	70	114
76-77	12524	13030	25554	19073	4959	1417	79	26
77-78	13902	14221	28123	20732	5409	1727	118	137
78-79	13496	14060	27556	20283	5071	1944	231	27
79-80								

Year	Total Jefferson High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		460	253	36	49	122		39	195	226		34		124	1538
76-77		576	208	48	44	97	31		263	210		21		75	1573
77-78		596	234	37	54	84	17		271	186		21		53	1553
78-79		567	228	45	61	80	11		255	151		14		81	1493
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	707	831	1538	875	438	220	5	0
76-77	693	880	1573	858	393	319	2	1
77-78	640	913	1553	795	417	335	5	1
78-79	644	849	1493	738	387	365	3	0
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indien (I)

Table 45

Vocational Education Enrollment in Holmes County Compared to the Vocational Education Enrollment in Holmes County High School by Program, by Race, by Sex, and by Year

Year	Total Holmes County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	341	79	203	105											728
76-77	337	101	200	173									2		832
77-78	368	50	196	133									6		751
78-79	346	152	242	33									5		778
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	370	358	728	705	18	2	0	3
76-77	411	421	832	813	19	0	0	0
77-78	382	369	751	710	37	1	1	2
78-79	423	355	778	764	14	0	0	0
79-80								

Year	Total Holmes County High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	117	62	77	52											308
76-77	126	76	80	66									15		363
77-78	125	22	100	53									6		306
78-79	125	120	112	3									5		365
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	137	171	308	192	114	0	1	1
76-77	173	190	363	348	15	0	0	0
77-78	140	166	306	289	10	1	1	0
78-79	176	189	365	353	12	0	0	0
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 46

Vocational Education Enrollment in Nassau County Compared to the Vocational Education Enrollment in W. Nassau County High School by Program, by Race, by Sex, and by Year

Year	Total Nassau County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	199	319	306	177	18			61	229	285	35			66	1695
76-77	328	331	306	145			9	37	205	169	139			4	1673
77-78	268	418	356	169			4	66	145	187	137		4	12	1766
78-79	241	443	400	223			1	67	122	276	96		17	10	1896
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	953	742	1695	1361	334	0	0	0
76-77	910	763	1673	1397	273	3	0	0
77-78	917	849	1766	1479	282	1	1	3
78-79	993	903	1896	1560	335	0	0	1
79-80								

Year	Total W. Nassau County High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	114	106	111	12				31		60					494
76-77	200	146	150	22				37	31		40				626
77-78	137	128	194	47				46		52	27				631
78-79	137	132	188	60				43		57	29				646
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	254	240	494	441	53	0	0	0
76-77	324	302	626	574	52	0	0	0
77-78	331	300	631	575	56	0	0	0
78-79	321	325	646	585	61	0	0	0
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 47

Vocational Education Enrollment in Palm Beach County Compared to the

Vocational Education Enrollment in Twin Lakes and Palm Beach Gardens High Schools

by Program, by Race, by Sex, and by Year

Year	Total Palm Beach County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	723	2656	2786	1245	659	571		144	4098	912	80		84	692	14620
76-77	676	3458	2669	1443	606	599	129	117	4003	845	62		85	345	15017
77-78	490	3371	1973	1590	559	483	215	113	3231	783	93		70	443	13414
78-79	471	4220	1653	1083	496	510	32	100	2773	806	71		135	387	12737
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	7924	6696	14620	9686	4536	105	91	202
76-77	7866	7151	15017	9348	4450	1054	159	6
77-78	6951	6463	13414	8761	3845	759	36	9
78-79	6524	6213	12737	8444	3602	605	55	30
79-80								

Year	Total Twin Lakes High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		265	343	107	62	44			374		14			130	1339
76-77		360	297	119	68	43	76		423		2			28	1416
77-78		355	156	125	57		1		208		5			56	963
78-79		335	137	31	52		7		248		9			67	896
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	697	642	1339	915	417	5	1	1
76-77	719	697	1416	856	501	57	2	0
77-78	431	532	963	675	252	34	2	0
78-79	426	470	896	634	222	38	0	2
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 47
(continued)

Year	Total Palm Beach Gardens High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		488	340	43	55	56		51	329		5			37	1404
76-77		553	273	142	46	76		53	360					35	1538
77-78		395	139	131	66	82	13	55	161		9		20	31	1131
78-79		420	222	58	56	111		49	147		12			34	1108
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	711	693	1404	768	636	0	0	0
76-77	764	774	1538	938	593	4	2	0
77-78	542	589	1131	686	429	12	3	1
78-79	523	585	1108	724	372	11	1	0
79-80								

Table 48

Vocational Education Enrollment in Pinellas County Compared to the

Vocational Education Enrollments in Dixie Hollins and Clearwater High Schools

by Program, by Race, by Sex, and by Year

Year	Total Pinellas County Vocational Education Enrollment													
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	95	9685	4799	576	749	1334		219	4114	1029	2		19	1538	24159
76-77	73	10085	4035	527	517	1183	84	125	2664	1039	2		64	676	21077
77-78	104	10861	3679	381	540	1062	46	153	2635	1057	13	1	107	628	21267
78-79	120	11330	3323	248	614	1187	416	216	4546	1148	24		241	746	24159
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	11592	12567	24159	20201	3754	142	30	32
76-77	9718	11359	21077	17603	3336	44	78	16
77-78	9711	11556	21267	17503	3305	68	75	16
78-79	11643	12316	24159	20222	3749	81	95	12
79-80								

Year	Total Dixie Hollins High School Vocational Education Enrollment													
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		1038	561	47		148			451	437				131	2813
76-77		924	334	27		161	1		213	435				51	2146
77-78		748	322	31		98			235	411				35	1880
78-79		953	283	17		76			262						1591
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	1415	1398	2813	2291	495	3	23	1
76-77	1001	1145	2146	1753	376	2	10	1
77-78	847	1033	1880	1528	337	10	5	0
78-79	623	968	1591	1292	277	14	6	1
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 48
(continued)

Year	Total Clearwater High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		1247	393	46	168	117		40	338	110				243	2702
76-77		1165	295	50	117	108	2	31	346	101				152	2371
77-78		1309	293	23	88	61	2	32	315	98				114	2335
78-79		1305	197	32	97	93	58	38	574		24			139	2257
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	1248	1454	2702	2424	226	5	45	2
76-77	1132	1235	2371	2123	224	3	19	2
77-78	1100	1235	2335	2055	253	10	15	2
78-79	1256	1301	2057	2240	281	10	23	3
79-80								

Table 49

Vocational Education Enrollment in Polk County Compared to the Vocational Education Enrollments in Bartow and Mulberry High Schools by Program, by Race, by Sex, and by Year

Year	Total Polk County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	2177	1268	2528	2675	501	333			1933		343			439	12197
76-77	2477	1685	2646	1833	521	321	125		2188		322			240	12650
77-78	2600	4339	1966	2063	593	319	52		2292		415		18	331	15088
78-79	2326	4574	2286	1391	547	293	34		1976		480		23	353	14283
79-80															

	Sex			Race					
	Male	Female	Total	W	B	H	A	I	
75-76	5863	6334	12197	9287	2872	14	19	5	
76-77	6277	6373	12650	9492	3072	57	22	7	
77-78	7316	7772	15088	11547	3425	91	19	6	
78-79	6827	7456	14283	11083	3007	130	29	34	
79-80									

Year	Total Bartow High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	136	112	251	32	23	26					23			21	624
76-77	141	121	234	22	2	35	26		40		32			30	683
77-78	218	382	208	26	33	31			39		33			33	1003
78-79	214	369	277	23	20	25					63			34	1025
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	258	366	624	376	245	1	2	0
76-77	321	362	683	429	249	3	4	0
77-78	426	577	1003	601	386	15	1	0
78-79	425	600	1025	600	377	17	4	27
79-80								

Code: White (W)
Black (B).
Hispanic (H)
Asian (A)
American Indian (I)

Table 49
(continued)

Year	Total Mulberry High School Vocational Education Enrollment													
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	ME	Total
75-76	115	76	78	171	28				182		67			16	683
76-77	236	60	128	75	22		4		96		25			6	652
77-78	197	95	91	92	38		2		169		21			18	723
78-79	74	134	71	71	31		5		86		52				524
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	378	305	683	471	212	0	0	0
76-77	344	308	652	409	268	4	0	0
77-78	380	343	723	472	247	4	0	0
78-79	225	299	524	363	159	2	0	0
79-80								

Table 50

Vocational Education Enrollment in Sarasota County Compared to the

Vocational Education Enrollment in Sarasota High School

by Program, by Race, by Sex, and by Year

Year	Total Sarasota County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	40	586	874	513	186	89		17	574	397			60	473	3809
76-77	83	763	1002	488	190	122	11	25	653	372			89	298	4096
77-78	119	881	899	633	150	120	11		575	494			93	469	4444
78-79	254	1749	703	462	178	128	6		637	235			117	479	4948
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	1746	2063	3809	3212	594	0	3	0
76-77	1820	2276	4096	3413	620	53	8	2
77-78	1961	2483	4444	3764	645	24	10	1
78-79	2126	2822	4948	4278	626	30	13	1
79-80								

Year	Total Sarasota High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	HE	PS	SP	WE	Total
75-76		208	340	20	58	57				240				93	1016
76-77		248	343	33	61	66	2		160	211				87	1211
77-78		263	328	21	57	61	7			306				62	1105
78-79	45	803	186	26	66	60	1			160				77	1424
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	473	543	1016	795	219	0	2	0
76-77	557	654	1211	907	269	28	6	1
77-78	507	598	1105	820	253	4	2	0
78-79	558	866	1424	1168	230	19	6	1
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 5

Vocational Education Enrollment in Seminole County Compared to the Vocational Education Enrollment in Seminole High School by Program, by Race, by Sex, and by Year

Year	Total Seminole County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	297	1261	611	798	123	213		103	704	1049	133	60	1	160	5493
76-77	307	1609	944	699	125	244	25	85	707	865	147	61		79	5897
77-78	290	1834	960	576	178	283	28	77	751	926	224	49	170	162	6508
78-79	287	2655	950	477	254	281	49	84	783	879	234	37	38	188	7216
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	2985	2508	5493	4334	1100	10	0	49
76-77	3007	2890	5897	4674	1156	44	10	13
77-78	3425	3083	6508	5093	1201	75	20	119
78-79	3659	3557	7216	5822	1189	125	67	13
79-80								

Year	Total Seminole High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	128	218	219	40	24	18				464	56	60		35	1262
76-77	151	384	300	34		62	5			363	52	61		36	1448
77-78	176	385	263	35	47	29	7			328	77	49		22	1418
78-79	152	442	243	43	73		9			337	111	37		33	1480
70-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	713	549	1262	659	553	0	1	9
76-77	723	725	1448	842	589	7	4	6
77-78	730	688	1418	850	548	7	3	0
78-79	767	713	1480	874	593	10	3	0
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 52

Vocational Education Enrollment in Taylor County Compared to the Vocational Education Enrollment in Taylor County High School by Program, by Race, by Sex, and by Year

Year	Total Taylor County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		67	21	195					122	26			31		462
76-77		22	56	105	18				72				65		338
77-78		37	146	60	38		2		107				29		419
78-79		56	46	34	32		1		142				23		354
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	211	251	462	292	270	0	0	0
76-77	126	212	338	197	141	0	0	0
77-78	193	226	419	285	133	0	0	1
78-79	192	142	334	236	98	0	0	0
79-80								

Year	Total Taylor County High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76		67	21	195					122	26			31		462
76-77		22	56	105	18				72				65		338
77-78		37	38	60	38		2		107				29		273
78-79		56	46	34	32		1		142				23		334
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	211	251	462	292	170	0	0	0
76-77	126	212	338	197	141	0	0	0
77-78	159	114	273	199	74	0	0	0
78-79	192	142	334	236	98	0	0	0
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 53

Vocational Education Enrollment in Wakulla County Compared to tha

Vocational Education Enrollment in Wakulla County High School

by Program, by Race, by Sex, and by Year

Year	Total Wakulla County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-67	77	132	64	72					2	192				26	565
76-77	11	128	42	72	31		5		43	150				15	497
77-78	11	77	43	113	46		8		46	150				23	517
78-79	35	141	9	94	43		6		48	127				31	534
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	284	281	565	422	143	0	0	0
76-77	248	249	497	369	127	1	0	0
77-78	262	255	517	380	137	0	0	0
78-79	253	241	534	424	110	0	0	0
79-80								

Year	Total Wakulla County High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	77	132	64	72					2	192				26	565
76-77	11	128	42	72	31		5		43	150				15	497
77-78	11	77	43	113	46		8		46	150				23	517
78-79	35	141	9	94	43		6		48	127				31	534
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	284	281	565	422	143	0	0	0
76-77	248	249	497	369	127	1	0	0
77-78	262	255	517	380	137	0	0	0
78-79	293	241	534	424	110	0	0	0
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)

Table 54

Vocational Education Enrollment in Washington County Compared to the

Vocational Education Enrollment in Chipley High School

by Program, by Race, by Sex, and by Year

Year	Total Washington County Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	108	255	125						47						535
76-77	145	73	149						45						412
77-78	130	131	126						37						424
78-79	171	289	106						41						607
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	251	284	535	447	87	0	0	1
76-77	202	210	412	344	68	0	0	0
77-78	208	216	424	338	85	0	0	1
78-79	294	313	607	468	139	0	0	0
79-80								

Year	Total Chipley High School Vocational Education Enrollment														
	AG	BU	CH	HG	DC	DE	ES	HL	IA	IN	JE	PS	SP	WE	Total
75-76	86	165	83												334
76-77	111	34	101												246
77-78	99	77	77												253
78-79	96	175	67												338
79-80															

	Sex			Race				
	Male	Female	Total	W	B	H	A	I
75-76	161	173	334	296	38	0	0	0
76-77	119	127	246	216	30	0	0	0
77-78	137	116	253	214	38	0	0	1
78-79	165	173	338	267	71	0	0	0
79-80								

Code: White (W)
Black (B)
Hispanic (H)
Asian (A)
American Indian (I)