

DOCUMENT RESUME

ED 060 193

VT 014 688

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TITLE An Exemplary Model for a Total Ecological Approach to Non-Graded Vocational Programs in Separate Education Centers. Final Report.
INSTITUTION Florida Vocational Programs Research Coordinating Units, Tallahassee.
SPONS AGENCY Bureau of Adult, Vocational, and Technical Education (DHEW/OE), Washington, D.C.
PUB DATE Nov 71
CONTRACT OEC-0-70-5181(361)
NOTE 178p.

EDRS PRICE MF-\$0.65 HC-\$6.58
DESCRIPTORS *Career Education; Developmental Programs; Disadvantaged Youth; Elementary Grades; *Environmental Education; Occupational Guidance; *Occupational Information; Program Evaluation; Secondary Grades; *Skill Development; *Student Attitudes; Teacher Attitudes; Ungraded Programs; Vocational Counseling; Vocational Education; Work Experience

ABSTRACT

This project was designed to implement an exemplary model for a total approach to non-graded vocational programs in four separate centers in Florida. Specific Objectives were to: (1) improve student attitudes toward the environment, (2) improve academic achievement of students, (3) develop students' occupational skills, and (4) improve the methods, techniques, skills and attitudes of teachers. The resulting occupational orientation program at the elementary and secondary levels relied on work experience and cooperative education, extensive training in job entry skills, and intensive occupational guidance and counseling. An evaluation by an outside team revealed all major phases of the program to be successful. (Author/GEB)

ED 060193

F I N A L R E P O R T

PROJECT No. O-361-0094
CONTRACT No. OEC-O-70-5181(361)

AN EXEMPLARY MODEL FOR A TOTAL ECOLOGICAL APPROACH
TO NON-GRADED VOCATIONAL PROGRAMS
IN SEPARATE EDUCATION CENTERS

EXEMPLARY PROJECT IN VOCATIONAL EDUCATION
CONDUCTED UNDER
PART D OF PUBLIC LAW 90-576

K. M. EADDY, ADMINISTRATOR
VOCATIONAL RESEARCH AND EVALUATION FUNCTION
ROOM 254 KNOTT BUILDING
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NOVEMBER, 1971

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FINAL REPORT

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The project reported herein was performed pursuant to a contract with the Bureau of Adult, Vocational and Technical Education, Office of Education, U. S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgement in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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November, 1971

SUMMARY

An Exemplary Model for a Total Ecological Approach to Non-graded Vocational Programs in Separate Educational Centers

The project to implement an exemplary program to improve vocational education opportunities for ecologically disadvantaged urban students was begun on July 1, 1970, and continued to June 30, 1971.

The major purpose of the project was to implement an exemplary model for a total approach to non-graded vocational programs in four separate educational centers located in metropolitan areas of Florida.

Specifically, product objectives of the project were to:

1. Improve attitudinal interaction of the student with his environment;
2. Improve academic achievement of the student;
3. Develop occupational skills of the students;
4. Develop or improve methods, techniques, skills and attitudes of the teacher to effectively teach disadvantaged students.

Procedures relevant to the establishment and operation of the exemplary vocational program were development of criteria to identify and select students, identification of instruments to measure design variables, securing and adapting instructional materials which link vocational and academic subject matter and meet individual needs of students, development of instruments to assess in-service preparation of teachers and supportive staff to work with disadvantaged students.

Specifically, the process objectives for the exemplary program were to provide:

1. A broad occupational orientation at elementary and secondary school levels to increase student awareness of the range of options open to them in the world-of-work.
2. Work experience, cooperative education and similar programs, in addition to those currently available, making possible a wide variety of offerings in many occupational areas.
3. Specific intensive training in job entry skills for students just prior to the time they leave school.
4. Intensive occupational guidance and counseling during the last years of school and for initial placement of all students at the completion of their schooling.

Processes relevant to the exemplary vocational program were: (1) developing linkages among components of the educational system, between the educational system and the community and between academic and occupational skills so that making an occupational choice and learning the necessary job attitudes and skills was a continuous process for the student, involved his parents and community and made available a wide range of vocational options; (2) developing innovative procedures for orienting disadvantaged students to occupational knowledge, skills and attitudes, and the world-of-work; (3) providing a wide variety of occupational programs, using innovative instructional techniques, and training youths for job entry skills; and (4) developing innovative approaches to guidance, counseling and placement of students.

In summary, the primary objective of this project was to establish a program in four school centers which could provide an opportunity for students to develop basic skills of work and communication, positive social modes and greater academic achievement necessary to obtain employment as a part-time or full-time employee. Work skills were developed in vocational areas such as mechanics, electricity, wood-working, health, clerical and personnel services. Social and academic skills were an integral part of the vocational programs.

An equally important objective of this project was preparation of teachers to work with disadvantaged students which entailed training student teachers and in-service teachers in appropriate methods and attitudes for effectively interpreting and translating behavior patterns of disadvantaged students into positive, constructive modes.

To achieve the objectives of the project, the following procedures were implemented:

- a. Selection and recruitment of students and staff.
- b. Development of curriculum and instructional materials for elementary and secondary components.
- c. Renovation and equipping facilities.
- d. Development of in-service programs for teachers.
- e. Design and implementation of the evaluation model.

Results and Accomplishments

Measurement of achievement of objectives indicated that:

1. Students improved in attitudinal interaction with their environment.
2. Students gained academic skills as well as students enrolled in traditional programs.
3. Students learned more entry-level occupational skills.
4. Teachers had programs to improve techniques in dealing with youngsters.

5. Occupational orientation programs were offered to all students enrolled in the program.
6. A wider variety of occupational programs were made available to students.
7. Intensive training for job entry skills was provided for students who were leaving school prior to graduation, or drop-outs returning to school.
8. Occupational guidance and counseling was provided students enrolled in the program. Placement services were limited since the students were enrolling for the first year and many were not over 16 years of age.

Evaluation of the program was conducted by a third party at the University of West Florida. The evaluation design for the project consisted of assessment of product and process hypotheses developed to determine effectiveness of the program. Conclusions drawn from the analysis of data indicate:

- A. Students enrolled in the exemplary programs as compared to students in traditional academic programs can expect to:
 - 1 - learn more entry level manipulative-type job skills for employment.
 - 2 - achieve equally well in reading skills, communication skills, and math skills.
 - 3 - demonstrate more positive attitudes toward the school, peer relationship, work in our society, and work habits.
 - 4 - demonstrate equal school attendance rate and a higher school drop-out rate.
 - 5 - receive and pursue more instruction in vocational related courses.
 - 6 - receive more individual and group counseling, and a larger percent of students in the exemplary program will express an interest in an occupational choice.
- B. Students attending exemplary programs can expect to experience fewer confrontations with law enforcement agencies during their first year in the exemplary program than they did during the year previous to entering the program.
- C. Teachers in the exemplary program can be expected to utilize different teaching techniques to the same degree as teachers in academic-type programs. While they can be expected to use individual instruction consistent with the purposes of the exemplary program, they can be expected to use other techniques with the program. Teachers in both groups can be expected to exhibit difficulty writing performance objectives.

Other conclusions which were drawn from data collected through informal observation were:

1. Development of curricula and instructional materials should be completed before instruction begins.
2. Staff development programs should include additional techniques in instructing urban disadvantaged students.
3. Several occupational areas should be strengthened by additional courses; e.g., distributive education, ornamental horticulture, child day care center aides, health related occupations, etc.
4. More cooperative type programs should be offered.
5. Vocational related clubs should be organized.
6. Recruitment of dropouts should be emphasized. These should be placed in the intensive skill development courses.
7. Special effort should be made to articulate with other education institutions; i.e., area vocational technical centers, regular programs, etc.
8. Placement services should be available.

Based upon conclusions drawn from formal and informal evaluation, the above recommendations are suggested to strengthen and expand exemplary programs to provide a comprehensive program of vocational education for career development.

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CHAPTER I

PROBLEM

During the last decade America's space program challenged educators to reappraise the academic process by which engineers, scientists and related technicians were produced to assure the United States would meet the challenge for superiority in space exploration. Indirectly, the emphasis encouraged educators to cull the slow-learner from the academic population in an effort to speed up the learning pace of the talented student. In despair, less talented students turned productive efforts to out-of-school areas rather than academic achievement. If students remained in school, they were socially promoted toward the twelfth grade and graduation.

Recently, more emphasis has been placed on utilization of resources to develop and implement programs for all students so they may achieve to their fullest capabilities. Increased state and national efforts have been made to provide programs of vocational-technical education for youth and adults who:

- are enrolled in secondary and post-secondary schools;
- have completed or left formal education programs and are available for employment;
- have entered the labor market but need to upgrade their skills or learn new ones; or
- have special educational needs related to a disadvantaged or handicapped condition.

The ultimate purpose of these occupational education programs is to prepare persons for successful employment in a dynamic and constantly changing world-of-work. Vocational educators are successful in achieving this purpose if the process of their organization results in a useful product, namely, people who are competent workers.

Opportunities for occupational success among the disadvantaged are improved through programs that are realistically planned from data concerning actual and projected labor market needs, student interests, aspirations, abilities and needs.

New programs must be based upon evaluative results of programs shown to have a high probability of success. Time is of the essence in dealing effectively with disadvantaged youth. The need for well prepared workers demands that programs utilize results of completed research projects funded to produce data and other pertinent information useful in making judgements about effective programs for disadvantaged youth.

Several factors contributed to the need for developing vocational programs specifically designed to meet the unique needs of disadvantaged youth and adults. The severity of problems of the disadvantaged in Florida are indicated in the project proposal (38). Unless a program of intervention could be implemented, the problem of disadvantaged youth promised to become more severe. This report describes an exemplary program for meeting the vocational education needs of disadvantaged urban youth.

Dales and Walters (36) found that a developmental trend with adolescent boys in economically depressed areas of North Florida was evident; i.e., disadvantaged boys in early adolescence tend to have unrealistic goals and need encouragement to acquire acceptable work habits while furthering their education. This conclusion has implications for counselors, teachers and parents working to establish meaningful and realistic programs for disadvantaged youth.

In reviewing many studies (3), (12), (14), (20), (21), (36), (1), (19), (24), (26), (31), (32), (29), (10), (9), (13), (18), (8), (7), (6), (5), (4), (37), (2), (11), (23), (25), (27), (28), of disadvantaged and underachieving youth, the following characteristics were indicated as typical:

- 1 - Retarded intellectual development resulting from cultural conflicts and lack of early environmental stimulation.
- 2 - Increased learning through a physical and concrete approach.
- 3 - Over age for grade at the early elementary level.
- 4 - Irregular school attendance patterns
- 5 - Measured I.Q. of 89 or below.
- 6 - Retarded academic or verbal intelligence which precludes the ability to abstract, to concentrate over sustained periods of time and to be persistent in their efforts.
- 7 - Poorly defined value systems.
- 8 - Aggressive behavior and low hostility thresholds.
- 9 - Resentfulness and defiance of authority.
- 10 - Impulsiveness.
- 11 - Egocentricity and self-indulgence.
- 12 - Strong suggestibility.
- 13 - Low frustration levels.

- 14 - Low self concepts.
- 15 - Anxiety levels which decreased with age among white students and increased with age among black students.
- 16 - Males with low I.Q. have medium or low occupational aspirations.
- 17 - High parental aspirations were correlated with high educational and occupational aspirations while low parental aspirations were related to low educational and occupational aspirations.

The above studies indicated that disadvantaged youth came from homes, families and neighborhoods with the following characteristics:

- 1 - Social norms in the home and neighborhood were contradictory to school norms.
- 2 - Delinquent sub-culture.
- 3 - Typical family make-up of broken homes.
- 4 - Weak personal relationships with other family members.
- 5 - Cultural conflicts which concern family, school and society in general.
- 6 - Family discipline usually erratic, punitive and strict, or non-existent.

A review of material published by various groups concerning the "600" Schools of New York City, (1), (19), (24), (26), (31), indicates that emotionally disturbed children do well in settings where learning difficulties are considered. A project conducted in Hawthorne, California (32) concluded that the potential dropout will stay in school and become successful if the learning situation can be adapted to his needs.

Russell (29) concluded that the school environment is a supplement to the home and living environment and may fulfill needs to all types, including those concerned with personality, self-esteem and ambition.

On the other hand, schools may be detrimental to students by placing them in a classical learning situation which only adds to the child's frustration, low self-esteem or other problems. Studies by Kaplan and O'Dea (18) indicated that inappropriate curriculum and failure to consider individual differences of students may create problems that cannot be solved.

The relationship between self, self concept and achievement is well documented in literature by Fick (10), Erikson (9) and Grambs (13), who reviewed implications of lowered self-concept, its causes and results. Although the study primarily concerned implications these are appropriate to any disadvantaged group. In the same study, Grambs indicated the need for a new approach in curriculum and teaching with more emphasis on individual programs for each student.

To be effective in dealing with youth who have the above characteristics, a program was developed to bridge the gap between school and the world-of-work, promote cooperation between public education and manpower agencies, and broaden occupational aspirations and opportunities for youth.

CHAPTER II

OBJECTIVES OF THE PROJECT

This project was a cooperative effort between the State of Florida, and four district school systems selected on the basis of need, and concern with two primary problems:

- . implementing on an adequate scale a vocationally oriented exemplary program to meet the unique psycho-social needs of the urban, ecologically disadvantaged child;
- . implementing a teacher training program to prepare teachers for work with the ecologically disadvantaged child.

It was planned to serve slow-learners and/or ecologically disadvantaged students who had problems which prevented them from achieving in the traditional classroom, and was not intended to serve primarily the mentally retarded, severely emotionally disturbed or physically handicapped student.

Underlying all educational procedures implemented in the project was the basic assumption that behavior could be changed to aid the learner in adapting to an environment, society or culture.

Innovation in the program dealt with physical location in metropolitan areas of deprivation and the integration of outstanding and successful attributes of other programs and projects which were designed to answer specific student problems. This project considered social (ecological), academic and vocational aspects of the student's life.

Concepts upon which this program was developed reflect major findings from vocational education research and research-related activities.

1. Kaufman, et al; in a study entitled, The Role of Secondary Schools in the Preparation of Youth for Employment, (34), found no preference for either the comprehensive or the separate school. The proposed exemplary program was organized as a separate program in a center or was located in a separate school facility.
2. The Richmond Plan (33) created a team approach to the teaching of subject matter and related subjects; such as, mathematics, reading and communication. The measure of success was in

and exit point by articulating with other educational programs or providing intensive training for entry-level job skills so that all students leaving the program would be employable.

8. The objective of career exploration or occupational orientation program was to guide the student in making a wiser occupational choice based on knowledge of himself and his activities, and to guide the student in selecting a vocational area at the secondary school level. After an orientation in occupational clusters, each student selected a specific field for an indepth study. A work experience instructor was assigned to introduce vocations in elementary and junior high schools and to provide a program of employability skills.
9. A vocational guidance and counseling component for the project was planned to provide one occupational specialist per fifty students to insure intensive guidance capability. In addition to the occupational specialist, a social worker was included for the purpose of providing supportive services for ecologically handicapped students. These members of the support staff were available around-the-clock for consultation with students when school, job or home problems arise. When necessary, the support staff worked with juvenile court officials. The support staff was responsible for student placement.

Objectives

The major purpose of the project was to implement an exemplary model for a total approach to non-graded vocational programs in four separate educational centers located in metropolitan areas of the State.

Specifically, product objectives of the project were to:

1. Improve attitudinal interaction of the student with his environment;
2. Improve academic achievement of the student;
3. Develop occupational skills of the students;
4. Develop or improve methods, techniques, skills and attitudes of the teacher to effectively teach disadvantaged students.

Procedures relevant to the establishment and operation of the exemplary vocational program were development of criteria to identify and select students, identification of instruments to measure design variables, securing and adapting instructional materials which link vocational and academic subject matter and meet individual needs of students, development of instruments to assess in-service preparation of teachers and supportive staff to work with disadvantaged students.

direct ratio to the personal interest and acceptance of participating teachers. Each package was tailored for a one-time application, thus creating excessive design time. The program reported herein makes use of a generalized package requiring infrequent minor revisions, but was adaptable for use with students having varying needs.

3. Initial reports from participating instructors of the Brevard County, Florida, project entitled, Non-Graded Vocational Program in Comprehensive High Schools indicated a significant difference in student learning when the learning package stressed trade vocabulary, mathematics and science related to basic occupational subject matter. When completed this study is expected to validate previous findings of the (15)(16)(17)(22) acceptability of a non-graded concept for under-achievers and slow-learners. The program was designed to focus around an occupational area and was non-graded.
4. The organic curriculum for Trades and Industrial programs purposed by Bushnell and Morgan, advanced a systematic approach which was learner-centered, meaningful and motivating. The program incorporated this approach in its design and included measurable objectives designed to develop educational and occupational skills, good citizenship, and personal growth and development.

Other unique features of the program included utilization of:

5. Existing media such as programmed materials, films, slides, and overlays, when they were compatible to the occupational and educational needs of students. Commercial packages developed for one media and for a broad target population were adopted. Additional learning packages designed for needs of the target population were developed by in-house teams consisting of course designers, subject matter experts and reading specialists, for materials not available for adoption or adaptation.
6. Cooperative programs including work experience and club activities were used extensively. The work experience programs stressed many objectives necessary for personal growth of the student; such as, personal grooming and job interview techniques. Club activities provided experiences which gave direction to students' social growth.
7. College preparatory programs of academic subjects do not permit time for vocational exploration. Vocational programs to develop job skills do not permit exploration of an occupational choice. Once committed to either a vocational or an academic program the student cannot change programs without major time loss. The exemplary program was planned to permit students a flexible entry

Specifically, the process objectives for the exemplary program were to provide:

1. A broad occupational orientation at elementary and secondary school levels to increase student awareness of the range of options open to them in the world-of-work.
2. Work experiences, cooperative education and similar programs, in addition to those currently available, making possible a wide variety of offerings in many occupational areas.
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4. Intensive occupational guidance and counseling during the last years of school and for initial placement of all students at the completion of their schooling.

Processes relevant to the exemplary vocational program were: (1) developing linkages among components of the educational system, between the educational system and the community and between academic and occupational skills so that making an occupational choice and learning the necessary job attitudes and skills was a continuous process for the student, involved his parents and community and made available a wide range of vocational options; (2) developing innovative procedures for orienting disadvantaged students to occupational knowledge, skills and attitudes, and the world-of-work; (3) providing a wide variety of occupational programs, using innovative instructional techniques, and training youths for job entry skills; and (4) developing innovative approaches to guidance, counseling and placement of students.

In summary, the primary objective of this project was to establish a program in four school centers which could provide an opportunity for students to develop basic skills of work and communication, positive social modes and greater academic achievement necessary to obtain employment as a part-time or full-time employee. Work skills were developed in vocational areas such as mechanics, electricity, woodworking, health, clerical and personnel services. Social and academic skills were an integral part of the vocational programs.

An equally important objective of this project was preparation of teachers to work with disadvantaged students which entailed training student in-service teachers in appropriate methods and attitudes for effectively interpret and translate behavior patterns of disadvantaged students into positive, constructive modes.

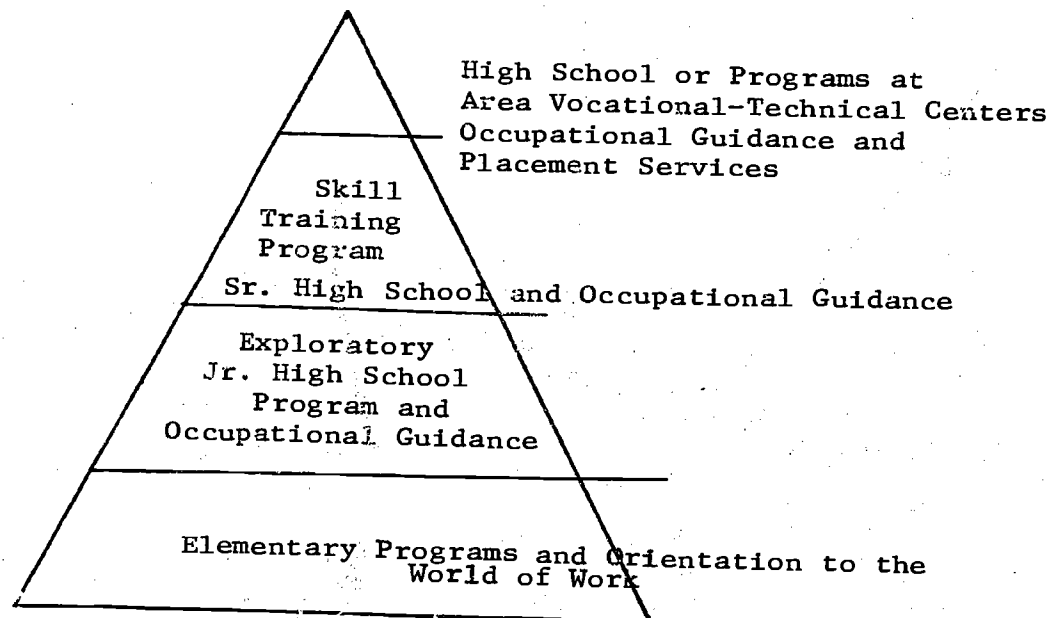
CHAPTER III

PROJECT DESIGN AND PROCEDURES

The secondary school component was the major focus of the exemplary program and provided a non-graded occupational program for disadvantaged urban students. Special features of the program included: (1) skill training for entry level jobs, (2) remedial instruction in academic skills integrated with job skill development programs, (3) vocational guidance and counseling, (4) personal guidance and counseling, (5) use of cooperative programs to provide on-the-job training experiences, and (6) intensive programs of job skill training for students prior to separation from the center.

Other components of the exemplary program provided: (1) articulation with elementary schools and other educational programs offered in the conventional school system, (2) cooperative relationships with other community agencies to serve needs of students, (3) in-service training for faculty and staff in curriculum development and instructional techniques to be used with disadvantaged youngsters. The overall design for components is indicated in Figure 3.1.

FIGURE 3-1 -- Generalized Design of Program Components.



Administration

An administrative structure was established enabling the program to accomplish stated objectives using resources of state and district vocational education offices. Responsibilities of state level staff were:

1. To coordinate state level activities for exemplary projects in four school districts. Coordination revolved around curriculum development, evaluation of the program, and in-service staff development programs.
2. Each participating school district appointed a project director and other staff to coordinate functional elements operating at the district level.
3. Figure 3-2 on the following page represents generalized organizational structure of the project.

Location of Exemplary Programs

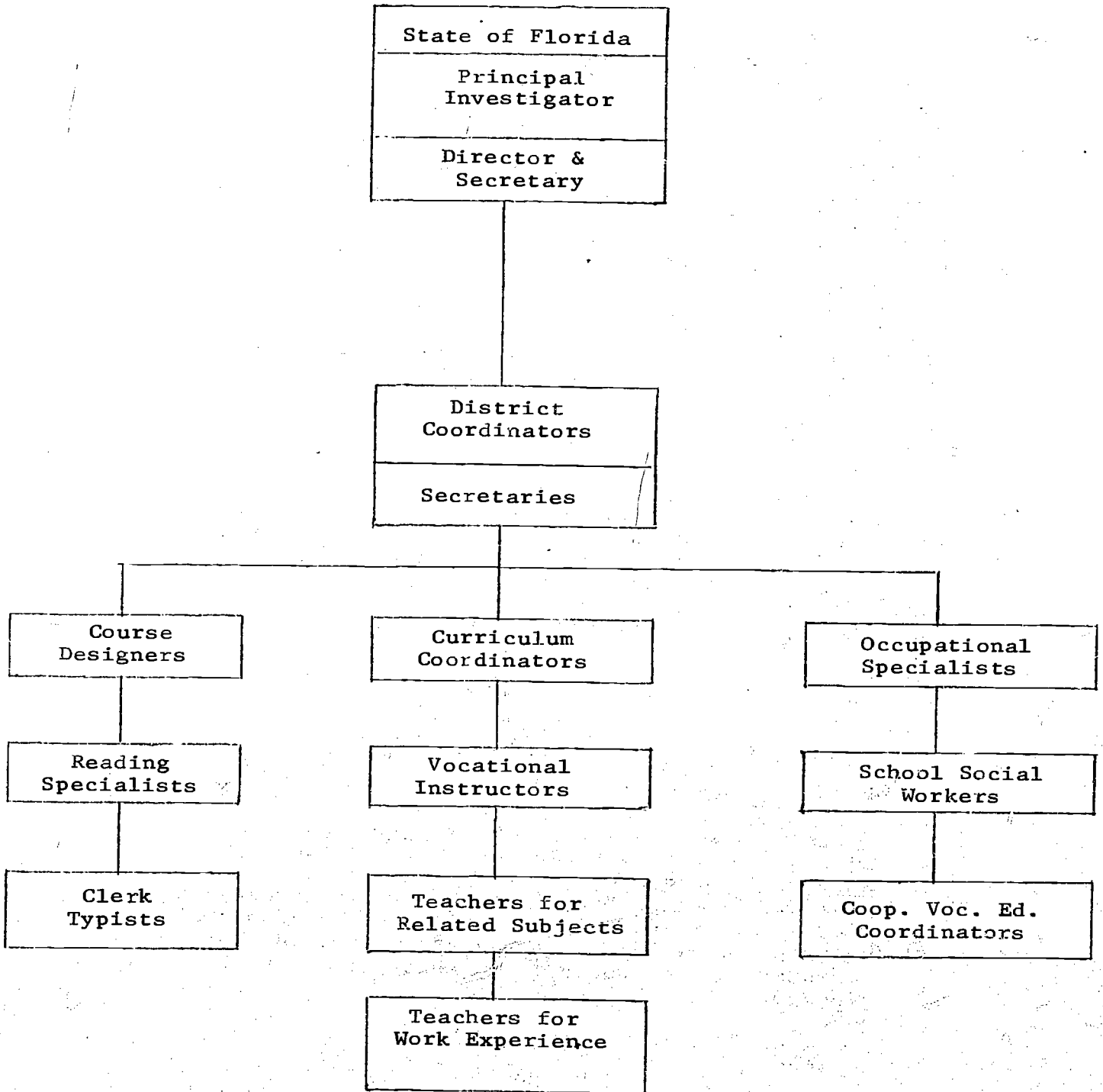
Criteria for the selection of school districts included in the program were:

1. Concentration of target population; e.g., large numbers of urban disadvantaged students.
2. Concern for problems of the target population, and past participation in innovative vocational programs.
3. Engagement in Model City programs.

Schools selected to participate in the program were:

1. E. Dixie Beggs Educational Center, Escambia County, Florida.
2. Career Education Center, P. S. #101, Duval County, Florida.
3. Booker T. Washington Junior High School, Dade County, Florida.
4. George Washington Junior High School, Hillsborough County, Florida.

Figure 3-2 --- Generalized Organizational Structure for State and District Level Exemplary Program Administration



Procedure

A general design for planning and implementation of the project included:

1. Establishment of student selection criteria and definition of terms for evaluation purposes.
 - a. Definition of Student Population -
 - (1) Students 13-1/2 to 18-1/2 years of age who have one or more of the following characteristics were selected to participate in the program: (a) two years or more retardation in reading and/or mathematics skills, (b) a current grade point average of 1.5 or lower on a 4 point scale (A = 4 pts.; B = 3 pts.; C = 2 pts.; D = 1 pt.), (c) at least 18 months over-age in grade, (d) attendance of 80% or less in the reporting period prior to selection, (e) a measured intelligence quotient of 75 or higher on a county-selected test, (f) two or more referrals to school authorities for behavior problems in the reporting period immediately preceding selection, or an arrest or detention by juvenile authorities in the same period of time, and (g) recommendation by two teachers on the basis of personality deficiencies indicated by maladaptive behavior.
 - (2) Students within the group identified by the criteria above were excluded from participation on the basis of: (a) failure to obtain parental approval for participation, (b) recommendation of juvenile authorities, and (c) gross physical or emotional handicaps justifying placement in an exceptional child program.
 - b. Definition of Terms -
 - (1) For the purpose of data collection in this study, definition of the major terms used are as follows:
 - (a) Confrontations with Law Enforcement Agencies -- Any incidence where a student is picked up by law enforcement agents for possible adjudication.
 - (b) Employment -- Refers to full-time work. Thirty hours or more per week, four or more weeks in in the job trained for or a closely related job.
 - (c) Exemplary Vocational Programs -- Special school programs designed for educationally disadvantaged youth. All instruction is based on the students' selected vocation; voluntary attendance and individual instruction are characteristics of the program.

- (d) Functional Illiterates -- Students who cannot read beyond the fifth grade level.
- (e) The Matched Comparison Group Students -- Students selected using the following criteria:
1. Failed two of the first seven grades.
 2. Established a history of educational achievement on the basis of social promotion.
 3. Retarded at least two years in reading and/or mathematics.
 4. Established irregular attendance - truancy problem.
 5. Personality deficiencies:
 - a. poorly defined value system
 - b. aggressive
 - c. resentful toward authority
 - d. impulsive
 - e. low frustration tolerance
 - f. poor or low self-concept
 - g. withdrawn - within the frame of reference of school
 6. An I. Q. above 75 as measured in group tests.
- (f) Non-Readers -- Students who cannot read or write their full name.
- (g) Occupational Exploration Courses -- Instruction designed with primary objectives to make students familiar with a variety of occupations, e.g., job descriptions, qualification requirements, pay, working hours and conditions, potential for advancements, number of new people needed, and available training programs.
- (h) Pre-Vocational Skill Development Experiences -- Instruction designed to enable the student to experience a variety of manipulative skills basic to many trade level occupations. The objectives may be attained through practical art courses in Home Economics, General Business, General Agriculture, and Industrial Arts. This may also include interdisciplinary arrangements whereby a student is programmed to attend exploratory instruction in a variety of different occupations (three or more occupational areas).
- (i) School Drop-Out -- A student who has terminated his formal educational endeavors.
- (j) Vocational Programs -- Instruction with objectives direction students toward employment in occupations related to: (a) industrial production and service, (b) technology, (c) health, (d) home economics, (e) business, and (f) agriculture.

2. Screening elementary, middle and junior high school populations.
 - a. Cumulative student records were searched to identify students eligible for enrollment.
 - b. Teacher referrals for eligible students were solicited.
3. Conducting student group meetings.
 - a. Distribution of work sheets for students preference in vocational subjects and collection of information on academic weaknesses.
 - b. Distribution of information about the program to students and parents.
4. Conducting parent group meetings.
 - a. Explanation of program purposes and procedures.
 - b. Secure parental support of the program.
5. Obtaining student applications with parental approval.
6. Completing home visit interviews.
 - a. Complete developmental case history of each prospective student was obtained.
 - b. Social, medical and psychological data on each student were obtained.
7. For evaluation, selection of students on a stratified random basis for the experimental and control groups.
 - a. Racial mix compared with geographic area ratio.
 - b. Sex mix was established through labor market ratio.
 - c. Other significant regional and ethnic factors were considered; i.e., the Cuban refugee migration and the influx of migrant farm workers.
 - d. Students selected for the control group were matched with students in the experimental group on the basis of age, sex, race, and socioeconomic factors.
8. Completion of developmental case histories for each student.
 - a. Physical and dental examinations were conducted and sight and hearing tests were administered.
 - b. County-selected achievement and intelligence tests were administered.
9. Presentation of the instructional programs.
10. Evaluation of student progress -- To determine when the Center had reached maximum development of each student in achieving stated performance objectives for each course, the Center staff met and recommended that the student:
 - a. Remain in the exemplary Educational Center.
 - b. Return to regular high school programs.
 - c. Transfer to Area Vocational School for more specialized training.

- d. Enter part-time employment through cooperative educational programs.
 - e. Enter full-time employment
11. Conducting student follow-up - Progress of students into the world-of-work or continued education has been an important element of the evaluation of exemplary programs.
 12. Evaluating program follow-up - Feedback evaluation data for program revision and modification was being collected.

Methods and Materials

The program began with a case history of each student selected for the program. It included physical and dental examination, sight and hearing tests, and county-selected achievement and aptitude tests to indicate learning problems from which a special instructional program was designed to aid the student.

A primary focus of the instructional approach was individualized, pre-designed programs utilizing known media when available. Only media best adaptable to the individual's learning behavior was used in each case.

Curriculum writers worked with teachers to develop needed learning packages. Each teacher was provided time to write learning packages which were reproduced and distributed to all participating schools by the Vocational, Technical and Adult Education Division, Department of Education. Learning packages were developed during summer workshops.

Much of the software was extracted from industrial packages and military technical curriculum. Examples include the auto mechanic and service station attendant packages developed jointly by the Chrysler Corporation and Northwestern High School, Detroit, Michigan; and the motor tune-up package coordinated by Shell Oil for Brandeis High School located in the heart of the Harlem ghetto.

Learning packages placed emphasis in the areas of compensatory instruction in reading and mathematics. Such reading and mathematics programs follow two general guidelines:

1. Students were provided an opportunity to develop reading and computation skills in a specially designed program rather than in a traditional remedial program.
2. Emphasis was placed on developing individual basic reading and mathematics skills needed to become effective in an occupational field and every day living.

Materials and techniques in reading and mathematics programs have been drawn from commercially developed programs, techniques and materials used in the area of learning disabilities.

Staff Training

Teacher in-service training was another important aspect of the program. Few vocational instructors and occupational specialists had experience necessary to function effectively in the program for disadvantaged students because teacher education programs often lack or provide limited experiences with disadvantaged students. A summer workshop was conducted as a retraining program for selected personnel in curriculum development, orientation to the program, and behavioral disorders of disadvantaged youth. Daily training sessions reinforced successful teaching techniques for disadvantaged students and offered solutions to those who fail to meet desired standards.

In-service programs to provide instruction for teachers in course design and vocational education program development required close cooperation with teacher training institutions in the State.

Evaluation

The extent to which the program succeeded in the attainment of stated objectives has been determined by an analysis of product and process data through an evaluation project conducted at the University of West Florida. A summary of results is included as Chapter IV, and the entire report is found in Appendix B.

Product evaluation assessed the significance of changes in student attitudes, academic achievement and occupational skill development.

The research design included specified measures from a stratified random sample of 270 students selected to participate in the exemplary program as the experimental group and a matched stratified random sample of 270 students enrolled in a traditional school as the control group. Pre-treatment data and post-treatment data were compared to determine statistical significance of change resulting from the experimental versus the traditional treatment. Appropriate statistical tests were used to make inter- and intra- group comparisons.

Following are the four major product hypotheses, with their corresponding subhypotheses tested in the project:

1. Students attending the exemplary non-graded vocational education center will have a significant increase in positive attitudes as compared with students enrolled in vocational programs while attending traditional educational centers. This increase in positive attitudes will be evidenced by the following relationships between the two groups.
 - a. There will be a significant increase in scores made on each of the five attitude scales by the experimental group as compared to the control group. The five scales will measure attitudes toward: (1) family relationships, (2) peer relationships, (3) self, (4) school, and (5) world-of-work.

- b. There will be a significant increase in the number of positive responses to questions on a structured interview by the experimental group as compared to the control group.
 - c. There will be a significant increase in positive affective behavior as assessed by anecdotal records by the experimental group as compared to their previous record.
 - d. There will be a significant increase in the attendance rate of the experimental group as compared to the control group.
 - e. There will be a significant decrease in the number of conflicts with law enforcement agencies made by the experimental group compared to previous number of confrontations.
 - f. There will be a significant decrease in the drop-out rate of the experimental group as compared to the control group.
2. Students attending exemplary non-graded vocational education centers will have a significant increase in academic achievement scores as compared to students enrolled in vocational programs while attending traditional education centers. This increase in academic achievements will be assessed by the following relationships:
- a. There will be a significant increase in the reading and communication skill in non-readers and functional illiterates as compared to their previous skills.
 - b. There will be a significant increase in mathematics skills in non-readers and functional illiterates as compared to their previous skills.
3. Students attending exemplary non-graded vocational education centers will have significantly greater development of occupational skills. This development of occupational skills will be assessed by the following relationships:
- a. There will be a significant amount of development in occupational skills in the experimental group.
 - b. There will be a significant percentage of students being employed after completing the experimental program than those completing the traditional program.
 - c. Students of the experimental program will be employed on their first job for a significant period of time than former students of the traditional program.
 - d. Graduates of the experimental program will require a significantly lesser amount of time to obtain employment than graduates of the traditional school.
 - e. There will be a significantly greater amount of students from the experimental program enrolling in continued vocational program beyond the termination of the experimental program, than students of the traditional program.

4. Teachers participating in the exemplary training programs will develop or improve their ability to deal effectively with disadvantaged students. This improvement or development will be assessed by the following relationships:
 - a. Teachers completing a training program for the experimental school will have a significantly greater understanding of the value systems of disadvantaged students than teachers not enrolled in the training program.
 - b. Teachers completing a training program for the experimental school will have a significantly greater understanding of the environment of disadvantaged youth than the teachers not enrolled in the training program.
 - c. Teachers completing a training program for the experimental school will have a significantly greater understanding of the psychology of learning of the disadvantaged student than the teachers not enrolled in the training program.
 - d. Teachers completing a training program for the experimental school will have a significantly greater understanding of the most useful methods, techniques and skills necessary to teach disadvantaged students than teachers not enrolled in the training program.
 - e. Teachers completing a training program for the experimental school will have a significantly greater understanding and skill in the use of techniques of evaluating student achievement of stated objectives than teachers not enrolled in the training program.

Process evaluation was designed to assess the feasibility of replicating the exemplary program. Data were to be obtained by the application of program planning, budgeting techniques, including identification, description and cost accounting, of those activities relating to: (a) soft ware (curricular) development activities, (b) installation costs, limited to hardware acquisition, personnel recruitment and training, and (c) operational costs, limited to personnel salaries, consumable instructional materials, maintenance of equipment items and in-service costs designed to maintain integrity to the instructional program design.

The research design to assess achievement of process objectives evolved from the original description to sampling of items related to types of programs and services available to students in each center. Data were collected to measure four major hypotheses.

Following are four major hypotheses with corresponding subhypotheses related to process objectives:

1. Implementation of a program of occupational orientation at the elementary, middle or junior high school and senior high school levels will result in a significantly greater number of students choosing an occupation. Positive changes will be evidenced by the following relationships between the group of students attending the exemplary program and the control group attending traditional programs.

- a. There will be a significant increase in the number of occupational choices made by the experimental group as compared to the control group when measured by criteria of suitability to: (1) their personal needs, interests and abilities; (2) labor market needs; (3) available training programs; and (4) knowledge, skills, and attitudes needed for employment.
 - b. There will be a significant increase in the number of students in the experimental group as compared to the control group having positive attitudes toward the constructive contribution of work to our society.
 - c. There will be a significant increase in the number of students in the experimental group as compared to the control group having exploratory pre-vocational skill development laboratory experiences.
2. Implementation of work experience, cooperative education and similar innovative vocational programs and techniques will result in a significant increase in the number of offerings in many occupational areas.
- a. There will be a significant increase in the number of vocational programs available to the experimental group as compared to the control group.
 - b. There will be a significant increase in the number of instructional techniques used with the experimental group as compared to the control group.
3. Implementation of the exemplary program will result in a significant increase in the number of students in the experimental group as compared to the control group leaving school with specific training for job entry skills.
4. Implementation of the exemplary program will result in a significant increase in the quality and quantity of guidance, placement and supportive social services available to students in the experimental group as compared to students in the control group.
- a. There will be a significantly greater number of hours of individual guidance, placement and supportive services per experimental student as compared to such services per control student.
 - b. There will be a significantly greater number of hours of group guidance and counseling per experimental student as compared to such services per control student.
 - c. There will be a significantly greater number of experimental students placed through placement services as compared to control students.

Coordination and Dissemination

1. The exemplary project coordination was located within the existing organizational structure of the Vocational, Technical and Adult Education Division. As a direct responsibility of the Division Director and the Administrator, Research and Evaluation Function; the Division coordinated state level activities among the four district projects. Division staff responsibility included:
 - a. Communications with other exemplary projects/ programs, and related developmental studies conducted within the State.
 - b. Supervision of the project operation in accordance with the State Plan.
 - c. Communication with exemplary programs in other public and private agencies.
2. Materials and learning packages were developed by each project location as assigned by the Principal Investigator. Completed packages were forwarded to the state coordinating structure for review and comments prior to field testing. Upon completion of field testing, evaluation and program review, approved materials were made available to other pilot locations for implementation. Final material as approved for general distribution will be available to all state school districts through the ERIC system.

Personnel

General qualifications for the project director at the state level included those for an Educational Consultant as defined by the State Personnel Board. Other qualifications were:

1. Administrative experience needed to direct the preparation of plans, coordinate operation, formulate and execute budgets and conduct activities with appropriate agencies.
2. An ability to create innovative concepts, methods and procedures in the field of vocational education.

District coordinators possessed these same qualifications.

Instructional and other staff positions were subject to State certification requirements for their assigned responsibility. Other staff were subject to secretarial/clerical and other job qualification requirements.

Facilities

Each participating county school district selected a facility meeting the state accreditation standards for classroom, laboratories and other facility requirements for vocational programs.

The full cooperation of all districts participating in the exemplary project was assured by agreements completed in December, 1969, at the general administration briefing held in Tallahassee, Florida.

CHAPTER IV

RESULTS AND ACCOMPLISHMENTS

In December of 1969, a series of administrative meetings was held to develop a design for the program, identify criteria for student selection and collect other basic information needed to complete program plans necessary for preparing and submitting the project on January 1, 1970.

Planning grants from the Vocational Division, Department of Education, were awarded to each center in April for the purposes of selecting human and material resources needed to implement the program, orienting teachers and others in the district school system to the project and providing in-service workshops for specialized curriculum development.

Between May and September, 1970, several administrative arrangements and organizational activities were achieved at each exemplary center. These included: (1) recruitment of instructional personnel and supportive staff, (2) selection of students, (3) implementation of curriculum development workshops, (4) renovation of facilities, (5) procurement of equipment and supplies, (6) contacts with community agencies, and (7) completion of other necessary arrangements to begin operation of the exemplary program in each of the four districts.

Establishment of each exemplary center was accomplished by September, 1970. Each center opened on schedule although all problems with procurement of equipment, recruitment of personnel and development of curricula and instructional materials were not solved. Other problems encountered in project implementation related to the development of evaluative instruments which could provide data and information from students who are unable or unwilling to perform competently on paper and pencil tests. Because of the time needed to develop instruments and to gain district school board approval, no pre-treatment data were collected. Post-treatment data and information were collected in April and May, 1971.

Location:

Centers with similar activities were in operation during previous years. One such program was funded in Escambia County.

In September, 1966, the Vocational-Technical Division of the Escambia County School District applied for and received a grant from the Department of Education, Vocational, Technical and Adult Education Division, to study the feasibility of offering a program similar to this project.

The study indicated that there were approximately 3400 students in the junior high school age group (grades 7-8-9) who should be in some special vocational program, either permanently or temporarily. The pilot and planning program, supported by county funds, was begun January, 1969, with seventeen boys, two instructors and an aide from the University of West Florida. The pilot program functioned until June, 1969.

During the pilot phase, information was collected concerning needs for teacher training, evaluation of students, classroom management, possible teaching and counseling procedures and techniques, community involvement, baseline data on students, work areas and ancillary needs of the program (community mental health, juvenile court, local law enforcement, business mens clubs, etc.)

Students in the pilot program showed significant improvement in all areas measured. Summaries of the assessment are available upon request.

The four centers selected for implementation of the exemplary program had similar characteristics. Each center was located either within or contiguous to an urban ghetto.

The centers were located in Dade County at the Booker T. Washington Junior High School, 1200 N. 6th Avenue, Miami, Florida, 33136, Mr. Ernest Upthegrove, Director; Duval County at the Career Education Center, 1149 W. 13th Street, Jacksonville, Florida, 32209, Mr. B. J. McDuffie, Director; Escambia County at the Beggs Pre-Vocational Center, P. O. Box 12068, Pensacola, Florida, 32502, Dr. Charles Partin, Director; and Hillsborough County at the George Washington Junior High School, 2704 Highland Avenue, Tampa, Florida, 33602, Mr. Ralph Smouse, Director.

All school facilities were in extremely poor condition and required renovation and repair prior to installation of equipment. Renovation of facilities proved to be one of the major problems in implementing the exemplary program.

Selection of Students and Staff

Twelve hundred forty-six students meeting selection criteria were enrolled in the program. Teachers were selected on the basis of criteria related to their desire to teach disadvantaged students and their innovativeness in dealing with ecologically disadvantaged youngsters. Staff to provide vocational guidance and social services were selected on the basis of similar criteria.

A large number of support staff were employed to assist instructional and administrative staff. The ratio of instructional staff was 1/12 students and support staff ratio was 1/29 students. See Table 4-1.

TABLE 4-1 -- Number of teachers and supportive staff in the exemplary program.

| Type | Number |
|---|------------|
| Instructional Staff: | |
| Agriculture | 2 |
| Business | 5 |
| Distribution | 1 |
| Health | 5 |
| Home Economics | 4 |
| Industrial and Trades | 29 |
| Work Experience | 5 |
| Employability Skills | 1 |
| Vocational Mathematics | 13 |
| Vocational Communications | 17 |
| Vocational Social Studies | 1 |
| Vocational Science | 1 |
| Academic skills | 9 |
| Supportive Staff for: | |
| Directors, Assistant Directors, & Supervisors | 6 |
| Evaluators | 3 |
| Curriculum Developers | 9 |
| Vocational Guidance personnel | 10 |
| Teacher Aides | 4 |
| Secretarial/Clerical personnel | 16 |
| Social Workers | 4 |
| Librarian | 1 |
| SIE Coordinator | 1 |
| TOTAL | 147 |

An in-service training program for staff was held during July and August. Curricula were developed, teachers were oriented, facilities were renovated, equipment was installed, and students were recruited and assigned.

Table 4-2 shows three types of staff development education programs available to teachers implementing the exemplary program.

TABLE 4-2 -- Number of teachers participating in staff development education programs by type.

| Type | Number of Teachers |
|-------------------------|--------------------|
| Conducted within school | 143 |
| Conducted by district | 106 |
| Conducted by university | 62 |
| TOTAL | 311 |

* Duplicated count

Curriculum and instructional materials were developed to provide an integration of job skill training and remedial academic skills. To provide individualized instruction for disadvantaged youth, many of the materials had to be specially developed. Most materials were completed in the summer workshop, field tested during the year and revised in the summer workshop of 1971. A note indicating available copies of those revised materials is found in Appendix C. See Table 4-3.

TABLE 4-3 -- Occupational areas in which instructional materials were developed

| Occupational and Related areas | Number of Centers Developing Instructional Materials | Status of Development | |
|--------------------------------|--|-----------------------|-----------|
| | | Partially Completed | Completed |
| Agriculture | 2 | 0 | 2 |
| Business | 4 | 1 | 3 |
| Distributive | 1 | 0 | 1 |
| Health Related | 2 | 1 | 1 |
| Home Economics | 3 | 0 | 1 |
| Industrial | 4 | 1 | 3 |
| Work Experience | 2 | 1 | 1 |
| Other | | | |
| Related Mathematics | 1 | 1 | |
| Related Science | 1 | 1 | |
| Related Communications | 1 | 1 | |
| Employability Skills | 1 | 1 | |

Curricula Materials and Techniques

During the summer workshop curricula and instructional materials for occupational programs were developed for field testing at each center. Characteristics of these materials included concepts indicated in the review of completed research; e.g., use of the organic curriculum model and integrating academic skill with job skill development in the instructional materials. Materials were developed to focus upon the development of job skills and academic remediation.

Approximately 1300 students were enrolled in the four exemplary programs. They were classified by occupational choice and enrolled in programs to provide an occupational orientation preparation for entry-level job skills. Table 4-4 indicates that the largest group of students were enrolled in industrial occupations with the next largest group enrolled in business occupations.

TABLE 4-4 -- Number of students enrolled in the exemplary programs by occupational area and sex

| Occupational Area | Male | Female | Total |
|------------------------------|------|--------|-------|
| Agriculture | 65 | 7 | 72 |
| Business | 61 | 243 | 304 |
| Distributive | 30 | 10 | 40 |
| Health Related | 12 | 122 | 134 |
| Home Economics | 5 | 135 | 140 |
| Industrial | 1192 | 326 | 1518 |
| Work Experience | 92 | 42 | 134 |
| Other (Employability Skills) | 54 | 29 | 83 |
| TOTAL | 1511 | 914 | 2425 |

* Students were permitted to enroll in several courses; therefore, enrollments are duplicated.

A total of 67 different course offerings were available for students enrolled in exemplary centers. See Table 4-5 for a complete list of occupational areas and course offerings. Over one-half the courses offered were in industrial type occupations and generally included the following:

Cosmetology (Grooming)
Service Station Attendant
Small Engine Repair
Trowel Trades
Building Maintenance
Cabinetmaking & Woodworking
Home Appliance Repair

Tailoring and Upholstery
Automotive, Marine, Aviation and
Allied Mech. Occupations
Metal Works & Machine Tool Operation
Electronics and Allied Occupations
Masonry
Paint and Body Repair

TABLE 4-5 -- Number of courses offered by occupational area

| Occupational Area | Number of Courses |
|-------------------|-------------------|
| Agriculture | 6 |
| Business | 6 |
| Distributive | 1 |
| Health Related | 5 |
| Home Economics | 10 |
| Industrial | 35 |
| Work Experience | 4 |
| TOTAL | 67 |

Special Programs

Exemplary projects provided a variety of programs to meet the specialized needs of disadvantaged students. Cooperative occupational programs, occupational orientation and vocational guidance and counseling programs were available to students enrolled.

Cooperative type programs were available to students enrolled in the exemplary centers. Approximately one-fifth of all students were enrolled in programs which used cooperative work experience to provide on-the-job training experiences. Table 4-6 indicates the number of students enrolled in cooperative vocational education programs.

TABLE 4-6 -- Number of students enrolled in cooperative programs by occupational area and sex.

| Occupational Area | Male | Female | Total |
|-------------------|------------|-----------|------------|
| Agriculture | 12 | 0 | 12 |
| Business | 2 | 20 | 22 |
| Home Economics | 0 | 7 | 7 |
| Industrial | 108 | 14 | 122 |
| Work Experience | 96 | 38 | 134 |
| TOTAL | 218 | 79 | 297 |

Few students enrolled in the four exemplary centers participated in clubs and other organized school activities in previous years. Many were participants in various school sponsored events in the exemplary program. One unanticipated result was that students chose to form traditional school activities above vocationally oriented youth organizations. This result is shown in Table 4-7.

TABLE 4-7 --- Number of students participating in clubs and organized school activities

| School Activity | Number of Students |
|----------------------------|--------------------|
| FHA | 2 |
| Student Advisory Committee | 11 |
| Band | 83 |
| Newspaper | 94 |
| Intramural Sports | 392 |
| Extramural Sports | 96 |
| Chorus | 139 |
| Art | 54 |
| Drama | 16 |
| Student Council | 6 |
| Cheerleaders | 15 |
| Music Talent Show | 34 |
| Career Fair | 161 |
| Field Trips | 416 |
| Awards Day, Fashion Show | 82 |
| Girl's Club | 56 |
| TOTAL | 1657 |

Three centers reported 1119 students enrolled in special occupational orientation programs. The purpose of these programs was to provide information upon which youngsters could base a more valid choice of a career. Occupational orientation programs or pre-vocational programs are indicated in Table 4-8.

TABLE 4-8 -- Number of students enrolled in occupational orientation programs

| Cluster Courses | Total Number of Students |
|-----------------|--------------------------|
| Agriculture | 50 |
| Business | 68 |
| Distributive | 40 |
| Health Related | 134 |
| Home Economics | 261 |
| Industrial | 277 |
| Work Experience | 75 |
| Related Science | 214 |
| TOTAL | 1119 |

The number of students receiving individual and group counseling during and outside school hours is indicated in the following table. Most of the students involved received counseling during school hours and few were counseled after school. Because one center did not report counseling and guidance information, these data reflect counseling at three centers. See Table 4-9.

TABLE 4-9 -- Number of students receiving individual and group guidance and counseling services by sex.

| Type | Number of Students | | |
|---|--------------------|-------------|-------------|
| | Male | Female | Total |
| During school hours: | | | |
| Individual guidance and counseling services | 896 | 473 | 1369 |
| Group guidance and counseling services | 815 | 509 | 1324 |
| Outside school hours: | | | |
| Individual guidance and counseling services | 32 | 22 | 54 |
| Group guidance and counseling services | 44 | 21 | 65 |
| TOTAL | 1787 | 1025 | 2812 |

The total represents a duplicated count

Only fourteen students were enrolled in programs to provide intensive skill development prior to leaving school. The major reason for the small number is that only one program enrolled students over sixteen years of age who were leaving the regular school program. See Table 4-10.

TABLE 4-10 -- Number of students over 16 years of age enrolled for intensive entry level job skill development by sex.

| Occupational Area | Number of Students | | |
|-------------------|--------------------|----------|-----------|
| | Male | Female | Total |
| Agriculture | 1 | 0 | 1 |
| Business | 0 | 2 | 2 |
| Home Economics | 1 | 0 | 1 |
| Industrial | 8 | 2 | 10 |
| TOTAL | 10 | 4 | 14 |

Contacts with Elementary Schools

A variety of programs for elementary students were conducted in the exemplary centers including a presentation of special programs, displays of center activities, and visitations to the exemplary centers. The number of elementary school students having contact with the exemplary program is indicated in Table 4-11.

TABLE 4-11 -- Number of elementary students having contact with exemplary programs.

| Type | Number of Students |
|--|--------------------|
| Special programs in elementary schools | 1196 |
| Visitation in exemplary centers | 200 |
| Displays | 900 |
| TOTAL | 2296 |

Contacts with Community Agencies and Organizations

Use of community agencies and organizations in providing additional resources for exemplary centers is shown in Table 4-12, on the following page by indicating the number of exemplary centers using various agencies and the purposes of contacts with those agencies.

TABLE 4-12 -- Contacts by administrative personnel and teachers with community agencies and organizations by purpose and agency

| Agency | Purpose of Contact | | | | | | | | | | | | | | |
|----------------------------------|---------------------------------|---|---|---|---|---|--------------------------------------|--------------------------------------|--|----------------------|--|---------------------------------------|---|------------------|---------------------------------------|
| | To place students in employment | To bring potential employers to center for interviews | To work with students in occupational area of specialty | To provide public relations for exemplary program | To render assistance to students for mental/physical health | To counsel students, provide case history | To diagnose mental/physical problems | To provide advance training programs | To provide day treatment care and prescription direction | To provide referrals | To place students in homes and to center | To provide food for indigent families | To provide family counseling for indigent | To help indigent | To provide temporary living placement |
| PUBLIC AGENCIES | | | | | | | | | | | | | | | |
| Florida State Employ. Service | 3 | | 1 | 2 | | 2 | 1 | | | 1 | 1 | | | | |
| Vocational Rehabilitation | 2 | 1 | 2 | 2 | 4 | 4 | 1 | 2 | | 1 | | | | | |
| Mental Health Clinic | | | 2 | 2 | 3 | 3 | 3 | | 1 | | | | | | |
| Public Health Service | 2 | 1 | 2 | 2 | 3 | 3 | 3 | | | | | | | | |
| Juvenile Court | | | 1 | 2 | 2 | 4 | 1 | 2 | | 1 | | | | | |
| Military Services | 1 | | | 1 | 1 | | | | | | | | | | |
| Division of Family Services | | | 1 | 1 | 1 | | | | | 1 | 1 | | | | |
| Commodity Center | | | | 1 | | | | | | | | 1 | | | |
| Universities | | | | 2 | 1 | | | | | | | | | | |
| COMMUNITY ACTION GROUPS | | | | | | | | | | | | | | | |
| Neighborhood Youth Corps | 4 | 1 | 2 | 2 | | 3 | | | | | | | | | |
| Headstart | | | 1 | 1 | | | | | | | | | | | |
| Neighborhood Service Center | | | | | 1 | | | | | | | | | | |
| Model Cities | | 1 | | 1 | | | | | | | | | | | |
| VOLUNTARY | | | | | | | | | | | | | | | |
| Urban League | 1 | | | 1 | | | | | | | | | | | |
| Civic Organizations | 3 | 2 | 2 | 3 | 2 | 3 | 1 | 1 | | | | | | | |
| Cerebral Palsy | | | 1 | 1 | | | | | | | | | | | |
| Cripple Children's Home | | | | 1 | 1 | | 1 | | | | | | | | |
| Career Society | | | | 1 | 1 | | 1 | | | | | | | | |
| Catholic Society | | | | 1 | | | | | | | | 1 | | | |
| Salvation Army | | | | 1 | | | | | | | | | | 1 | |
| Waterfront Mission | | | | 1 | | | | | | | | | | | 1 |
| OTHERS | | | | | | | | | | | | | | | |
| Labor Unions | 1 | | | 1 | | | | | | | | | | | |
| Other Institutions | | | | | 1 | | | | | | | | | | |
| Advisory Committee & Individuals | | | | | 1 | | | | | | | | | | |

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Student Placement

Table 4-13 indicates numbers of male and female students retained or leaving by reason. It should be noted that approximately 56% of the students were retained in the center. Reasons for leaving were numerous, but many re-entered the regular school program, graduated or moved away.

TABLE 4-13 -- Numbers of students retained and numbers leaving by reason

| Type | Number of Students | | |
|---|--------------------|------------|-------------|
| | Male | Female | Total |
| Retained at the Exemplary Center | 442 | 257 | 699 |
| Leaving Center to: | | | |
| re-enter regular school program | 99 | 34 | 133 |
| enter area vocational center or junior college | 45 | 36 | 81 |
| become employed away from home | 22 | 1 | 23 |
| become employed at home | 32 | 13 | 45 |
| enter military service | 12 | 0 | 12 |
| be married - not employed | 0 | 26 | 26 |
| remain at home - not employed | 32 | 11 | 43 |
| be incarcerated in a correctional institution | 32 | 2 | 33 |
| Other reasons for leaving Center: | | | |
| busing order, graduating, and moved from county, etc. | 93 | 58 | 151 |
| TOTAL | 808 | 438 | 1246 |

Evaluation

An evaluation design to measure achievement of process and product objectives was developed. Many instruments for data and information collection were developed by the third party evaluator. An extensive amount of time was spent for development, validation and approval of data collection instruments. This precluded collection of pre-treatment data. Post-treatment data were collected and analyzed for each district. The summary report is included in this document as Chapter IV and a full report in Appendix B prepared by Dr. L. Hobby Perkins.

Based upon data collected for this chapter, the following conclusions may be drawn:

1. There were approximately 1300 students enrolled in four exemplary programs conducted in urban areas of Florida.
2. The ratio of instructional staff to students was 1/12; the ratio of support staff to students was 1/29.
3. Almost all teachers participated in one or more types of staff development programs.
4. A large volume of curriculum materials had to be developed.
5. Almost all students enrolled in more than one job skill development course.
6. Sixty-seven occupational courses were offered. Most courses were in the industrial education area.
7. Approximately 20 per cent of the students were in cooperative type programs.
8. Almost all students were involved in clubs and other organized school activities.
9. Almost all students were enrolled in occupational orientation programs.
10. Almost all students received individual and group guidance and counseling during school hours; few received such assistance after hours.
11. Few students enrolled in the centers for intensive entry-level job skill courses.
12. Approximately 2300 elementary school students had contact with the exemplary centers.
13. Public assistance agencies, community action groups, volunteer assistance agencies, and other educational and civic institutions and organizations provided assistance to the exemplary centers.
14. Approximately 56 per cent of the students enrolled were retained in the exemplary centers. The next largest groups left involuntarily or re-entered the regular school program.

Recommendations for strengthening the program are:

1. Development of curricula and instructional materials should be completed before instruction begins.
2. Staff development programs should include additional techniques in instructing urban disadvantaged students.
3. Several occupational areas should be strengthened by additional courses; e.g., distributive education, ornamental horticulture, child day care center aides, health related occupations, etc.
4. More cooperative type programs should be offered.
5. Vocational related clubs should be organized.

6. Recruitment of dropouts should be emphasized. These should be placed in the intensive skill development courses.
7. Special effort should be made to articulate with other education institutions; i.e., area vocational technical centers, regular programs, etc.
8. Placement services should be available.

The overall program at each of the centers was effective as observed by the many visitors to the four programs. The major recommendations are: (1) that all four programs be expanded to enroll more students with similar handicapping conditions, (2) that the four programs be made available to all youngsters, and (3) that the four programs evolve into a comprehensive program of vocational education for career development.

CHAPTER V

Evaluation of the Project

Dr. L. Hobby Perkins, Chairman
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Evaluation

The Beggs Educational Center in Escambia County and the Booker T. Washington Junior High School, Dade County along with the Career Education Center in Duval County and George Washington Junior High School in Hillsborough County were designated as exemplary vocational programs for the 1970-71 school year. The programs, located in the urban areas of Pensacola, Miami, Jacksonville, and Tampa, were established in old school building with inadequate facilities, materials, and supplies. The programs were designed for students identified as potential school drop-outs and push-outs who had experienced difficulties and frustration in traditional academic-type programs.

The purposes of the study were to answer the following questions:

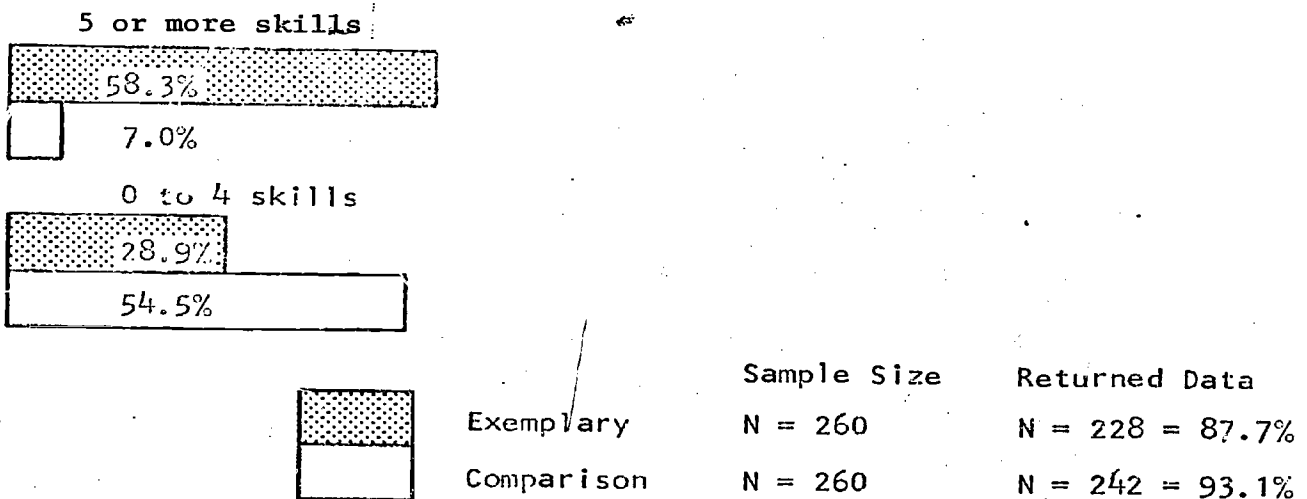
- A. Did students in exemplary programs as compared to students in traditional programs;
 - 1 - learn more entry level manipulative-type job skills?
 - 2 - achieve more basic reading, communication, and math skills?
 - 3 - develop more positive attitudes, personal traits, and work habits?
 - 4 - demonstrate a higher attendance rate and a lower drop-out rate?
 - 5 - receive more instruction in vocational and related courses?
 - 6 - receive more individual counseling, group counseling, and support service?
 - 7 - express a greater interest in occupational choices?
- B. Did students experience fewer confrontations with law enforcement agencies during their first year in the exemplary program than they did during the year previous to entering the program?
- C. Did teachers in exemplary programs utilize more different teaching techniques than teachers in traditional programs?

The purposes of this chapter are to report the achievements of the four exemplary programs in Florida during the 1970-71 school year.

In each exemplary program 50 students and 15 alternates were chosen as the exemplary groups while the comparison groups included 50 students and 15 alternates which were randomly selected from 150 students meeting the same criteria as students attending the exemplary program. Teachers of the 65 students in each group were then identified and utilized as teachers of students in the exemplary groups and teachers of students in the comparison groups. For most of the information requested from students and teachers, the returns were less than 100%.

Skills and Knowledge. Students enrolled in the vocationally oriented exemplary programs in the four centers in Dade, Duval, Escambia, and Hillsborough Counties acquired more entry level job skills than comparison students enrolled in traditional academically oriented programs (see Figure 5-1). Usable data relative to entry level job skills were received for 87.7% of the students in the exemplary groups and 93.1% in the comparison groups. In the exemplary groups 58.3% of the students acquired five or more entry level job skills while only seven percent of the students in the comparison groups did as well. In the exemplary groups 28.9% failed to acquire at least four entry level job skills while 54.5% of the students in the comparison groups performed at this level.



Figure 5-1 -- Instructor's Evaluation of Student Achievement of Entry Level Job Skills in Exemplary and Comparison Groups in Dade, Duval, Escambia, and Hillsborough Counties - 1970-71 School Year



Academic Achievement. Usable data relative to academic achievement were received on 79.6% of the students in the exemplary groups and 85.0% of the students in comparison groups. Data were collected with the standardized instrument, Adult Basic Learning Exam. Computed mean scores and t-values are included in Figure 5-2.

Figure 5-2 -- Basic Education Achievement of Students in Exemplary and Comparison Groups in Dade, Duval, Escambia, and Hillsborough Counties - 1970-71 School Year

| Mean Scores | Standard Deviation | t-value |
|-------------|--------------------|---------|
| Vocabulary | | |
| 26.4 | 9.25 | -1.729 |
| 31.5 | 9.03 | |
| Reading | | |
| 41.3 | 11.14 | -0.0836 |
| 41.7 | 10.30 | |
| Spelling | | |
| 13.3 | 11.80 | +0.118 |
| 13.3 | 10.93 | |
| Arithmetic | | |
| 14.7 | 7.51 | -1.169 |
| 16.7 | 8.41 | |

| | | | |
|---|------------|-------------|-----------------|
|  | Exemplary | Sample Size | Usable Data |
|  | Comparison | N = 260 | N = 207 = 79.6% |
| | | N = 260 | N = 221 = 85.0% |

t-value ≥ 1.96 Significant at the .05 confidence level

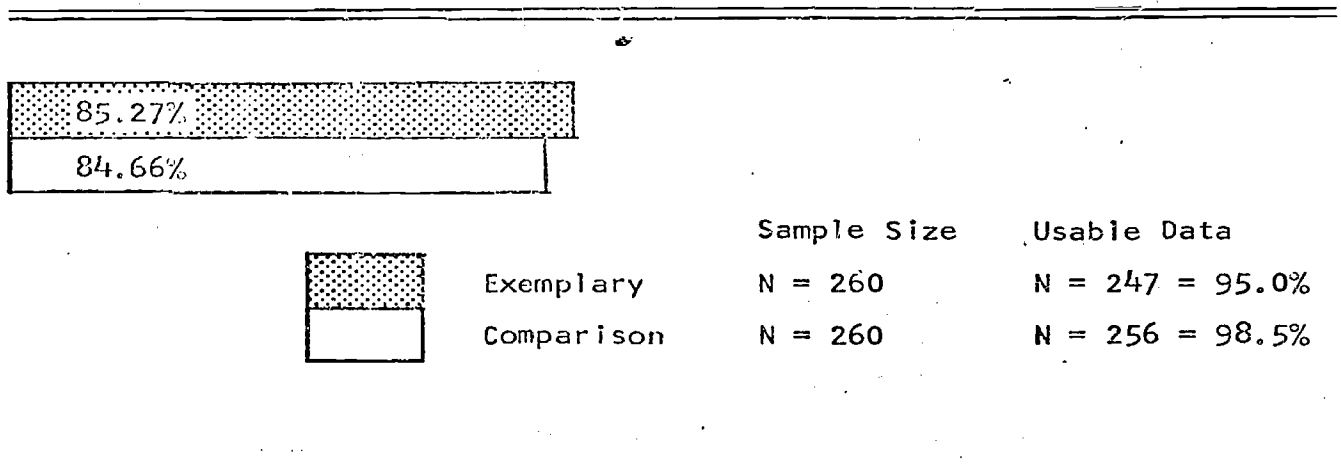
Data would indicate no significant difference between the two groups relative to scores on vocabulary, reading, spelling, and arithmetic.

Attitudes and Personal-Social Traits. Three instruments, "How I See Myself," "Personal-Social Traits Inventory," and "My Work-My School-My Country," were used to collect data from students and teachers in the exemplary and comparison groups relative to student attitudes and personal-social traits. Two hundred and two exemplary students and 227 comparison students responded to "How I See Myself"; 216 exemplary students and 243 comparison students responded to "My Work-My School-My Country" while teachers in the exemplary groups responded to the "Personal-Social Traits Inventory" on 216 of their students; and comparison group teachers responded to the same instrument on 229 of their students.

Data collected, tabulated by exemplary and comparison groups for the four counties, and treated statistically revealed that: there was no significant difference between the groups relative to scores indicating attitudes toward self-concepts, work in our society, school, family relationship and peer relationship. There was a difference, significant at the .05 confidence level, favoring the exemplary group relative to scores indicating more positive attitudes toward work habits.

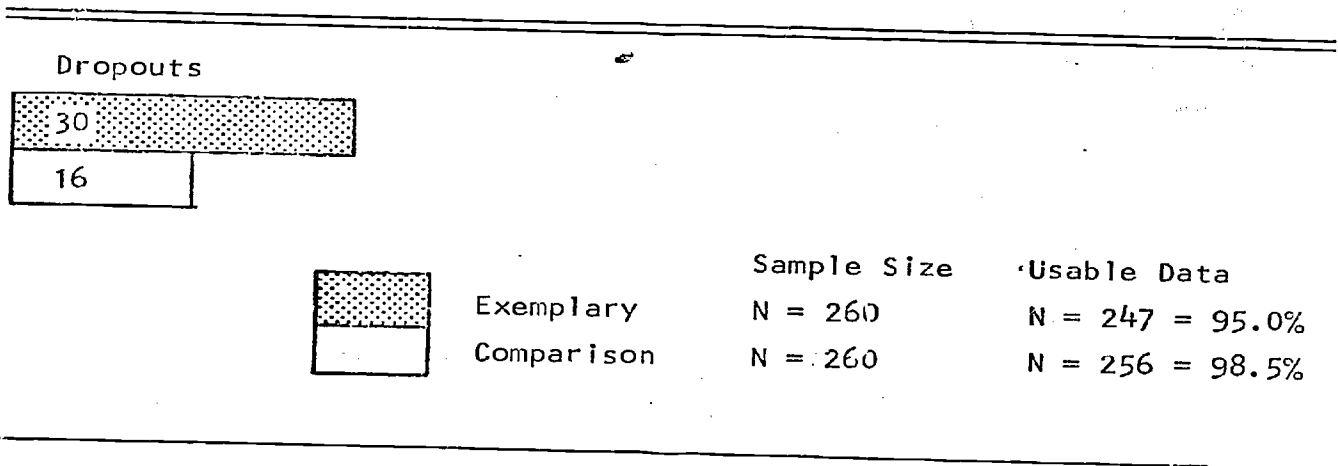
Attendance and Drop-Out Rate. Data relative to school attendance and drop-out rate were collected from the students' cumulative record at the end of the school year. Data were reported on 247 students in the exemplary groups and 256 students in the comparison groups. The ratio of days attended to the total number of days the student was enrolled in school yielded an attendance rate in percent (see Figure 5-3). A computed average of 85.27% for the students in the exemplary groups and 84.66% for students in the comparison groups and a t-value of 0.076 indicate no significant difference between the groups relative to attendance rate.

Figure 5-3 -- School Attendance Rate by Students in the Exemplary and Comparison Groups (Mean Scores in Percent) in Dade, Duval, Escambia, and Hillsborough Counties -- 1970-71 School Year



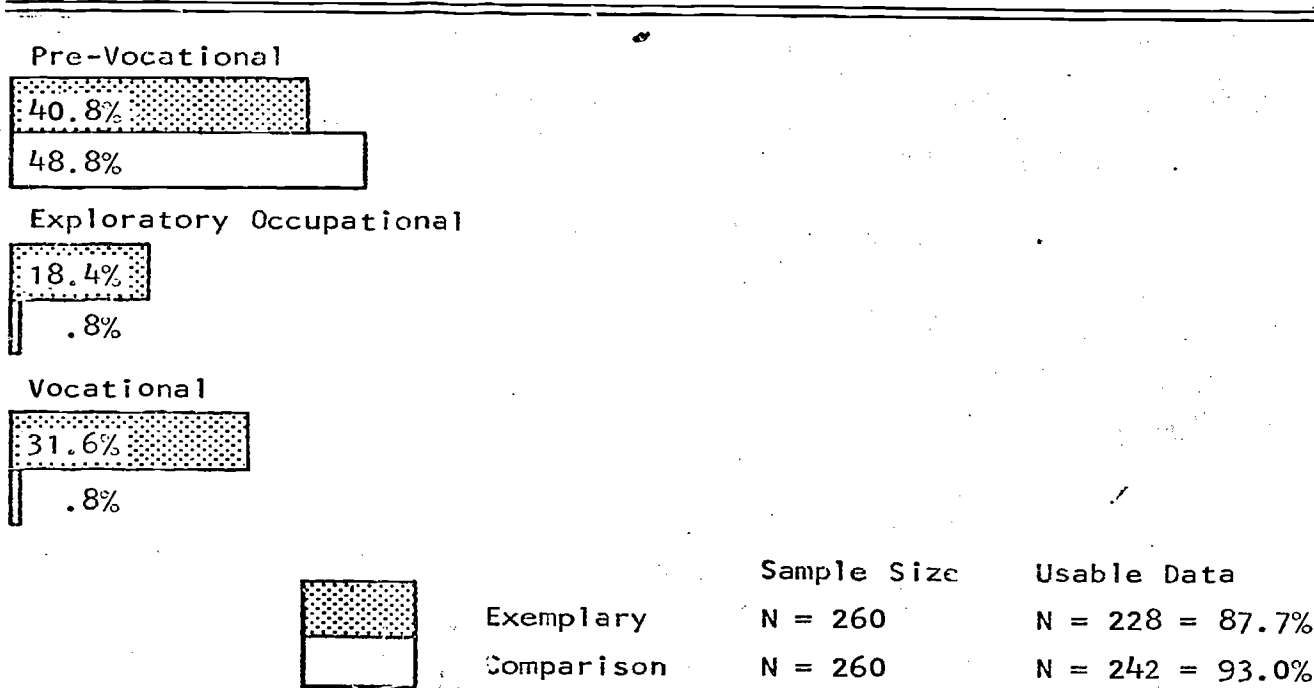
Thirty students in the exemplary groups were reported as dropouts while only 16 students in the comparison groups were reported as drop-outs (see Figure 5-4). A computed Chi Square value of 5.26, significant at the .05 confidence level, indicates a higher drop-out rate for students in the exemplary groups.

Figure 5-4 -- School Dropouts in the Exemplary and Comparison Groups in Dade, Duval, Escambia, and Hillsborough Counties - 1970-71 School Year



Vocational and Related Courses Offered. Data relative to course offerings were collected from administrators of exemplary and comparison schools while data relative to student enrollment were collected from teachers of exemplary and comparison group students. Tabulated data indicate that students in the exemplary groups were offered more instruction in vocational related courses than students in the comparison groups. Averages computed for all four programs reveal that exemplary programs offered 10.1 hours per student while the comparison schools offered only 1.4 hours per student in vocational and related instruction. Students in the exemplary groups were offered a greater variety of instruction in different occupational or career fields than were offered to students in the comparison groups. While only 50.3% of the students in the comparison groups were enrolled in vocational related courses, 91.9% of the students in the exemplary groups were enrolled in vocational related courses (see Figure 5-5).

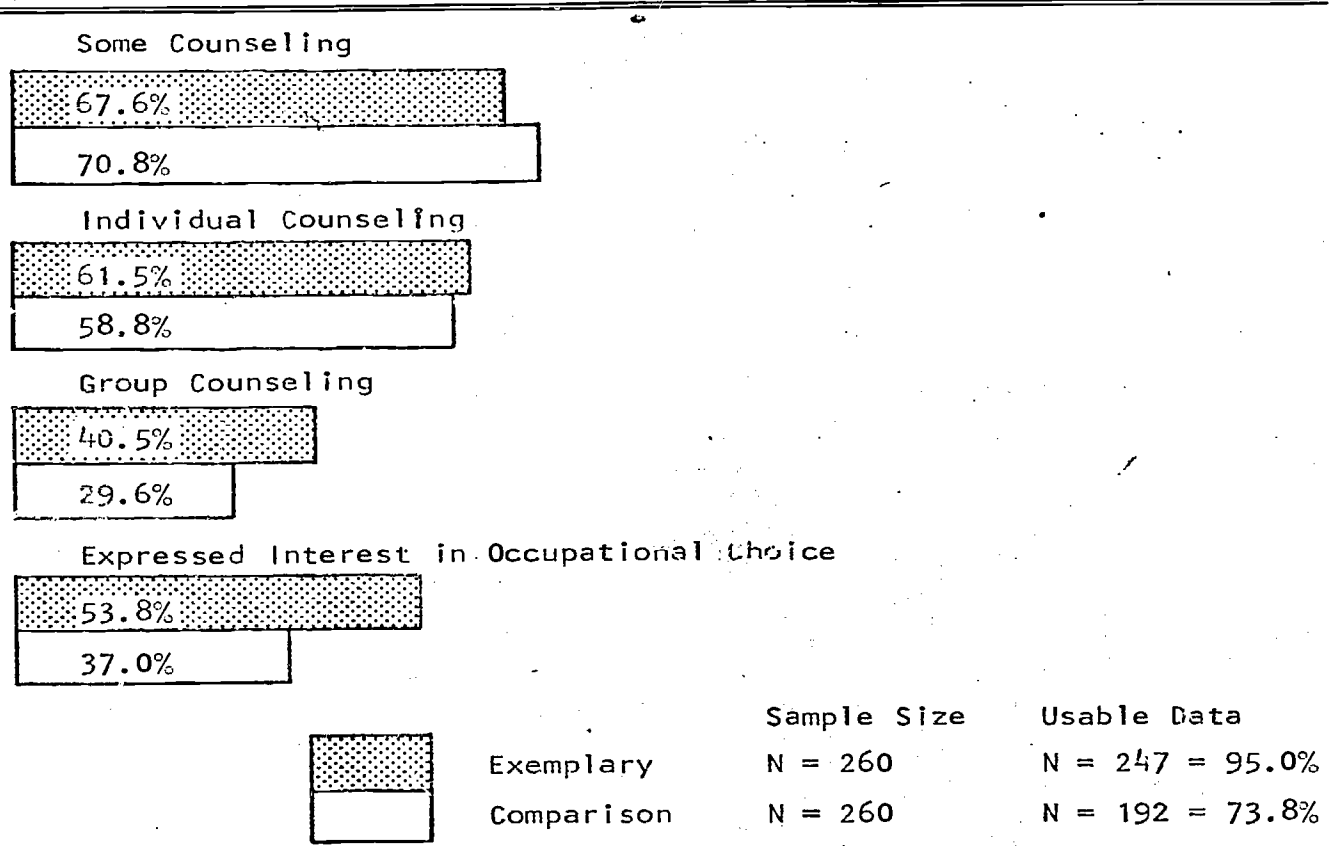
Figure 5-5 -- Student Enrollment in Vocational Related Courses in Exemplary and Comparison Groups in Dade, Duval, Escambia, and Hillsborough Counties - 1970-71 School Year



Counseling. Individual and group counseling information forms for recording exemplary and comparison group counseling sessions and the student's expressed interest in an occupational choice were forwarded to the centers in late March and early April and returned to UWF after the schools terminated in June. The data collected represent counseling received for only a portion of the school year. Three counties reported information on both the exemplary and comparison groups while Escambia reported information only on the exemplary group.

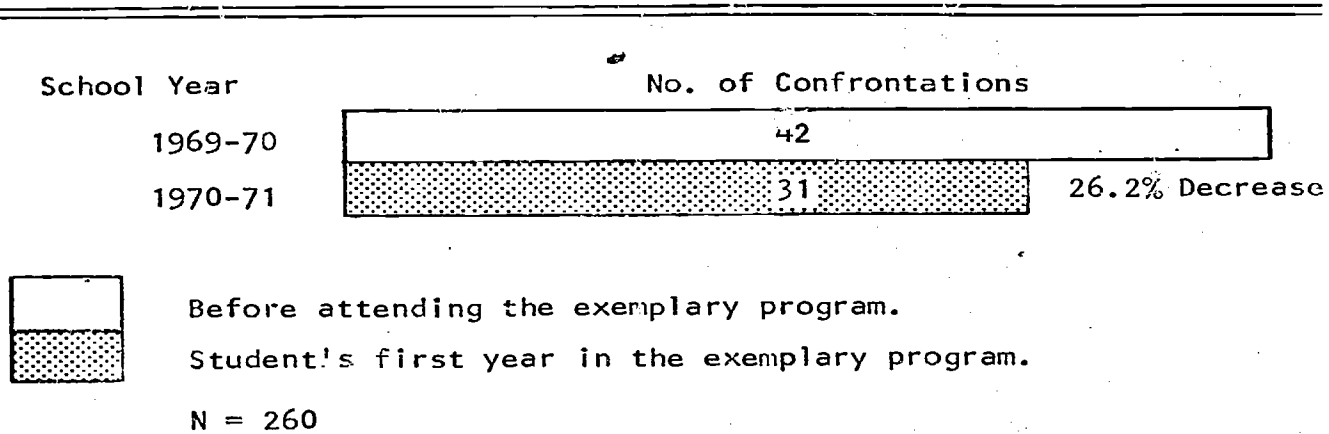
Averages computed from the tabulated data for the four counties reveal a higher percentage of the students in the exemplary groups received counseling in groups with one or more other students than did students in the comparison groups (see Figure 5-6). A higher percentage of students in the exemplary group received individual counseling sessions than did students in the comparison group. Further, more students in the exemplary groups expressed an interest in occupational choice than did students in the comparison groups.

Figure 5-6 -- Counseling Received by Exemplary and Comparison Groups in Dade, Duval, Escambia, and Hillsborough Counties - 1970-71 School Year



Confrontations with Law Enforcement Agencies. Data collected from law enforcement agencies revealed that students in the exemplary groups experienced fewer confrontations during their first year in the exemplary program than they did during the year previous to entering the program (see Figure 5-7). During the 1970-71 school year, 260 students in the four exemplary programs experienced 31 confrontations with law enforcement agencies. During the year previous to entering the exemplary program the same group experienced 42 confrontations.

Figure 5-7 -- Confrontations with Law Enforcement Agencies by Students in the Exemplary Program in Dade, Duval, Escambia, and Hillsborough Counties - 1969-70 and 1970-71 School Year



Instructional Techniques. The "Instructional Technique Inventory" was used to collect information from 86 teachers of the exemplary groups and 186 teachers of the comparison group students relative to the number of techniques used and the frequency of use. Tabulated data revealed that the exemplary teachers in Dade and Duval Counties used more techniques than did the exemplary teachers. Conversely, the comparison teachers in Hillsborough and Escambia Counties used more techniques than did the exemplary teachers. A majority of the exemplary teachers in all four counties used individual instruction frequently while a large number of the same group indicated that they never used "Programmed Instruction" and "Picture, Performance, and Oral Exams." Teachers of both groups demonstrated difficulty in writing performance objectives.

Conclusion

Insofar as the instruments were valid, the data reliable and complete, and students were selected for the exemplary and comparison groups with common criteria, the data indicate the following conclusions:

- A. Students enrolled in the exemplary programs as compared to students in traditional academic programs can expect to:
 - 1 - learn more entry level manipulative-type job skills for employment.
 - 2 - achieve equally well in reading skills, communication skills, and math skills.
 - 3 - demonstrate more positive attitudes toward the school, peer relationship, work in our society, and work habits.

- 4 - demonstrate equal school attendance rate and a higher school drop-out rate.
 - 5 - receive and pursue more instruction in vocational related courses.
 - 6 - receive more individual and group counseling, and a larger percent of students in the exemplary program will express an interest in an occupational choice.
- B. Students attending exemplary programs can expect to experience fewer confrontations with law enforcement agencies during their first year in the exemplary program than they did during the year previous to entering the program.
 - C. Teachers in the exemplary program can be expected to utilize different teaching techniques to the same degree as teachers in academic-type programs. While they can be expected to use individual instruction consistent with the purposes of the exemplary program, they can be expected to use other techniques which are inconsistent with the program. Teachers in both groups can be expected to exhibit difficulty writing performance objectives.

Recommendations

On the basis of the findings and the conclusions of the evaluation of four exemplary vocationally oriented programs in Dade, Duval, Escambia, and Hillsborough Counties, the following recommendations are presented to the Florida Department of Education for consideration and implementation:

- A. Since students in exemplary programs developed considerably more manipulative-type job skills for entry level employment and achieved as well in basic education as students in academic programs, county school boards should be encouraged to evaluate academic programs as to the needs of students. Program revision should include a wide variety of instruction designed to enable students to make realistic career choices and pursue preparation directed toward their chosen career.
- B. Since a higher percent of students in exemplary programs expressed an interest in an occupational or career choice than students in academic programs, county school boards should be encouraged to provide adequate vocational guidance for the purpose of helping every student: (1) make a realistic a career choice, (2) locate and enroll in training programs to become qualified for entry level employment, (3) become employed in the job trained for, and (4) adjust to the job.
- C. Since teachers in exemplary and comparison programs demonstrated difficulty identifying and writing performance objectives, county school boards should be encouraged to provide in-service teacher education programs to familiarize all county administrators, supervisors, counselors, and teachers with the basic concepts of vocational education.

Teachers should be provided instruction in the analysis technique of selecting course content, writing performance objectives which are measurable, meaningful, and readable. The teacher should be instructed in the use of a wide variety of teaching methods and techniques.

- D. Recorded data relative to student achievement was, in some programs, vague or nonexistent. District school personnel should be encouraged to provide adequate supervision for assisting teachers and counselors to organize and construct course materials. They should also be encouraged to keep accurate and complete records about student achievement, as a basis for improving instruction.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The following conclusions were drawn from informal observations and information:

1. There were approximately 1300 students enrolled in four exemplary programs conducted in urban areas of Florida.
2. The ratio of instructional staff to students was 1/12; the ratio of support staff to students was 1/29.
3. Almost all teachers participated in one or more types of staff development programs.
4. A large volume of curriculum materials had to be developed.
5. Almost all students enrolled in more than one job skill development course.
6. Sixty-seven occupational courses were offered. Most courses were in the industrial education area.
7. Approximately 20 percent of the students were in cooperative type programs.
8. Almost all students were involved in clubs and other organized school activities.
9. Almost all students were enrolled in occupational orientation programs.
10. Almost all students received individual and group guidance and counseling during school hours; few received such assistance after hours.
11. Few students enrolled in the centers for intensive entry-level job skill development courses.
12. Approximately 2300 elementary school students had contact with the exemplary centers.
13. Public assistance agencies, community action groups, volunteer assistance agencies, and other educational and civic institutions and organizations provided assistance to the exemplary centers.
14. Approximately 56 percent of the students enrolled were retained in the exemplary centers. The next largest groups left involuntarily or re-entered the regular school program.

On the basis of evidence collected from participating programs by the third party evaluator, it may be concluded that:

1. Students enrolled in the exemplary programs as compared to students in traditional academic programs can expect to:
 - a. learn more entry level manipulative-type job skills for employment.
 - b. achieve equally well in reading skills, communication skills, and mathematics skills.

- c. demonstrate more positive attitudes toward the school, peer relationship, work in our society, and work habits.
 - d. demonstrate equal school attendance rate and a higher school drop-out rate
 - e. receive and pursue more instruction in vocational related courses.
 - f. receive more individual and group counseling, and a larger percent of students in the exemplary program will express an interest in an occupational choice.
2. Students attending exemplary programs can expect to experience fewer confrontations with law enforcement agencies during their first years of attendance in the exemplary program than they did during the year previous to entering the program.
 3. Teachers in the exemplary program can be expected to utilize different teaching techniques to the same degree as teachers in academic-type programs. While they can be expected to use individual instruction consistent with the purposes of the exemplary program, they can be expected to use other techniques which are inconsistent with the program. Teachers in both groups can be expected to exhibit difficulty writing performance objectives.

Recommendations

On the basis of the findings and the conclusions of the evaluation of four exemplary vocationally oriented programs in Dade, Duval, Escambia, and Hillsborough Counties, the following recommendations are presented by the third party evaluator:

1. Since students in exemplary programs developed considerably more manipulative-type job skills for entry level employment and achieved as well in basic education as students in academic programs, district school boards should be encouraged to evaluate academic programs as to the needs of students. Program revision should include a wide variety of instruction designed to enable students to make realistic career choices and pursue preparation directed toward their chosen career.
2. Since a higher percentage of students in exemplary programs expressed an interest in an occupational or career choice than students in academic programs, district school boards should be encouraged to provide adequate vocational guidance for the purpose of helping all students: (1) make a realistic career choice, (2) locate and enroll in training programs to become qualified for entry level employment, (3) become employed in the job trained for, and (4) adjust to the job.

3. Since teachers in exemplary and comparison programs demonstrated difficulty identifying and writing performance objectives, district school boards should be encouraged to provide in-service teacher education programs to familiarize all county administrators, supervisors, counselors, and teachers with the basic concepts of vocational education.

The teachers should be provided instruction in the analysis technique of selecting course content, writing performance objectives which are measurable, meaningful, and can be read and interpretable by students and parents. They should also be provided instruction in utilizing a wide variety of teaching methods and techniques.

4. Since recorded data relative to student achievement was in many instances vague or nonexistent, district school boards should be encouraged to provide adequate supervision to assist teachers and counselors in organizing and constructing course materials. Complete records of information needed as a basis for improving instruction should also be kept.

The following recommendations were drawn from information obtained through observations by the prime contractor:

1. Curricula and instructional materials should be developed prior to the instructional period.
2. Staff development programs should include additional techniques in instructing urban disadvantaged students.
3. Several occupational areas should be strengthened by additional courses; e.g., distributive education, ornamental horticulture, child day care center aides, health related occupations, etc.
4. More programs using cooperative educational methods should be planned and offered.
5. Vocational related clubs should be organized at each center.
6. Recruitment of dropouts should be emphasized and provided intensive skill development courses.
7. Special programs should be developed to articulate with other education institutions; i.e., area vocational technical centers, regular programs, etc.
8. Placement services should be available to all students as they complete the programs.
9. The project should be developed and approved with sufficient lead time to allow the local district to: (a) renovate a facility; (b) secure and install all equipment, machinery and purchase supplies; (c) arrange for transportation of students to the new facility; (d) employ

- administrators, supportive staff and faculty to conduct the program; and (e) provide sufficient time for staff to become familiar with philosophy and goals of program, to develop specific objectives for each course in terms of desired student outcome, to secure or develop evaluative devices to measure the attainment of stated objectives and to develop curriculum and secure curriculum materials for each course or program.
10. Project directors should be located at each center and coordinated through the district supervisory staff.
 11. Instruments should be developed and district school board approval should be secured early in the year.
 12. Teacher and counselor in-service programs should be implemented before, during and following the school year.
 13. A special program for elementary school needs to be designed in advance.
 14. A special program to acquaint other educators and the community with the objectives of the exemplary program should be planned and implemented.
 15. Meeting of local administrators, curriculum developers, and evaluators should be conducted during the year to identify problems and solutions in implementing the program.
 16. All local and state personnel in the educational environment should be involved in a leadership training conference to explain the exemplary program.
 17. Adequate records should be kept to determine more accurately the effectiveness of the program.
 18. A comprehensive program of occupational guidance is needed.
 19. A specially designed program of personal growth and development should be a part of the exemplary curriculum.
 20. A follow-up of dropouts from the exemplary program should be made.
 21. Entrance and exit interviews of students enrolling in the exemplary program should be kept.
 22. A follow-up of students completing the exemplary program should be made.

Results of the evaluation conducted by the University of West Florida and by informal observation of project staff indicate that the exemplary program for urban disadvantaged students accomplished the major objectives as outlined in the project. Successes of each exemplary program center are the result of dedicated and committed personnel staffing each project.

The overall program at each of the centers was effective as observed by the many visitors and their enthusiastic response to the four programs. The major recommendations are: (1) that all four programs be expanded to enroll more students with similar handicapping conditions, (2) that a similar program be made available to all youngsters, and (3) that the four programs evolve into a comprehensive program of vocational education for career development.

APPENDIX A

CONSULTANTS

APPENDIX A

Consultants

Many people contributed time, thoughts and energy to the planning, implementation and evaluation of the exemplary program entitled: "An Exemplary Model for a Total Ecological Approach to Non-graded Vocational Programs in Separate Educational Centers."

Notable contributions to the success of the program were made by:

Hon. Floyd T. Christian, Commissioner of Education, State of Florida

Department of Education

Dr. Carl W. Proehl, Director, Division of Vocational, Technical and Adult Education

Mr. E. A. Emmelhainz, Assistant Director, Division of Vocational, Technical and Adult Education
Dr. Roy Giehls, Consultant for Evaluation, Division of Vocational, Technical and Adult Education
Dr. Virginia Bert, Consultant for Research, Division of Vocational, Technical and Adult Education

Dade County Schools, Miami, Florida

Dr. Edward L. Whigham, Superintendent

Mr. John Standridge, District Superintendent, Vocational-Technical Adult Division
Mr. Joseph Anderson, Principal, Booker T. Washington Junior High School
Mr. Arthur Ballou, Project Coordinator, Booker T. Washington Junior High School

Duval County Schools, Jacksonville, Florida

Dr. Cecil Hardesty, Superintendent

Mr. Donald Johnson, Associate Superintendent for Curriculum
Mr. David Brown, Supervisor of Planning and Evaluation and Industrial Education

Escambia County Schools, Pensacola, Florida

Mr. J. E. Hall, Superintendent

Mr. James Jordan, Director of Vocational Education
Mr. E. G. Holley, Former Director of Vocational
Education (retired)

Hillsborough County, Tampa, Florida

Dr. Raymond Shelton, Superintendent

Mr. David Erwin, Assistant Superintendent for
Vocational, Technical and Adult Education
Mr. John Alfano, Principal, George Washington
Junior High School
Mr. Carl Miller, Project Coordinator, George Washington
Junior High School

University of West Florida, Pensacola, Florida

Dr. L. Hobdy Perkins, Chairman, Faculty of Industrial Education
and Technology

APPENDIX B

EVALUATION REPORT

Final Report

Project No. VTAD-5-C1-005

From August 1970 to August 1971

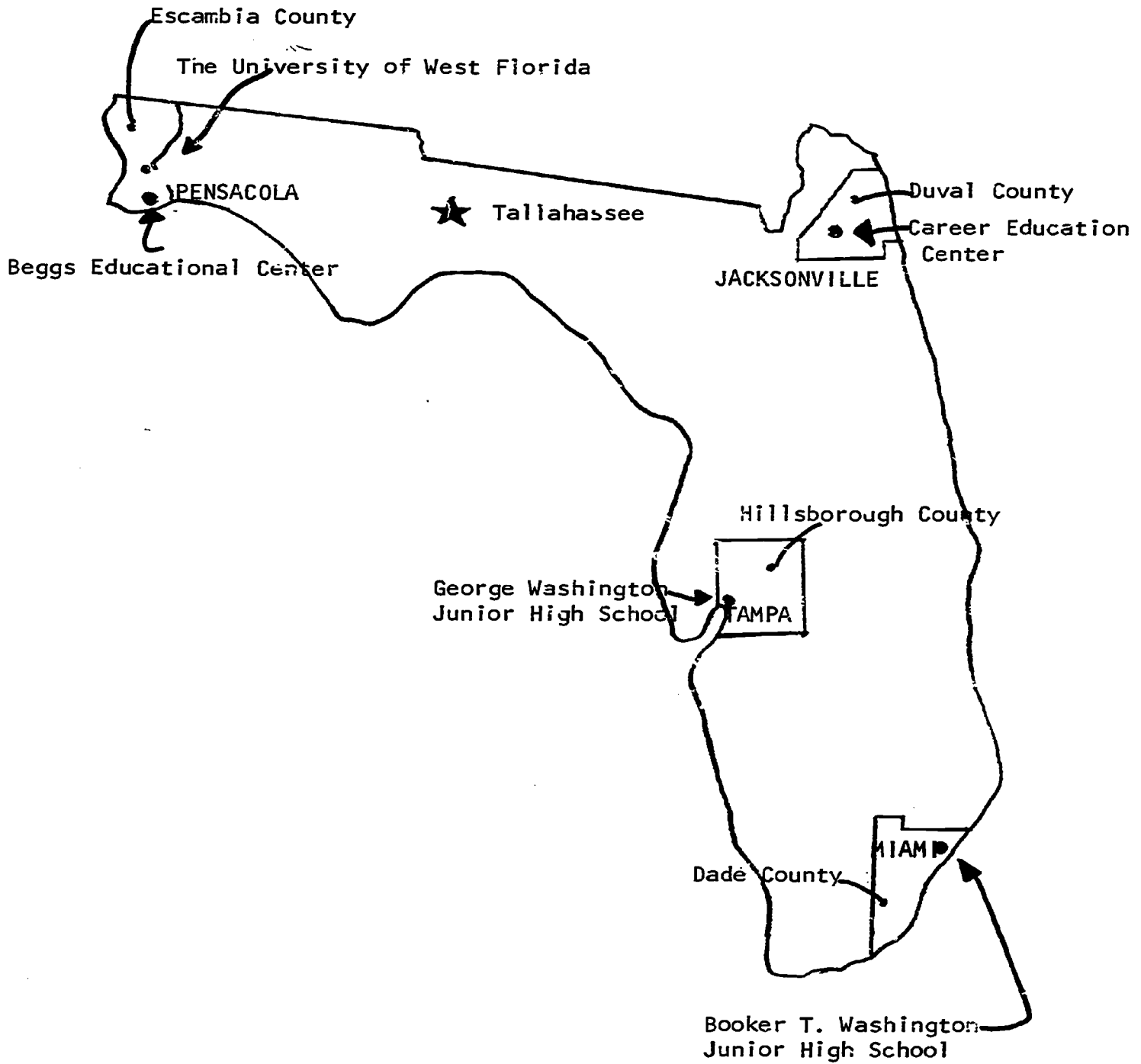
**Evaluation of Exemplary Programs in
Dade, Duval, Escambia, and Hillsborough Counties**

**The University of West Florida
Pensacola, Florida**

Lawrence H. Perkins

The project reported herein was conducted pursuant to a grant from the Division of Vocational, Technical and Adult Education, Florida State Department of Education. Contractors undertaking such projects are encouraged to express freely their professional judgments 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.

FLORIDA'S EXEMPLARY PROGRAMS
1970-71





THE UNIVERSITY OF WEST FLORIDA
PENSACOLA, FLORIDA 32504

OFFICE OF THE PRESIDENT

MEETING SOCIETY'S NEEDS

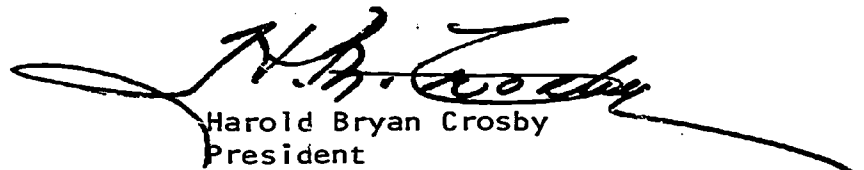
Since the end of World War II, the cost of education has risen exponentially. This substantial investment has paid huge dividends to the citizens of our country by providing them with the highest standard of living in the world, and has solved many problems relating to national defense, disease and poverty.

Despite the affluence evident in our society, a few individuals not in the mainstream, are marooned on islands of poverty, underproductivity, and frustration, primarily because of their lack of marketable skills.

In view of the foregoing, vocationally-oriented educational programs appear to offer a solution to this pressing social problem by providing a "second chance" for a substantial number of our unskilled and untrained youth. Not only can these citizens become productive members and contributors to the betterment of our society but they can enjoy a feeling of pride and accomplishment in their daily lives.

The vocationally-oriented exemplary programs in Beggs Educational Center in Pensacola, the Career Education Center in Jacksonville, the George Washington Junior High School in Tampa, and the Booker T. Washington Junior High School in Miami represent the most recent efforts in Florida to motivate the potential school drop-out to stay in school, to prepare for a socially desirable job and to earn a high school diploma.

In support of our community role, The University of West Florida is pleased to have played a part in the evaluative process of this important program.


Harold Bryan Crosby
President

ABSTRACT

Title: Evaluation of Florida's Vocational Exemplary Programs in Dade, Duval, Escambia, and Hillsborough Counties, 1970-71 School Year

Purpose: To ascertain answers to the following questions:

- A. Did students in the exemplary program as compared to students in academic programs
 1. learn more entry level manipulative-type job skills?
 2. achieve more basic reading skills, communication skills, and math skills?
 3. develop more positive attitudes, personal traits, and work habits?
 4. demonstrate a higher attendance rate and a lower drop-out rate?
 5. receive more instruction in vocational and related courses?
 6. receive more individual counseling, group counseling, and support service, did more students express an interest in an occupational choice?
- B. Did students experience fewer confrontations with law enforcement agencies during their first year in the exemplary program than they did during the year previous to entering the program?
- C. Did teachers in exemplary programs utilize more different teaching techniques than teachers in traditional programs?

Method: Data were collected from students, teachers, counselors, and administrators in exemplary and comparison schools in Dade, Duval, Escambia, and Hillsborough Counties relative to the student achievement in (1) manipulative-type salable job skills, (2) basic education skills, (3) attitudes, personal traits and work habits, and (4) school attendance and drop-out rate. Data were also collected relative to (1) the student's expressed interest in an occupational choice, (2) the number of confrontations with law enforcement agencies by students in exemplary programs, (3) student enrollment in vocational related courses, (4) the amount of vocational and related instruction offered, (5) the amount of individual and group counseling received, and (6) instructional techniques utilized by teachers. The mean score, t test, Chi Square, and Mann Whitney U statistical techniques were used to analyze the data. Three instruments were purchased from commercial publishers and five instruments were constructed to gather the data.

Summary:

(1) In the exemplary programs, 58.3% of the students acquired five or more entry level job skills while only 7% of the students in the comparison programs achieved as well.

(2) There was no significant difference between the exemplary and comparison groups in achievement in basic education skills in reading, vocabulary, spelling, and arithmetic.

(3) Students in the exemplary groups scored more positive than students in the comparison groups relative to work habits. There was no significant difference between the groups relative to attitudes toward work in our society, school, family relationship, and self-concept.

(4) Students in the comparison groups demonstrated a lower school drop-out rate than students in the exemplary groups. There was no significant difference between the groups relative to school attendance rate.

(5) The exemplary programs offered 10.1 hours in vocational and related courses per student enrolled while the comparison programs offered only 1.4 hours in vocational and related instruction per student.

(6) In the exemplary groups, 91.9% of the students were enrolled in vocational related courses while 50.3% of the students in the comparison groups were enrolled in the same type instruction.

(7) A larger percent of students in the exemplary groups received individual and group counseling than students in the comparison group, and a larger percent of students in the exemplary program expressed an interest in an occupational choice than did students in academic programs.

(8) Teachers in the exemplary programs in Dade, Duval, and Hillsborough Counties used more different teaching techniques than teachers in comparison schools while teachers in the comparison schools used more different techniques more often in Escambia County. Teachers in all exemplary programs used individual instruction often. Teachers in all counties experienced difficulty identifying their student performance objectives.

Conclusions:

- A. Students enrolled in exemplary programs as compared to students in traditional academic programs can be expected to:
1. learn more entry level manipulative-type job skills for employment.
 2. achieve equally well in reading skills, communication skills, and math skills.
 3. demonstrate more positive attitudes toward work habits.
 4. demonstrate a higher drop-out rate.
 5. receive and pursue more instruction in vocational related courses.
 6. receive more individual and group counseling and more students in the exemplary programs would be expected to express interest in an occupational choice than students in the academic-type programs.

- B. Students would be expected to experience fewer confrontations with law enforcement agencies during their first year in the exemplary program than they did during the year previous to entering the program.
- C. Teachers in the exemplary program would be expected to utilize different teaching techniques to the same degree as teachers in academic-type program. Teachers in both groups would be expected to exhibit difficulty writing performance objectives.

Recommendations: On the basis of the findings and the conclusions of the evaluation of four exemplary vocationally oriented programs in Dade, Duval, Escambia, and Hillsborough Counties, the following recommendations are presented to the Florida Department of Education for consideration and implementation:

- A. Since students in exemplary programs developed considerably more manipulative-type job skills for entry level employment and achieved as well in basic education as students in academic programs, county school boards should be encouraged to evaluate academic programs as to the needs of students. Program revision should include a wide variety of instruction designed to enable students to make realistic career choices and pursue preparation directed toward their chosen career.
- B. Since a higher percent of students in exemplary programs expressed an interest in an occupational or career choice than students in academic programs, county school boards should be encouraged to provide adequate vocational guidance for the purpose of helping every student: (1) make a realistic career choice, (2) locate and enroll in training programs to become qualified for entry level employment, (3) become employed in the job trained for, and (4) adjust to the job.
- C. Since teachers in exemplary and comparison programs demonstrated difficulty identifying student performance objectives for their courses, county school boards should be encouraged to provide instruction for teachers in writing performance objectives which are measurable and can be read and interpreted by the student.
- D. Since recorded data relative to student achievement was vague and nonexistent in some programs, county school boards should be encouraged to provide adequate supervision to assist teachers in the analysis technique of selecting course content and record keeping for improved instruction.

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INTRODUCTION

When John F. Kennedy became President of the United States in 1961, one of his first actions was to appoint a national Panel of Consultants to study the needs of and make recommendations for vocational education. The Panel conducted the study and in 1962 published the report labeled Education for a Changing World of Work (1)*. The Panel made specific recommendations which were included in the Vocational Education Act passed into law by the U. S. Congress in 1963.

Federal funds appropriated under previous legislation had been directed toward the four curricular areas administered under the labels of Agriculture, Distribution, Home Economics, and Trades and Industry. In formulating the Vocational Education Act of 1963, the U. S. lawmakers adhered to the advice of the Panel of Consultants and directed the funds toward the needs of special groups of people rather than curricular areas. Thus, the law was directed toward serving the vocational education needs of the following groups of U. S. citizens:

1. Those in high school.
2. Those who have completed or discontinued their formal education and are preparing to enter the labor market.
3. Those who have already entered the labor market but need to upgrade their skills or learn new ones.
4. Those who have academic, socioeconomic or other handicaps (2).

With this historical landmark in educational leadership, lawmakers were saying to educators that the needs of the people should be the target of teaching efforts rather than the promotion of vocational Agriculture, Distribution, Home Economics, and Trades and Industry. This philosophy carried over into The Amendments to the Vocational Education Act of 1963 (3), passed into law in 1968.

Even before 1963 leading educators had recognized that the public secondary schools were not serving the needs of all youth. About 80 percent of all high school youth are programmed into a traditional college preparatory curriculum while only 20 percent of these same high school youth complete a college degree program as preparation for work.

*See Appendix A - Selected Bibliography for References

At least 30 percent of the youth in this country leave school before earning a high school diploma and enter the category of the educationally disadvantaged. While during the 60's this group represented 7.2 million youth, the 70's expect to see 9.6 million youth leave school without a high school diploma to enter the labor market at the very lowest and most crowded level of our occupational structure. Largely because of an absence of realistic, meaningful programs in the public schools the early school leaver exits without a salable skill. Unskilled and uneducated, these youth most often enter jobs which are temporary, seasonal, and dead end with no possibility for advancement or promotion. The young wage earner experiences unemployment when seasonal and periodic downturns in the economy put the unskilled out of work. As the youth leaves employment and enters the ranks of the unemployed, his contributions stop and he becomes a liability to our society.

The need for some exemplary programs to serve as models for school boards trying to design programs for the educationally disadvantaged youth was pointed to by U. S. lawmakers. To best present the interest in and special provision for this project by the U. S. Congress the following excerpt is cited from Public Law 90-576, The Amendments to the Vocational Education Act of 1963 (3):

Part D Exemplary Programs and Projects

Findings and Purpose

Sec. 141. The Congress finds that it is necessary to reduce the continuing seriously high level of youth unemployment by developing means for giving the same kind of attention as is now given to the college preparation needs of the two out of three young persons who end their education at or before completion of the secondary level, too many of whom face long and bitter months of job hunting or marginal work after leaving school. The purposes of this part, therefore, are to stimulate, through Federal financial support, new ways to create a bridge between school and earning a living for young people, who are still in school, who have left school either by graduation or by dropping out, or who are in postsecondary programs of vocational preparation, and to promote cooperation between public education and manpower agencies.

The law provides for funding all or part of the cost of grants or contracts for planning, establishing, developing, operating, and evaluating exemplary programs to broaden occupational aspirations and opportunities for youth with socioeconomic, academic, and other handicaps.

It further specifies that projects may include programs to provide students with instruction in broad occupational areas, cooperative work study and intensive occupational guidance. Provisions are included to broaden and improve vocational education curricula, to offer instruction to young workers released from the job on a part-time basis to increase their educational achievement, to exchange personnel from industry, manpower agencies, and other institutions with the school and to motivate and provide pre-professional preparation for potential vocational teachers.

The logical procedure for developing an exemplary educational program is to first formulate the objectives to be attained, then identify the students, teachers, reference materials, teaching methods, counseling techniques, time schedule arrangements, and physical facilities. Then as a group of students complete the program, conduct an evaluation to measure the progress and utilize results of the evaluation to justify material and human expenditures and make program revisions.

Review of Related Research

A search of the professional literature reveals several studies which have been conducted in an attempt to measure progress of educational programs. Some are closely related to the process of this study; the more recent ones are included to establish some procedural validity for this evaluation.

The Harkness Center was established in Buffalo, New York, to provide the educationally disadvantaged youth with exploratory experiences in a series of different occupations. The students were scheduled for ten weeks of instruction in each occupation. At the end of each ten-week period the teachers completed a checklist type evaluation form to measure the student's progress. The instrument consisted of nine items which relate to work habits and personal traits. The evaluation of the product objectives consisted of subjective observation of the teachers and administrators (4).

Wasden evaluated an exemplary program in Utah in which the purposes were to provide youth, in small rural high schools, skills to enter industrial occupations or preparation to continue education in post high school institutions. Industrial educators combined efforts with agricultural mechanics to reach those objectives. Additional purposes of the project were to (a) provide leadership for local school administrators, (b) establish pilot programs, (c) provide a special teacher education program, and (d) to help local school boards establish exemplary programs. Cooperation was received from teachers, industrial personnel, and parents. The evaluation consisted of (a) exemplary and comparison groups, (b) pre and post tests, and (c) subjective observations by parents, school principals, and superintendents (5).

Darcey reported a project by the faculty of Ohio University to develop programs in six central Ohio communities. The purposes of the project were to (a) identify teaching content to bridge the gap between school and work for junior and senior high school students, (b) explore the feasibility to offer a course in manpower and education, (c) write instructional materials, (d) develop a valid and reliable evaluation plan, and (e) field test the instructional materials. The evaluation consisted of students assigned to experimental and control groups, pre and post tests, and written exams. The instruments used were "Manpower Economics Test of Understandings" and "Survey of Manpower and Economic Attitudes" (6).

George Abner and C. R. Wright reported a one-teacher program for slow learning senior high school boys. The program was designed for those students who could not complete standard curriculum requirements for high school graduation. Cooperative experience in service type jobs was included while competition and threats for grades were removed. The evaluation procedure involved observing the achievements of the program objectives which were, in fact, fulfilled. Discipline problems, absenteeism, and tardiness disappeared and every participating student earned a job (7).

In a study to test the validity of programmed instruction against conventional techniques of teaching high school youth bookkeeping, Gibb and others utilized the pre and post test design to measure the achievement of the experimental and control groups. Four classes of students were subjects of the evaluation with two classes randomly designated as the exemplary group which received the programmed instruction technique. The remaining two classes were designated as the control group which received conventional teaching techniques to achieve the same objectives. Statistical treatment to analyze the data consisted of the mean, standard deviation, and the t test (8).

Kraft conducted a survey-type evaluation of Florida's Vocational-Technical Education Programs for the 1969-70 school year. The criteria utilized for the evaluation was Florida Laws and basic philosophy of vocational education. On the basis of personal interviews, observations, and subjective value judgments, the investigator made recommendations which would seem to support the intent of Florida legislation (9).

The Escarosa Humanities Curriculum Project (10) was established for the purpose of developing the whole child through activities in music, drama, art, and literature. Specific objectives of the program were to help students improve their self-concept, academic performance, and attitude toward school; and to help Escambia and Santa Rosa County teachers integrate the humanities into the curriculum, increase their use of audio-visual aids and human resources, and increase their knowledge of the local heritage. The evaluation consisted of pre and post observation of the teachers and students, exemplary group only, written exams,

and checklist type information forms. The statistical treatment included mean scores, standard deviation, and Fisher's t test.

Delon (11) conducted an evaluation of computer assisted instruction in first grade math for economically and educationally disadvantaged McComb, Mississippi, youth. Purposes of the investigation were to ascertain answers to the following questions: (a) What effects, if any, did the treatment have on achievement in mathematics and reading? (b) What effects, if any, did the treatment have on measured intelligence? (c) If the treatment produced significantly greater results than regular instruction, were the treatment differences maintained through the following year?

The design included (a) students randomly assigned to exemplary and comparison groups in the project school, (b) comparison groups in a control school separate from the project school, (c) pre and post tests, and (d) a follow-up study of youth in the exemplary group one year after they were in the project. Standardized tests used to gather the data were the California Achievement Test, the Wechsler Intelligence Scale for Children, and the Otis-Lennon. The analysis of variance and t test techniques were utilized for data analysis.

Exemplary Programs in Florida

Public secondary education in Northwest Florida consists largely of classroom-centered, subject-centered, academic college preparatory programs. To graduate from high school the students must successfully complete courses which demand memorization of long passages from topics such as "Julius Caesar", "Tales of King Arthur", "Camelot", and "Greek Mythology". Abstract algebra, English literature, scientific theory, foreign languages, marching bands, and football teams prevail over instruction designed to prepare students for socially desirable occupations. To program youth through this type of instruction without first preparing them to survive in our changing world of work is an indication that the curriculum is as ancient as the myths the students are required to memorize. Many students fail to see any immediate rewards from a traditional academic-type education. They become disinterested and leave school. The supporters of public education also express dissatisfaction with the present public school curriculum by voting down future financial obligations just as quickly as school boards submit them for voters' reaction.

The traditional academic-type curriculum may have served its purpose one hundred years ago when less than ten percent of our citizens attended the secondary schools and 90 percent of those attending went on to earn a college degree in preparation for a career in the ministry, law, or medicine. However, in our space-age society these programs are not nearly as effective when trying to serve the educational needs of

every high school age youth. Data gathered during the five-year period, 1963-68, would indicate that 40 percent of those students enrolled in Escambia County schools leave the system before earning a high school diploma. They then enter the enlarging ranks of the unskilled, the unemployed, and the uneducated and become a liability to the Pensacola community, the State of Florida, and the nation.

Recognizing the inadequacy of traditional secondary-school programs, forward looking educators in Escambia County began to take action in the early 60's to design a program to identify and meet the needs of the potential out-of-school youth 14 years and older. In 1969 the Beggs Educational Center opened with approximately 600 students enrolling while many others waited to enter. The fifty-year old building had been condemned, the facilities were poor, supplies were scarce and inadequate, the students were juvenile delinquents, dropouts, pushout, kickouts, and leavers of other Escambia schools; and many of the teachers were first year teaching. The faculty and staff managed to disarm the bundle of social explosives, create interest and motivation, and successfully complete their first year of operation with only light casualties.

Characteristics which appear to be unique to the Beggs Center and different from those of traditional schools which seem to repel the educationally disadvantaged students are:

1. A teaching faculty which is empathetic with and sympathetic toward these students.
2. A relatively high teacher-student ratio and high counselor-student ratio.
3. Close cooperation with the local Department of Mental Health, Vocational Rehabilitation, Juvenile Courts, Probation Department, Welfare Department, community action, National Youth Corps, and private physicians.
4. A flexible scheduling and team teaching arrangement to allow the student prescription-type learning.
5. Cooperative work-study agreement with local business and industry.
6. A diagnostic procedure for entering students whereby the vocational guidance counselor analyzes the student's needs, interests, and abilities. The student is encouraged to select an occupational choice based on the analysis, then the related "must know"-type information and "academic-type" instruction are selected to fit the student's qualifications to the job requirement.

7. A series of teaching teams centered in occupational areas, e.g. electronics team, auto mechanics team, ornamental horticulture team and others. When the student selects the occupational choice, he is assigned to a team which designs his studies and monitors his progress. The team functions much like a graduate committee in a doctoral program.

The Beggs Educational Center and Booker T. Washington Junior High School were the first school programs to benefit from federal funds for exemplary programs available from The Amendments to the Vocational Education Act of 1963, Public Law 90-576. The exemplary concept was extended and two similar programs much like the Beggs Center were opened in Duval and Hillsborough Counties in August, 1970. Total enrollment for the four centers increased to approximately 2000 students. All four counties receiving seed monies for exemplary programs had previously been involved in Model Cities Programs.

The Chairman, Department of Vocational-Technical Education, UWF, received a grant from the Florida Department of Education to evaluate progress of the four vocational exemplary programs in Dade, Duval, Escambia, and Hillsborough Counties.

The Purpose of the Evaluation

In a national leadership conference on exemplary vocational education programs held at Squaw Valley, California, in July 1970, evaluation by an agency outside of the experimental school was strongly recommended (12). Educators with the Florida Department of Education had, however, already entered negotiations with UWF to measure the progress of four exemplary vocational programs in Dade, Duval, Escambia, and Hillsborough Counties for the 1970-71 school year.

The goals of the exemplary schools were to enable the students to accomplish:

1. Improved attitudinal interaction with their environment.
2. Improved academic achievement.
3. Occupational achievement in the form of salable skills.

A further goal was to enable the teachers to develop or improve their teaching skills to work effectively with the educationally disadvantaged youth.

The purposes of the evaluation were to ascertain answers to the following questions:

- A. Did students in the exemplary vocational schools, as compared to students in the traditionally academic oriented schools;
 1. develop more entry level manipulative-type job skills?
 2. acquire more cognitive knowledge which is considered a must to perform in a payroll job?
 3. develop more desirable personal traits, attitudes, and work habits to get and hold a payroll job?
 4. receive more:
 - a. instruction in vocational and related courses?
 - b. counseling service?
- B. Did teachers in the exemplary programs utilize more different teaching techniques than teachers in traditional academic-type schools?

Definition of Terms

For the purpose of data collection in this study, the major terms used are defined as follows:

Confrontations with Law Enforcement Agencies -- Any incidence where a student is picked up by law enforcement agents for possible adjudication.

Employment -- Refers to full-time work. Thirty hours or more per week, four or more weeks in the job trained for or a closely related job.

Exemplary Vocational Programs -- Special school programs designed for educationally disadvantaged youth. All instruction is based on the students' selected vocation; voluntary attendance and individual instruction are characteristics of the program.

The Exemplary Group Students -- Students selected using the following criteria for attending exemplary programs:

1. Failed two of the first seven grades.
2. Established a history of educational achievement on the basis of social promotion.
3. Retarded at least two years in reading and/or mathematics.
4. Established irregular attendance - truancy problem.
5. Personality deficiencies:
 - a. poorly defined value system
 - b. aggressive
 - c. resentful toward authority
 - d. impulsive
 - e. low frustration tolerance
 - f. poor or low self-concept
 - g. withdrawn - within the frame of reference of school

6. An I. Q. above 75 as measured in group tests.
7. Parental permission to participate.

Functional Illiterates -- Students who cannot read beyond the fifth grade level.

The Matched Comparison Group Students -- Students selected using the following criteria:

1. Failed two of the first seven grades.
2. Established a history of educational achievement on the basis of social promotion.
3. Retarded at least two years in reading and/or mathematics.
4. Established irregular attendance - truancy problem.
5. Personality deficiencies:
 - a. poorly defined value system
 - b. aggressive
 - c. resentful toward authority
 - d. impulsive
 - e. low frustration tolerance
 - f. poor or low self-concept
 - g. withdrawn - within the frame of reference of school
6. An I. Q. above 75 as measured in group tests.

Non-Readers -- Students who cannot read or write their full name.

Occupational Exploration Courses -- Instruction designed with primary objectives to make students familiar with a variety of occupations, e.g. job descriptions, qualification requirements, pay, working hours and conditions, potential for advancements, number of new people needed, and available training programs.

Pre-Vocational Skill Development Experiences -- Instruction designed to enable the student to experience a variety of manipulative skills basic to many trade level occupations. The objectives may be attained through practical art courses in Home Economics, General Business, General Agriculture, and Industrial Arts. This may also include interdisciplinary arrangements whereby a student is programmed to attend exploratory instruction in a variety of different occupations (three or more occupational areas).

School Drop-Out -- A student who has terminated his formal educational endeavors.

Vocational Programs -- Instruction with objectives directing students toward employment in occupations related to: (a) industrial production and service, (b) technology, (c) health, (d) home economics, (e) business, and (f) agriculture.

Limitations of the Study

The study was limited to the extent that the instruments were valid, that the professional integrity of the teachers, counselors, administrators and evaluation coordinators was upheld, and that the students performed at their best on written exams. The study was further limited to the extent that students selected for the comparison group met the same criteria as the exemplary group.

METHOD OF STUDY AND SOURCE OF DATA

Evaluating school programs is no simple task by anyone's imagination. In the earliest planning stages a group of recognized professionals in the field of education were contacted as consultants* for the planning, conducting, and reporting stages of this evaluation. Periodic conferences with the consultants produced suggestions which proved to be both valuable and time saving for all stages of the investigation.

A comprehensive review of instruments used in previous evaluations revealed three which were purchased from commercial vendors and used to measure basic educational achievement and inventory student attitudes for the study. Five additional instruments were constructed by the investigator with assistance from the consultants*.

The original design included pre and post testing. However, all instruments were forwarded to each participating county school board for approval before use*. This procedure took more time than had been anticipated, October until January, and through necessity the design was changed to include the post test only.

Data for the study were collected from students, teachers, counselors, and administrators. The chief administrator in each center designated one staff member responsible for coordinating and collecting evaluation data in his county for the UWF investigator.

Two groups of students, from each participating county, were utilized for evaluation purposes. The exemplary group (E) was selected from new students entering the exemplary program while the comparison group was selected from other county schools through the use of student records filed in the county school board office. Names of all new students entering each exemplary program for the 1970 Fall term and names of 150 qualifying comparison students were forwarded to the UWF investigator by the evaluation coordinator in each center. Fifty students and 15 alternates were selected at random, as participants for each group

*See Appendix B for List of Consultants.

*See Appendix C for Instruments Used to Collect Data for the Study.

*See Appendix E for Correspondence from County Superintendents Approving Use of Instruments.

by the UWF investigator. Names of those students selected as participants were forwarded to the evaluation coordinator in each center. The evaluation coordinator then identified teachers of these students and sent their names to UWF. The teachers' names were then typed on instruments containing information about teaching techniques and forwarded to the evaluation coordinator in each center for data collection. Students' names were typed on written examination and attitude inventory and forwarded to the evaluation coordinator to be administered to the students at the end of the school year. In a like manner information about students' personal-social traits and work habits was gathered from teachers and information about vocational counseling and occupational choice was gathered from counselors. Information about vocational and related course offerings was gathered from the chief administrator in schools of participating students through the evaluation coordinator.

Data returned to UWF were edited for accuracy, coded and stored in memory on the computer disc pack. Computer programs were developed to compute the mean score, standard deviations, Fisher's t, the Mann-Whitney U, and Chi Square for data analysis. The computer print-out of the statistical analysis, input data and student names were verified by the UWF staff. A copy of this information was then sent to the director of each exemplary center. Finally, information forms and instruments used in the investigation were destroyed.

Hypotheses for the Evaluation

The following research hypotheses served as guides for the investigation:

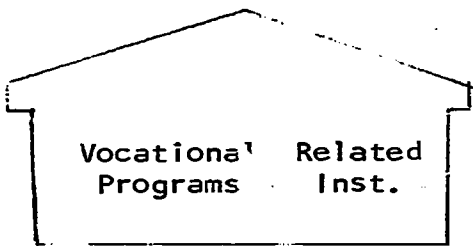
- A. Students in the exemplary group (E) as compared to students in the comparison group (C)
 1. develop more entry level manipulative-type job skills.
 2. experience greater achievement in basic reading, communications, and mathematic skills.
 3. develop more positive attitudes, personal traits and work habits.
 4. demonstrate a higher attendance rate.
 5. demonstrate a lower drop-out rate.
 6. receive more instruction in vocational and related courses.
 7. receive more individual and group counseling.
- B. Students in the exemplary group (E) experience fewer confrontations with law enforcement agencies during their first year in the exemplary program than they did during the year previous to entering the program.
- C. Teachers in the exemplary vocational programs utilize more different type teaching techniques than teachers in traditional-type academic programs.

The research hypotheses were tested by accepting or rejecting the following null hypotheses:

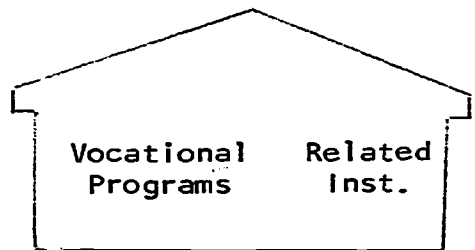
- HO₁: There is no significant difference between the exemplary group (E) and the comparison group (C) relative to
1. the number of manipulative-type salable skills developed.
 2. achievement in basic reading and communication skills.
 3. achievement in basic mathematic skills.
 4. the development of positive attitudes toward family relationships, peer relationships, the self, the school, and toward the contribution of work in our society.
 5. the school drop-out and attendance rate.
 6. the amount of instruction received in vocational and related courses.
 7. the amount of individual and group counseling received.
 8. the percent expressing an interest in an occupational choice.
- HO₂: There is no significant difference between the number of confrontations with law enforcement agencies by the exemplary group (E) during their first year in the program as compared to the number of confrontations during the year previous to entering the program.
- HO₃: There is no significant difference between the teachers of the exemplary group (E) and teachers of the comparison group (C) relative to the number of different teaching techniques used.

ADMINISTRATIVE STRUCTURE OF FLORIDA EXEMPLARY PROGRAMS

A. EXEMPLARY PROGRAMS IN SEPARATE CENTERS

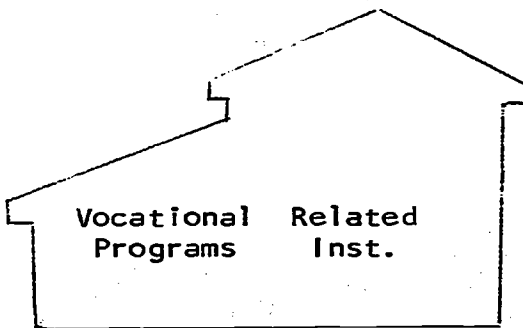


BEGGS EDUCATIONAL CENTER
ESCAMBIA COUNTY

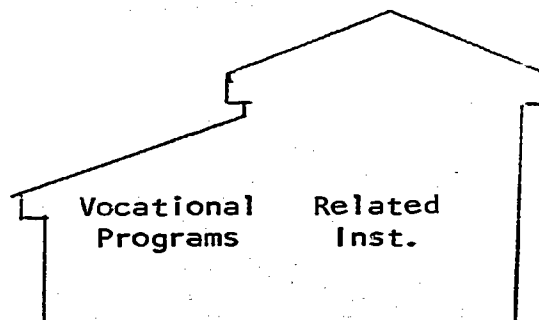


CAREER EDUCATION CENTER
DUVAL COUNTY

B. EXEMPLARY PROGRAMS ATTACHED TO JUNIOR HIGH SCHOOLS



GEORGE WASHINGTON JUNIOR
HIGH SCHOOL
HILLSBOROUGH COUNTY



BOOKER T. WASHINGTON
JUNIOR HIGH SCHOOL
DADE COUNTY

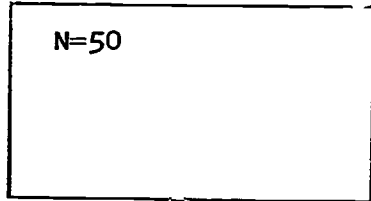
SAMPLE MODEL

Exemplary
Groups †

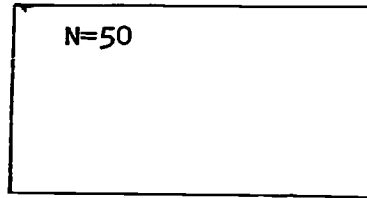
Comparison
Groups ‡

Design

Escambia
(Pensacola)



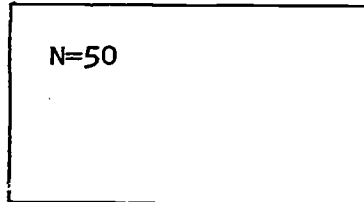
Beggs Education Center



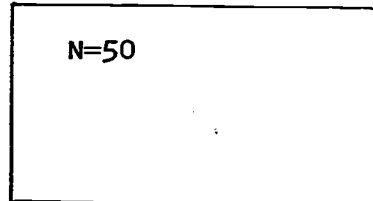
Other County Schools

*
MR X₁0₁
0₂

Duval
(Jacksonville)



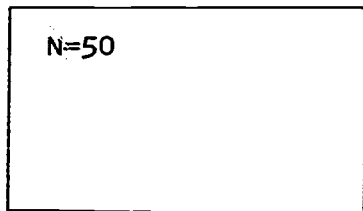
Career Education Center



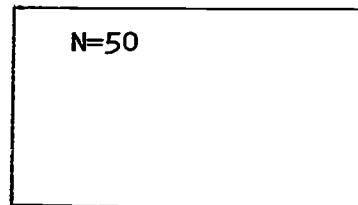
Other County Schools

MR X₁0₁
0₂

Hillsborough
(Tampa)



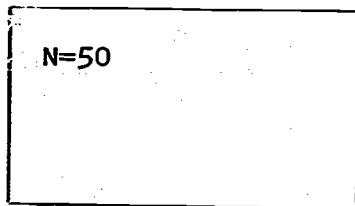
George Washington
Junior High



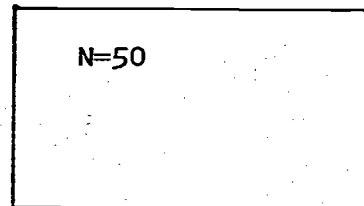
All County Schools

MR X₁0₁
0₂

Dade
(Miami)



Booker T. Washington
Junior High



All County Schools

MR X₁0₁
0₂

*S_s Matched By
Selection
Criteria
Randomly
Selected
Subsamples

† not intact classes

‡ not in same schools

STATISTICAL TREATMENT

SYMBOLIC STATEMENT

INSTRUMENT
Title _____ Completed By _____

HYPOTHESES

HYPOTHESES FOR PRODUCT OBJECTIVES

Students in the exemplary group (E) as compared to the comparison group (C) will demonstrate:

1. greater reading & communication skill
2. greater math skills
3. more positive attitudes toward:
 - 1) family relationship
 - 2) peer relationship
 - 3) self
 - 4) school
 - 5) the contribution of work in our society
4. lower school drop-out rate
5. higher school attendance rate

| | | |
|---|---|---|
| $H_1: E(POST) - C(POST) > 0;$ $H_0: E(POST) - C(POST) \leq 0;$ | Adult Basic Learning Exam Student | t Test |
| $H_1: E(POST) - C(POST) > 0;$ $H_0: E(POST) - C(POST) \leq 0;$ | Adult Basic Learning Exam Student | t Test |
| $H_1: E(POST) - C(POST) > 0;$ $H_0: E(POST) - C(POST) \leq 0;$ | How I See Myself My Work, My School, Student My Country Personal-Social Traits Inventory UWF Form #1003 Teacher | t Test Mann-Whitney U & Chi Square Chi Square |
| $H_1: C - E > 0$ $H_0: C - E \leq 0$ | No Instrument Used Evaluator | Chi Square |
| $H_1: E - C > 0$ $H_0: E - C \leq 0$ | No Instrument Used Evaluator | t Test In percent |

EVALUATION DESIGN FOR FLORIDA'S EXEMPLARY PROGRAMS
IN DADE, DUVAL, ESCAMBIA, AND HILLSBOROUGH COUNTIES
1970-71 SCHOOL YEAR

SYMBOLIC STATEMENT

INSTRUMENT

STATISTICAL TREATMENT

HYPOTHESES

Title

Completed By

| <u>HYPOTHESES</u> | <u>SYMBOLIC STATEMENT</u> | <u>INSTRUMENT</u> | <u>STATISTICAL TREATMENT</u> |
|---|---|--|------------------------------|
| 6. more entry level job skills | $H_1: E-C > 0$ $H_0: E-C \leq 0$ | Course Inventory UWF Form #1001 | Percent |
| 7. quicker employment after leaving school | $H_1: E-C > 0$ $H_0: E-C \leq 0$ | Follow-up Study Instrument to be Constructed | Chi Square |
| 8. a greater percentage being employed successfully or continuing education after leaving the exemplary program | $H_1: E-C > 0$ $H_0: E-C \leq 0$ | Follow-up Study Instrument to be Constructed | Chi Square |
| 9. greater employment duration (employed for longer period of time) | $H_1: E-C > 0$ $H_0: E-C \leq 0$ | Follow-up Study Instrument to be Constructed | Chi Square |
| Students in the exemplary group (E) will experience fewer confrontations with law enforcement agencies during their first school year in the program than the school year previous to entering the program. | $H_1: E(70-71) - E(69-70) < 0$; $H_0: E(70-71) - E(69-70) \geq 0$ | No Instrument Used | Percent |
| A greater number of students in the exemplary group (E) as compared to the comparison group (C) will express an occupational choice. | $H_1: E-C > 0$ $H_0: E-C \leq 0$ | Guidance Inventory UWF FORM #1005 | Percent |

EVALUATION DESIGN FOR FLORIDA'S EXEMPLARY PROGRAMS
 IN DADE, DUVAL, ESCAMBIA, AND HILLSBOROUGH COUNTIES
 1970-71 SCHOOL YEAR

| HYPOTHESES | SYMBOLIC STATEMENT | INSTRUMENT | | STATISTICAL TREATMENT |
|---|-------------------------------------|--|---------------|-----------------------|
| | | Title | Completed By | |
| B. HYPOTHESES FOR PROCESS OBJECTIVES | | | | |
| As a result of exemplary programs, students in the exemplary group (E) as compared to the comparison group (C) will receive more: | | | | |
| 1. instruction in occupational and career exploration courses | $H_1: E-C > 0$ $H_0: E-C \leq 0$ | Program Inventory UWF Form #1002 | School Admin. | |
| 2. pre-vocational skill development laboratory experiences | $H_1: E-C > 0$ $H_0: E-C \leq 0$ | Program Inventory UWF Form #1002 | School Admin. | |
| 3. instruction in vocational programs | $H_1: E-C > 0$ $H_0: E-C \leq 0$ | Program Inventory UWF Form #1002 | School Admin. | |
| 4. different instructional techniques in laboratory and classroom instruction | $H_1: E-C > 0$ $H_0: E-C \leq 0$ | Instructional Tech. Inventory UWF Form #1007 | Teacher | Percent |
| 5. individual guidance, placement and support service | $H_1: E-C > 0$ $H_0: E-C \leq 0$ | Guidance Inventory UWF Form #1005 | Counselor | Percent |

EVALUATION DESIGN FOR FLORIDA'S EXEMPLARY PROGRAMS
 IN DADE, DUVAL, ESCAMBIA, AND HILLSBOROUGH COUNTIES
 1970-71 SCHOOL YEAR

| <u>HYPOTHESES</u> | <u>SYMBOLIC STATEMENT</u> | <u>INSTRUMENT</u> Title | Completed By | <u>STATISTICAL TREATMENT</u> |
|---|---|--|--------------|------------------------------|
| 6. group guidance and counseling service | $H_1: E - C > 0$ $H_0: E - C \leq 0$ | Guidance Inventory UWF Form #1005 | Counselor | Percent |
| 7. payroll jobs through placement service | $H_1: E - C > 0$ $H_0: E - C \leq 0$ | Follow-up Study Instrument to be Constructed | Evaluator | Chi Square |

ACHIEVEMENT IN DADE COUNTY

Program Description

The Dade County Exemplary Program, which included 99 students, 17 teachers, and five counselors, was housed in the Booker T. Washington Junior High School along with a traditional junior high school program which included 881 students. The school building was located in a section of urban Miami surrounded by homes of middle to low income families and some small retail businesses. The section of the building which was utilized by the exemplary program was partially renovated during the school year while students were in attendance. Laboratory facilities which were installed late in the school year would appear to be adequate in quantity and quality for a minimum program for 99 students; however, additional equipment would have been highly desirable. The faculty and administrative staff appeared to be highly dedicated and were in the process of organizing their instruction during most of the year. The students appeared to be motivated, moderately dressed, and courteous.

Fifty students and 15 alternates in the exemplary program were randomly selected as the exemplary group while the comparison group included 50 students and 15 alternates which were randomly selected from 150 students meeting the same criteria as students attending the exemplary program. Teachers of the 65 students in each sample were then identified and utilized as teachers of students in the exemplary group and teachers of students in the comparison group. For most of the information requested from students and teachers, the returns were less than 100 percent. The exact number is identified with the report of each type of data collected.

The purposes of the study were to ascertain answers to the following questions:

- A. Did students in exemplary programs as compared to students in traditional programs
 1. learn more entry level manipulative-type job skills?
 2. achieve more basic reading, communication skills, and math skills?
 3. develop more positive attitudes, personal traits, and work habits?
 4. demonstrate a higher attendance rate and a lower drop-out rate?

5. receive more instruction in vocational and related courses?
 6. receive more individual counseling and group counseling, support service, and as a result did a greater percent of students express an interest in an occupational choice?
- B. Did students experience fewer confrontations with law enforcement agencies during their first year in the exemplary program than they did during the year previous to entering the program?
 - C. Did teachers in exemplary programs utilize more different teaching techniques than teachers in traditional programs?

The purposes of this section are to report the achievements of students enrolled in the Dade County Exemplary Program in Booker T. Washington Junior High School during the 1970-71 school year.

Skills and Knowledge. Information relative to entry level job skills was collected from the laboratory teachers of both exemplary and comparison group students. The lab teacher was asked to write performance objectives of his course, then rate the designated students against the objectives (see Appendix C, "Course Inventory"). All students in the exemplary program pursued courses which offered manipulative-type employment skills while less than one-half of the students in comparison programs pursued this type instruction.

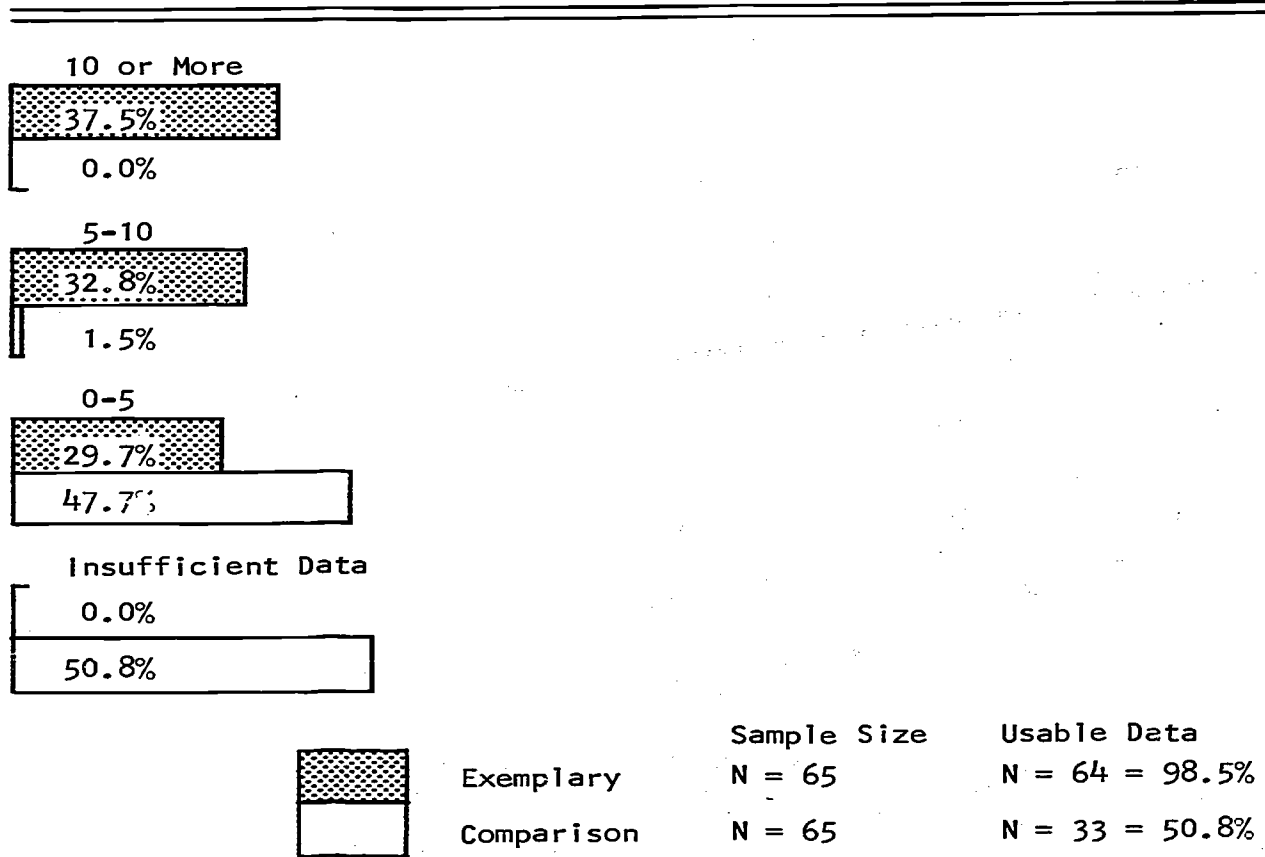
The criterion utilized in establishing the effectiveness of instruction relative to salable skills in both the exemplary and comparison groups was the subjective evaluation of the instructor. Objectives were varied both within and between groups (see Appendix D). A number of instructors did not specify any objectives at all. These data were established as insufficient for purposes of quantification.

In Dade County, students numbered 65 in both groups (see Figure 3-1). Based upon an entry level job skill attainment of "10 or more skills," 24 students, 37.5% of the exemplary group, acquired these numbers of skills. Of those students in the comparison group, none, 0%, attained 10 or more skills.

Twenty-one students, 32.8% of the exemplary group, acquired five to 10 entry level job skills while only one student, 1.5% of the comparison group, did as well. The one student in the comparison group attaining this range of entry level job skills was enrolled in an industrial arts course.

Nineteen students, 29.7% of the exemplary group, failed to attain more than four entry level job skills, whereas 31 students, 47.7% of the comparison group, failed to acquire a like number. The data were

FIGURE 3-1
INSTRUCTOR'S EVALUATION OF STUDENT ACHIEVEMENT
OF ENTRY LEVEL JOB SKILLS
IN EXEMPLARY AND COMPARISON GROUPS
IN DADE COUNTY
1970-71 SCHOOL YEAR

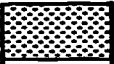



reported on 64 students, 98.5% of the exemplary group, relative to entry level job skill attainment were usable while the data reported on 33 students, 50.8% of the comparison group, were usable and sufficient for quantifying. The students in the exemplary sample acquiring five or more entry level job skills represent 70.3% of that group while only 1.5% of the comparison group did as well.

Data relative to achievement in the academic areas of reading, communication skills, and mathematics (see Figure 3-2) were collected by

**FIGURE 3-2
BASIC EDUCATION ACHIEVEMENT OF STUDENTS
IN EXEMPLARY AND COMPARISON GROUPS
IN DADE COUNTY
1970-71 SCHOOL YEAR**

| Mean Score | Standard Deviation | t-value |
|-------------------|--------------------|---------|
| Vocabulary | | |
| 28.1 | 6.8 | -0.520 |
| 31.1 | 6.9 | |
| Reading | | |
| 43.7 | 7.4 | 0.055 |
| 43.3 | 9.4 | |
| Spelling | | |
| 17.2 | 13.4 | 0.193 |
| 16.5 | 10.8 | |
| Arithmetic | | |
| 16.0 | 6.4 | -1.382 |
| 21.0 | 7.2 | |

| | | | |
|---|------------|-----------------------|-------------------------------|
|  | Exemplary | Sample Size N = 65 | Usable Data N = 59 = 90.8% |
|  | Comparison | N = 65 | N = 63 = 96.9% |

t-value \geq 1.980 Significant at .05 confidence level

means of the standardized instrument previously cited (Adult Basic Learning Exam). Subjective evaluation on the part of the instructors was eliminated by the use of this instrument.

Information was collected on 59 students in the exemplary group and 63 students in the comparison group. In the area of vocabulary the comparison group displayed higher scores; however, it was not an appreciable amount and was considered negligible.

In the area of reading, the exemplary group scored higher; however, the difference was so slight it likewise was considered negligible. Higher scores in spelling skills were attained by the students in the exemplary group; however, the difference as in the reading area was slight and was not significant. In the arithmetic area, the comparison group scored higher in the Dade County program but the difference was not significant.

Attitudes, Personal-Social Traits, and Work Habits. In an attempt to measure the attitudes, personal-social traits, and work habits achieved by the exemplary and the comparison group, three instruments were used. Two of the instruments--"How I See Myself" and "My Work-My School-My Country"--were purchased from commercial publishers while one instrument, "Personal-Social Traits Inventory," was constructed by the investigator. "How I See Myself" included 42 semantic differential-type items designed to enable the student to express self-concept. The instrument had established norms which permitted the use of a mean score and t test for data analysis. "My Work-My School-My Country," an attitude inventory which included 39 items, was designed to collect data pertaining to the student's attitudes toward work, school, and country. The "Personal-Social Traits Inventory" included 21 items designed to collect data from teachers about students (see Appendix C for Instruments).

Sixty-one students in the exemplary group and 65 students in the comparison group responded to the instrument "How I See Myself". Mean scores of 148.64 for the exemplary group and 143.95 for the comparison group and a t-value of 0.177 were computed from the data which would indicate a small difference favoring the exemplary group. This would indicate that exemplary students rated themselves slightly higher on self-concepts than did the students in the comparison group. The difference was not significant.

Information was collected with the "Personal-Social Traits Inventory" on 65 students in the exemplary group and 65 students in the comparison group. A Chi Square was computed from the data for each of the 21 items included in the instrument, comparing the response of teachers of the exemplary group with the response of teachers of the comparison group about their respective students. A Chi Square value large enough to indicate a significant difference, at the .05 confidence level, between the two groups occurred on only one item. The difference indicates that teachers of the comparison group rated their students more positive on "Attitudes Toward Peers" than teachers of exemplary students rated the exemplary students.

Sixty students in the exemplary group and 65 students in the comparison group expressed agreement or disagreement with 39 statements in the instrument "My Work-My School-My Country". The Mann-Whitney U Test

was used to analyze the data which would indicate no significant difference between the groups. However, a Chi Square computed for each of the 39 items in the instrument indicated a difference, significant at the .05 confidence level, between the two groups relative to response on nine items, seven of which favored the exemplary group. Students in the exemplary group scored higher on items indicating more positive attitudes toward the school, the contribution of work in our society, and peer relationship while the comparison group scored higher on self-concept type items indicating a more positive attitude toward self.

Data collected from the students and their teachers indicate that the exemplary group had more positive attitudes toward the school and the contribution of work in our society than the comparison group. There were no clearly indicated differences between the two groups relative to attitudes toward family relationship, self-concept, and work habits.

Attendance and Drop-Out Rate. Data relative to school attendance and drop-out rate were collected from the students' cumulative attendance records at the end of the school year. The ratio of days attended to the total number of school days yielded an attendance rate. A computed average of 89.7% for the exemplary group and 94.0% for the comparison group and a computed t-value of -.266 indicates no significant difference between the two groups relative to school attendance. There were no dropouts reported for either group.

Vocational and Related Courses Offered. Data in Table 3-1 were collected from administrators in the exemplary program and from administrators in the two comparison schools--Madison Junior High School and Robert E. Lee Junior High School--from which the comparison students were drawn.

Sixteen courses were offered to 99 students in the exemplary school; 12 courses were for pre-vocational purposes; one course was for vocational purposes and included cooperative work experience. In the comparison programs, 2282 students were offered 11 courses for pre-vocational purposes plus two courses for vocational purposes which included cooperative work experience. The number of instructional hours per student differs widely between the two programs. While the exemplary program offered 6.54 hours of vocational related instruction per student, the comparison program offered an average of .78 hours per student.

The exemplary program offered studies in more occupational areas than the comparison program. A review of the curricula reveals that the comparison program offered courses in general business, general home economics, and general shop industrial arts while the exemplary program offered career instruction in fields related to automotive, aircraft and marine, mechanics, construction trades, building maintenance, electronics, metals, the garment industry, and health occupations.

TABLE 3-1

VOCATIONAL AND RELATED COURSES OFFERED TO EXPERIMENTAL STUDENTS
 IN THE EXEMPLARY SCHOOL AND TO COMPARISON STUDENTS
 IN OTHER DADE COUNTY SCHOOLS DURING
 THE 1970-71 SCHOOL YEAR

| SCHOOL CENTERS | NO. OF STUDENTS ENROLLED | VOCATIONAL AND RELATED COURSES OFFERED | | | PURPOSE OF THE COURSE | | | NO. OF COOPERATIVE COURSES |
|-------------------------------|--------------------------|--|----------------------------------|-------------------------------------|-----------------------|--------------------------|------------|----------------------------|
| | | NO. OF COURSES | TOTAL NO. OF INSTRUCTIONAL HOURS | NO. OF INSTRUCTIONAL HOURS PER STU. | PRE VOCATIONAL | OCCUPATIONAL EXPLORATION | VOCATIONAL | |
| (for experimental students) | | | | | | | | |
| BOOKER T. WASHINGTON JR. HIGH | 99 | 16 | 6480 | 6.54 | 12 | 1 | 3 | 3 |
| (for comparison students) | | | | | | | | |
| MADISON JR. HIGH | 1291 | 7 | 720 | .56 | 6 | 0 | 1 | 1 |
| ROBERT E. LEE JR. HIGH | 991 | 6 | 1080 | 1.09 | 5 | 0 | 1 | 1 |
| | 2282 | 13 | 1800 | .78 | 11 | 0 | 2 | 2 |

Student Enrollment in Vocational and Related Courses. Data relative to student enrollment, included in Figure 3-3, were collected from teachers of the exemplary and comparison groups. The data indicate that 49% of the students in the comparison group were enrolled in pre-vocational courses while 51% were not enrolled in any type of vocational or related courses. Data further indicate that all students in the exemplary group were enrolled in some type of vocational related instruction. Pre-vocational and occupational exploration course enrollments were heavy.

Individual and Group Counseling. Individual and group counseling information forms (Student Guidance Inventory - UWF Form #1005, see Appendix C) for recording counseling sessions and the student's expressed interest in an occupational choice were forwarded to Dade County on May 7, 1971 and returned on June 21, 1971. The data included in Figure 3-4 represent counseling received by students in both the exemplary and comparison groups for only a portion of the school year.

The number of students in both the exemplary and comparison groups was 65. In the exemplary group 98.5% of the students received some counseling while 100% of the comparison group was receiving counseling of some type.

Counseling on an individual basis was received by 95.4% of the students in the exemplary group while 80% of the comparison group received individual counseling. In groups of two or more students, the spread was even greater, 89.2% of the students in the exemplary group received group counseling as compared to only 56.9% of the comparison group. The comparison group received 138 individual counseling sessions while the exemplary group received only 102.

During the counseling process, 83.1% of the students in the exemplary group expressed an interest in an occupational choice whereas 35.4% of the students in the comparison group made such an indication.

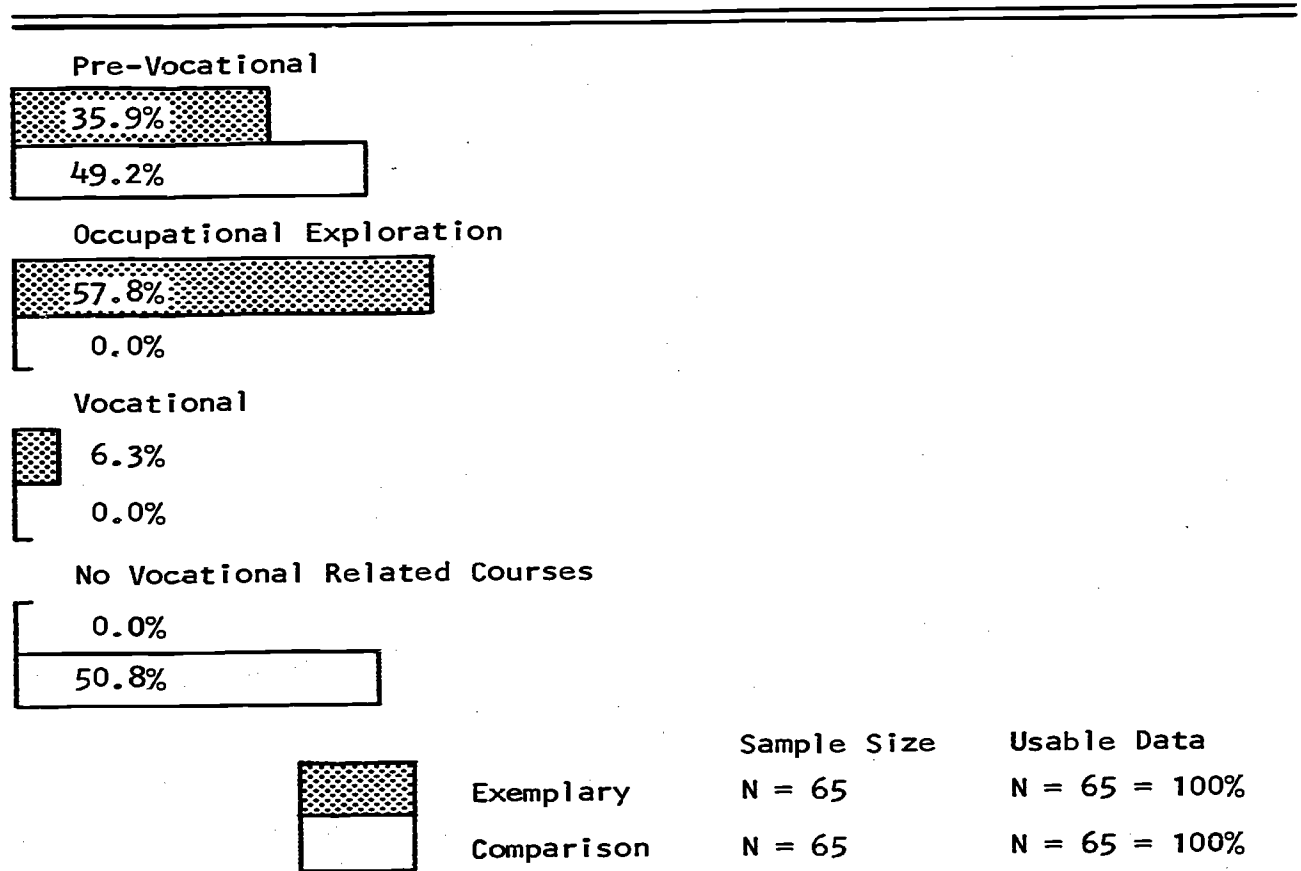
A greater percent of students in the exemplary group received both individualized and group counseling, and an even greater percent expressed an interest in an occupational choice.

Confrontations with Law Enforcement Agencies

One purpose of this study was to ascertain answers to the question: do students experience fewer confrontations with law enforcement agencies during their first year in the exemplary program than they did during the year previous to entering the program?

Data collected from law enforcement agencies reveal three confrontations by students in the exemplary group during their first year in the program and three confrontations by the same group during the year

FIGURE 3-3
 STUDENT ENROLLMENT IN VOCATIONAL RELATED COURSES
 IN EXEMPLARY AND COMPARISON GROUPS
 IN DADE COUNTY
 1970-71 SCHOOL YEAR



previous to entering the exemplary program. From the information presented, enrollment in the exemplary program has no effect toward reducing the number of student confrontations with law enforcement agencies.

Instructional Techniques

Teachers of students in the exemplary and comparison samples were asked to complete the Instructional Technique Inventory - UWF Form #1007 (See Appendix C) relative to the number and frequency of use of the different techniques used in their teaching. Seventeen teachers

In the exemplary group 70.6% indicated use of the "Classroom Lecture" while 58.8% indicated the use of "Questions and Answers" two or more times per week while 35% indicated they "Never" used "Programmed Instruction" and "Picture Exams." Teachers in the comparison group indicated little use of "Programmed Instruction" and "Picture Exams" while both groups indicated little use of "Assigned Homework."

TABLE 3-2
 FREQUENCY OF INSTRUCTIONAL TECHNIQUES USED
 BY TEACHERS IN EXEMPLARY AND COMPARISON GROUPS
 IN DADE COUNTY
 1970-71 SCHOOL YEAR

| Technique | Frequency of Use | | | | |
|--------------------------------------|---|---|-------|-------|-------|
| | Exemplary (N = 17) Comparison (N = 14) | Often: Two or more times per week | | Never | |
| | | Exp. | Comp. | Exp. | Comp. |
| Classroom Lecture | 70.6% | 21.4% | 5.9% | 0 | |
| Student Recitation | 35.3% | 28.6% | 17.6% | 7.1% | |
| Individual Instruction | 64.7% | 35.7% | 5.9% | 0 | |
| Large Gp. or Small Gp. Discussion | 47.1% | 21.4% | 5.9% | 0 | |
| Student Problem Solving | 52.9% | 42.9% | 5.9% | 0 | |
| Supervised Classroom Assignments | 76.5% | 64.3% | 5.9% | 0 | |
| Assigned Exercises | | | | | |
| . Supervised Classroom or Lab. | 76.5% | 57.1% | 11.8% | 0 | |
| . Homework | 0 | 14.3% | 64.7% | 42.9% | |
| Supervised Group Lab. Proj. & Prob. | 29.4% | 0 | 23.5% | 28.6% | |
| Supervised Indiv. Lab. Proj. & Prob. | 41.2% | 14.3% | 11.8% | 28.6% | |
| Free Elective Lab. Projects | 11.8% | 7.1% | 35.3% | 42.9% | |
| Questions & Answers | 58.8% | 35.7% | 5.9% | 0 | |
| Written Exams | 5.9% | 14.3% | 5.9% | 7.1% | |
| Performance Exams | 17.6% | 7.1% | 17.6% | 21.4% | |
| Oral Exams | 0 | 28.6% | 29.4% | 7.1% | |
| Picture Exams | 5.9% | 0 | 35.3% | 64.3% | |
| Programmed Instruction | 17.6% | 0 | 35.3% | 64.3% | |

*Percent may not total 100

frequently than teachers of the comparison students. Of 17 different techniques included in the instrument, the teachers of the exemplary students used 10 more often and more frequently than teachers of the comparison students.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The vocationally oriented exemplary program in Dade County, which consisted of 99 students, 17 teachers, and five counselors, was housed in Booker T. Washington Junior High School along with 881 additional students enrolled in a traditional junior high school program.

For the purpose of the evaluation, 50 students and 15 alternates in the exemplary program were randomly selected as the exemplary group while 50 students and 15 alternates were selected from 150 students meeting the same criteria as students attending the exemplary program. The students in the comparison group attended schools other than Booker T. Washington Junior High School. Data were collected from students in the exemplary and comparison groups and teachers, counselors, and administrators of students in both groups.

In the exemplary program 6.54 hours of vocational related courses were offered for each student enrolled while an average of only .78 hours per student of the same type of instruction were offered in schools attended by students in the comparison group. The exemplary program also offered studies in more occupational areas than the comparison schools.

All students in the exemplary group were enrolled in some type of vocational related instruction while only 49% of the students in the comparison group were enrolled in the same type courses.

Seventy percent of the students in the exemplary group achieved five or more entry level job skills while only 1.5% of the students in the comparison group achieved to the same level.

On basic education achievement the exemplary group scored slightly higher on reading and spelling while the comparison group scored slightly higher on vocabulary and math.

Students and teachers indicated that students in the exemplary group scored more positive on attitudes toward the school and the contribution of work in our society than students in the comparison group. There were no clear differences between the two groups relative to attitudes toward family relationship, self-concepts, and work habits.

There was no significant difference between the two groups relative to school drop-out and attendance rate.

31/32

All students in the comparison group received some counseling while 98.5% of the students in the exemplary group received some counseling; 95.4% of the exemplary students received individual counseling while 80% of the students in the comparison group received the same service. Eighty-nine percent of the students in the exemplary group received group counseling while 59.9% of the students in the comparison group received the same service.

Interest in an occupational choice was expressed by 83.1% of the students in the exemplary group while only 35.4% of the students in the comparison group did likewise.

Students in the exemplary group experienced three confrontations with law enforcement agencies during their first year in the exemplary program while during the previous year they also experienced three confrontations with law enforcement agencies.

Teachers of the exemplary students used more different teaching techniques more often than teachers of students in the comparison group. In the exemplary group 70.6% of the teachers used "Classroom Lecture" two or more times per week while 35% never used "Programmed Instruction" and "Picture Exams." Performance objectives written by teachers in both groups were vague and hard to interpret.

Conclusions

Insofar as the instruments were valid, the data reliable and complete, and students were selected for the exemplary and comparison group with common criteria, the following conclusions are suggested:

- A. Students enrolled in the exemplary program as compared to students in the traditional academic-type program would be expected to:
 1. Achieve more manipulative-type job skills for entry level employment.
 2. Experience equal achievement in reading skills, communication skills, and math skills.
 3. Demonstrate more positive attitudes toward the school and the contribution of work in our society and demonstrate equally positive attitudes toward peer relationship, work habits, family relationship, and self-concept.
 4. Demonstrate an equal school drop-out and attendance rate.
 5. Receive and pursue more instruction in vocational and related courses.
 6. Receive more individual and group counseling.
- B. More students in the exemplary program would be expected to express an interest in an occupational choice than students in academic-type program.

ACHIEVEMENT IN DUVAL COUNTY

Program Description

The Duval County Exemplary Program, which included 200 students, 21 teachers, and two counselors, was housed in the Career Education Center in the old business section in downtown Jacksonville. Physical conditions were less than inadequate; teachers spent most of their time organizing cleaning and renovating projects into meaningful student learning activities to improve the condemned building, and equipment and supplies ordered early in the school year arrived late in the school year. The faculty and administrative staff appeared to be highly dedicated and were in the process of organizing instruction most of the year.

Fifty students and 15 alternates in the exemplary program were randomly selected as the exemplary group while the comparison group included 50 students and 15 alternates which were randomly selected from 150 students meeting the same criteria as students attending the exemplary program. Teachers of the 65 students in each sample were then identified and utilized as teachers of students in the exemplary group and teachers of students in the comparison groups. For most of the information requested from students and teachers, the returns were less than 100%. The exact number is identified with the report of each type of data collected.

The purposes of the study were to ascertain answers to the following questions:

- A. Did students in exemplary programs as compared to students in traditional academic programs
 1. learn more entry level manipulative-type job skills?
 2. achieve more basic reading, communication skills, and math skills?
 3. develop more positive attitudes, personal traits, and work habits?
 4. demonstrate a higher attendance rate and a lower drop-out rate?
 5. receive more instruction in vocational and related courses?
 6. receive more individual counseling, group counseling, support service, and as a result did more students express an interest in an occupational choice?

34/
35

- C. Attendance in the exemplary program would have no effect on the number of confrontations with law enforcement agencies experienced by the student.
- D. Teachers in the exemplary program would be expected to use more different type teaching techniques more often than teachers in academic-type programs. Teachers in the exemplary program would be expected to use the classroom lecture to the extent that they are not in harmony with the philosophy of the school. Teachers in both groups would be expected to experience difficulty writing performance objectives.

Recommendations

On the basis of the findings and conclusions of the evaluation, the following recommendations are suggested to the Dade County School Board for implementation:

1. Since students in the exemplary program achieved more manipulative-type job skills and achieved equally well with students in academic-type programs in reading, communication and math skills, traditional programs should be evaluated relative to their purpose. Program modification should include instruction directed toward entry level job skills.
2. One of the stated purposes of the exemplary program was to develop more positive student attitudes toward family relationship, self, and to develop more desirable work habits than students in traditional programs. Since this did not happen, the instructional program should include structured content to fulfill the objective.
3. Since more students in the exemplary program expressed interest in an occupational choice and sought out instruction which served their needs, the school should provide adequate guidance and exploratory courses to continue to assist students in this task.
4. Since the teachers utilized teaching techniques which were not consistent with the purposes of the schools, the teaching faculty and supervisory staff in the exemplary program should be provided intensive in-service teaching education to develop skills in the use of individualized instruction. It is further recommended that the teachers become aware of the philosophy of the exemplary program.
5. Since teachers in both the exemplary and comparison groups experienced difficulties writing their objectives, leadership should be provided to assist the teachers in identifying and writing their objectives so that they are meaningful, measurable, and can be read and understood by the student and parent.

- B. Did students experience fewer confrontations with law enforcement agencies during their first year in the exemplary program than they did during the year previous to entering the program?
- C. Did teachers in exemplary programs utilize more different teaching techniques than teachers in traditional programs?

The purposes of this section are to report the achievement of students enrolled in the Duval County Exemplary Program in the Career Education Center during the 1970-71 school year.

Skills and Knowledge. Information relative to entry level job skills was collected from the laboratory teachers of both exemplary and comparison group students. The lab teacher was asked to write performance objectives of his course then rate the designated students against the objectives (see Appendix B, "Course Inventory"). In the exemplary program, 95.4% of the students pursued courses which offered manipulative-type employment skills while 59% of the students in academic programs pursued this type instruction.

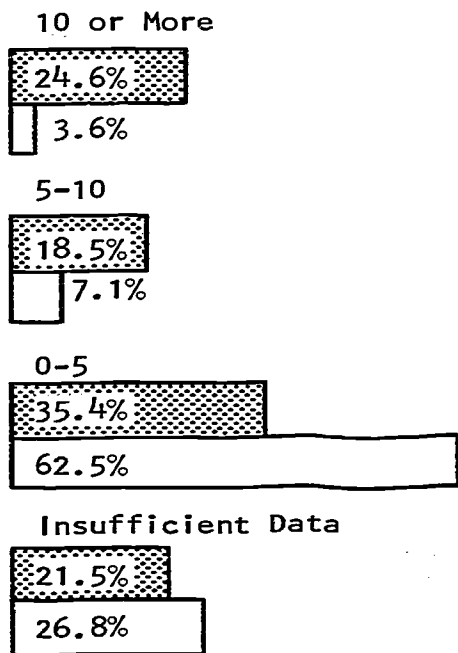
The criterion utilized in establishing the effectiveness of instruction relative to salable skills in both the exemplary and comparison groups was the subjective evaluation of the instructor. Objectives were varied both within and between groups (see Appendix C). A number of instructors did not specify any objectives at all. These data were established as insufficient for purposes of quantification.

In Duval County usable data were received on 65 students in the exemplary group as compared to 56 students in the comparison group (see Figure 4-1). Based upon an entry level job skill attainment of "10 or more skills," 16 students, 24.6% of the exemplary group, acquired these numbers of skills. Of those students in the comparison group, two, 3.6%, attained 10 or more skills.

Twelve students, 18.5% of the exemplary group, acquired five to 10 entry level job skills while four students, 7.1% of the comparison group, did as well.

Twenty-three students, 35.4% of the exemplary group, failed to attain more than four entry level job skills while 35 students, 62.5% of the comparison group, failed to acquire a like number. Data on 14 students, 21.5% of the exemplary group, were insufficient while those data on 15 students, 26.8% of the comparison group, were also insufficient. The students in the exemplary group acquiring five or more entry level job skills represent 43.1% of that group while only 10.7% of the comparison group did as well.

FIGURE 4-1
INSTRUCTOR'S EVALUATION OF STUDENT ACHIEVEMENT
OF ENTRY LEVEL JOB SKILLS
IN EXEMPLARY AND COMPARISON GROUPS
IN DUVAL COUNTY
1970-71 SCHOOL YEAR



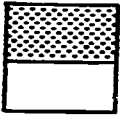
| | Sample Size | Usable Data |
|------------|-------------|----------------|
| Exemplary | N = 65 | N = 65 = 100% |
| Comparison | N = 65 | N = 56 = 86.1% |

Data relative to achievement in the academic areas of reading, communication skills, and mathematics (see Figure 4-2) were collected by means of the standardized instrument previously cited (Adult Basic Learning Exam). Subjective evaluation on the part of the instructors was eliminated by the use of this instrument.

Usable information was received on 50 students in the exemplary group and 49 students in the comparison group. In all academic areas

FIGURE 4-2
 BASIC EDUCATION ACHIEVEMENT OF STUDENTS
 IN EXEMPLARY AND COMPARISON GROUPS
 IN DUVAL COUNTY
 1970-71 SCHOOL YEAR

| Mean Score | Standard Deviation | t-value |
|-------------------|--------------------|---------|
| Vocabulary | | |
| 31.1 | 9.1 | -0.516 |
| 34.7 | 11.3 | |
| Reading | | |
| 40.8 | 13.1 | -0.411 |
| 44.4 | 10.5 | |
| Spelling | | |
| 11.0 | 10.6 | -1.023 |
| 14.7 | 13.0 | |
| Arithmetic | | |
| 12.7 | 8.8 | -0.367 |
| 13.9 | 9.4 | |

| | | | |
|---|------------|-------------|----------------|
|  | Exemplary | Sample Size | Usable Data |
| | Comparison | N = 65 | N = 50 = 76.9% |
| | | N = 65 | N = 49 = 75.3% |

t-value ≥ 1.985 Significant at the .05 confidence level

the comparison group displayed higher scores; however, none was an appreciable amount and all were considered negligible.

The greatest difference in academic achievement was realized in the spelling area but it was not appreciable.

Attitudes, Personal-Social Traits, and Work Habits. In an attempt to measure the attitudes, personal-social traits, and work habits achieved by the exemplary group as compared to the comparison group,

three instruments were used. Two of the instruments--"How I See Myself" and "My Work-My School-My Country"--were purchased from commercial publishers while one instrument, "Personal-Social Traits Inventory," was constructed by the investigator. "How I See Myself" includes 42 semantic differential-type items designed to enable the student to express self-concept. The instrument had established norms which permitted the use of a mean score and t test for data analysis. "My Work-My School-My Country," an attitude inventory including 39 items, was designed to collect data pertaining to the student's attitudes toward work, school, and country. The "Personal-Social Traits Inventory" includes 21 items designed to collect data from teachers about students (see Appendix C for Instruments).

Forty-nine students in both the exemplary and the comparison groups responded to the instrument "How I See Myself." Mean scores of 142.90 for the exemplary group and 137.24 for the comparison group and a t value of 0.196 were computed from the data which would indicate no significant difference between the groups relative to self-concepts.

Information was collected, with the "Personal-Social Traits Inventory," on 62 students in the exemplary group and 56 students in the comparison group. A Chi Square was computed, from the data for each of the 21 items included in the instrument, comparing the response of teachers of the exemplary and comparison groups about their respective students. A Chi Square value large enough to indicate a significant difference between the two groups occurred on five items, "Attitude Toward Performing Work in the Home," "Attitude Toward Teachers," "Attitude Toward Working With Family Members," favored the exemplary group at the .05 confidence level. There were no items with Chi Squares large enough to indicate significant differences which would favor the comparison group. The data would indicate that exemplary teachers rated exemplary students more positive than comparison teachers rated comparison students on the item relative to Attitude Toward School and Family Relationship.

Fifty students in the exemplary group and 48 students in the comparison group expressed agreement or disagreement with 39 statements in the instrument "My Work-My School-My Country." The Mann-Whitney U Test used to analyze the data indicated no significant differences between the groups. A Chi Square computed for each of the 39 items in the instrument indicated a difference on only one item that was significant at the .05 confidence level. The exemplary group scored more positively toward peer relationship than did the comparison group.

The data collected would indicate that students in the exemplary group demonstrated more positive attitudes than students in the comparison group toward family relationship, peer relationship, and the school. Data indicated no significant difference between the two groups relative to attitudes toward work and self-concepts.

Attendance and Drop-Out Rate. Data relative to school attendance and drop-out rate were collected at the end of the school year from the students' cumulative records. The ratio of days attended to the number of days enrolled yielded an attendance rate. A computed average of 78.9% for the exemplary group and 75.2% for the comparison group and a t value of 0.263 favors the exemplary group; however, the difference was not significant. Data were reported on 65 students in the exemplary group and 63 students in the comparison group. Five students in the exemplary group dropped out of school while nine students in the comparison group dropped out. The lower drop-out rate favors the exemplary group; however, a computed Chi Square of 1.43 indicates no significant difference between the groups.

Vocational and Related Courses Offered. Data in Table 4-1 were collected from administrators in the exemplary program and from administrators in seven comparison schools from which the comparison students were drawn. While exemplary students were offered vocational and occupational exploration courses, the comparison students were offered vocational, pre-vocational, and occupational exploration courses plus cooperative work experience. The number of instructional hours per student heavily favored the exemplary students with 18.00 while the comparison programs offered an average of only 3.42 hours per student.

Student Enrollment in Vocational and Related Courses. Data relative to student enrollment, included in Figure 4-3, were collected from teachers of students in the exemplary and comparison groups. The data indicate that 95.4% of the students in the exemplary group were enrolled in vocational and related courses while only 59% of the students in the comparison group were enrolled in vocational and related courses.

Individual and Group Counseling. Individual and group counseling information forms (Student Guidance Inventory - UWF Form #1005, see Appendix C) for recording counseling sessions and the student's expressed interest in an occupational choice were forwarded to Duval County on April 27, 1971 and returned on June 9, 1971. The data included in Figure 4-4 represents counseling received by students in both the exemplary and comparison groups for only a portion of the school year.

Information was reported on 65 students in the exemplary group and 63 students in the comparison group. In the exemplary group 70.8% of the students received some counseling while 46.1% of the comparison group was receiving counseling of some type.

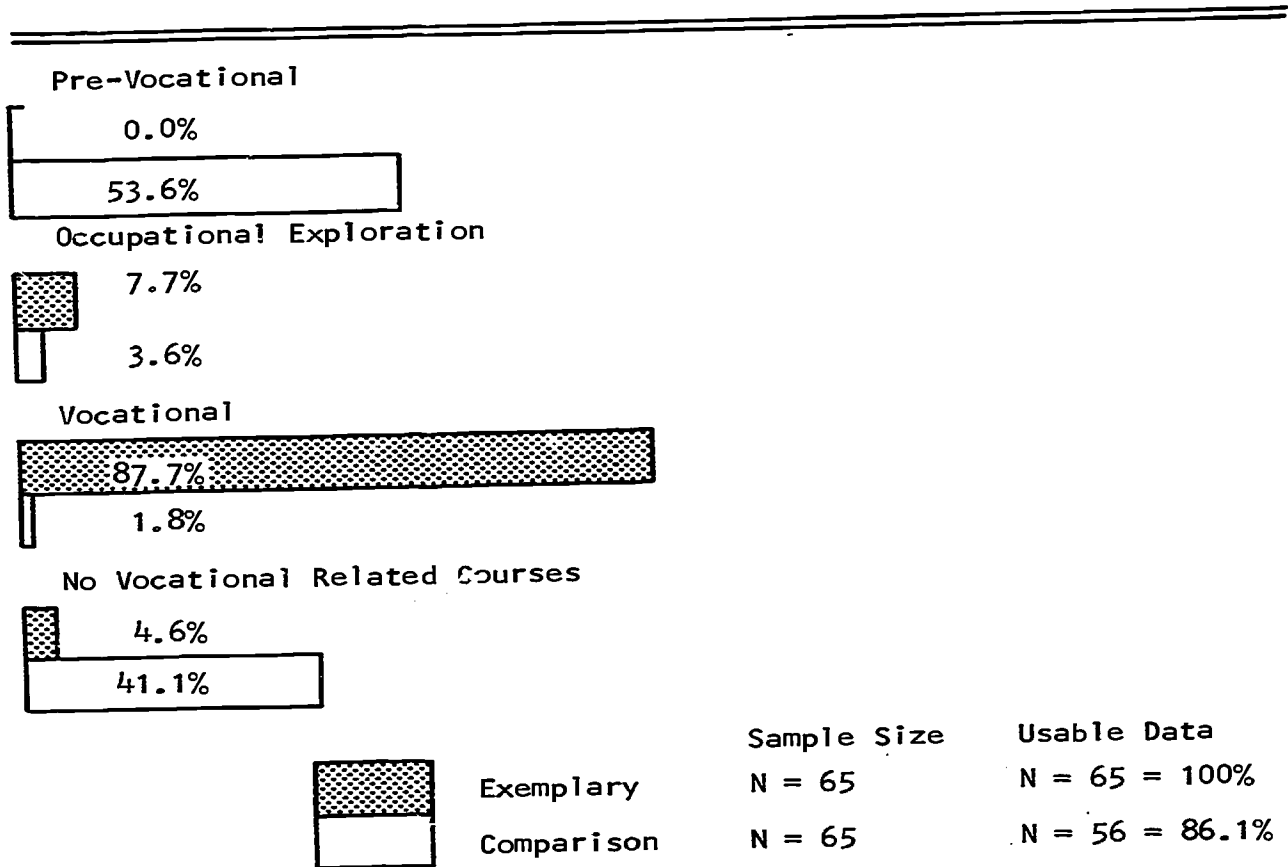
Counseling on an individual basis was received by 61.5% of the students in the exemplary group while 36.5% of the comparison group received individual counseling. On a group counseling basis 23.1% of the students in the exemplary group and 11.1% of the comparison group received this type counseling. The exemplary group received 78 individual counseling sessions while the comparison group received only 31.

TABLE 4-1

VOCATIONAL AND RELATED COURSES OFFERED TO EXPERIMENTAL STUDENTS
IN THE EXEMPLARY SCHOOL AND TO COMPARISON STUDENTS
IN OTHER DUVAL COUNTY SCHOOLS DURING
THE 1970-71 SCHOOL YEAR

| SCHOOL CENTERS | NO. OF STUDENTS ENROLLED | VOCATIONAL AND RELATED COURSES OFFERED | | | PURPOSE OF THE COURSE | | | NO. OF CO-OPERATIVE COURSES |
|-----------------------------|--------------------------|--|----------------------------------|------------------------------------|-----------------------|--------------------------|------------|-----------------------------|
| | | NO. OF COURSES | TOTAL NO. OF INSTRUCTIONAL HOURS | NO. OF INSTRUCTIONAL HRS. PER STU. | PRE VOCATIONAL | OCCUPATIONAL EXPLORATION | VOCATIONAL | |
| (for Experimental students) | | | | | | | | |
| CAREER EDUCATION CENTER | 200 | 10 | 3600 | 18.00 | | 2 | 10 | |
| (for comparison students) | | | | | | | | |
| JOHN GORRIE JUNIOR HIGH #22 | 1320 | 6 | 810 | .61 | 5 | | 1 | 1 |
| LAKE SHORE JUNIOR HIGH #69 | 1220 | 8 | 855 | .70 | | | 8 | 8 |
| FORREST #241 | 2925 | 31 | 11020 | 3.77 | 14 | 1 | 11 | 5 |
| PAXON SENIOR #75 | 2330 | 40 | 11470 | 4.92 | 13 | 3 | 21 | 7 |
| RIBAULT SENIOR #96 | 2060 | 30 | 10300 | 5.00 | 12 | 2 | 10 | 6 |
| TERRY PARKER #86 | 2550 | 37 | 10200 | 4.00 | 16 | 3 | 16 | 4 |
| LEE HIGH SCHOOL #33 | <u>1797</u> | <u>22</u> | <u>3870</u> | <u>2.15</u> | <u>9</u> | <u>1</u> | <u>10</u> | <u>2</u> |
| | 14202 | 174 | 48525 | 3.42 | 69 | 10 | 77 | 33 |

FIGURE 4-3
STUDENT ENROLLMENT IN VOCATIONAL RELATED COURSES
IN EXEMPLARY AND COMPARISON GROUPS
IN DUVAL COUNTY
1970-71 SCHOOL YEAR

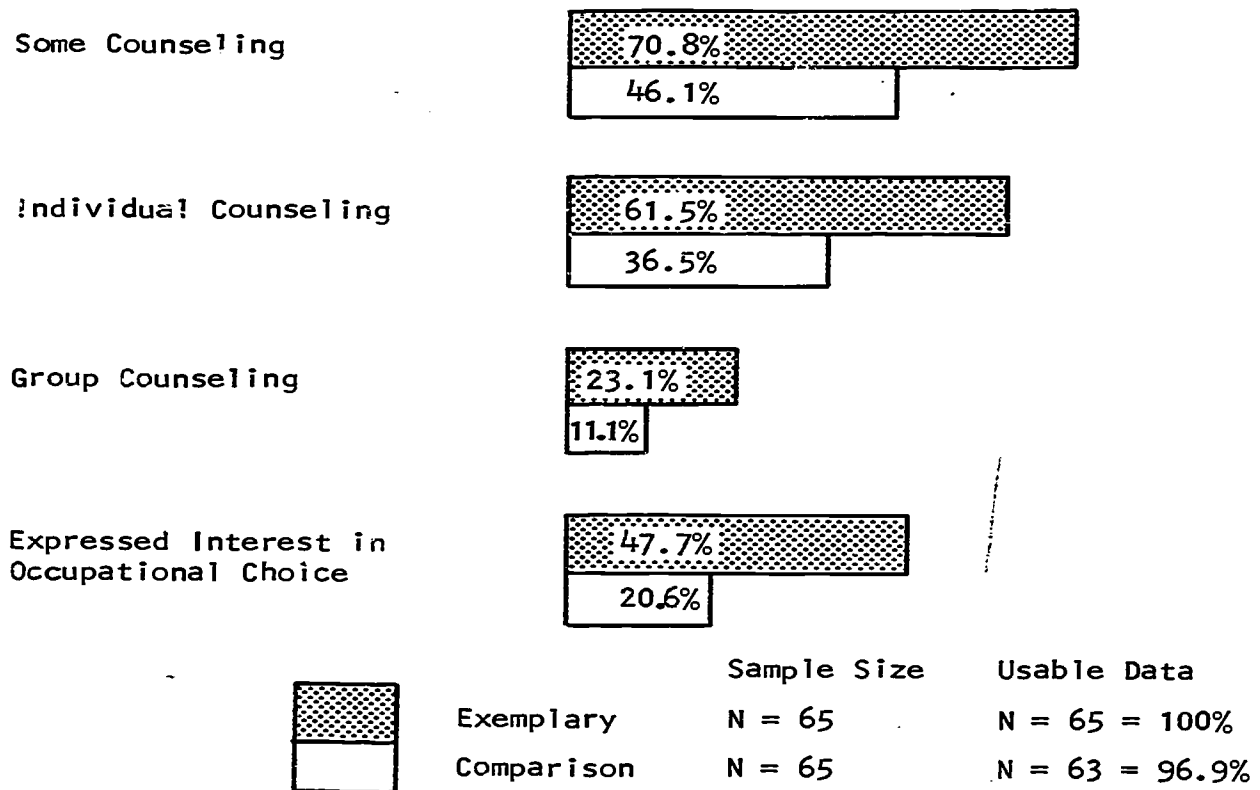


During the counseling process 47.7% of the students in the exemplary group expressed an interest in an occupational choice whereas only 20.6% of the students in the comparison group made such an indication.

Confrontations with Law Enforcement Agencies

One purpose of this study was to ascertain answers to the question: do students experience fewer confrontations with law enforcement agencies during their first year in the exemplary program than they did during the year previous to entering the program?

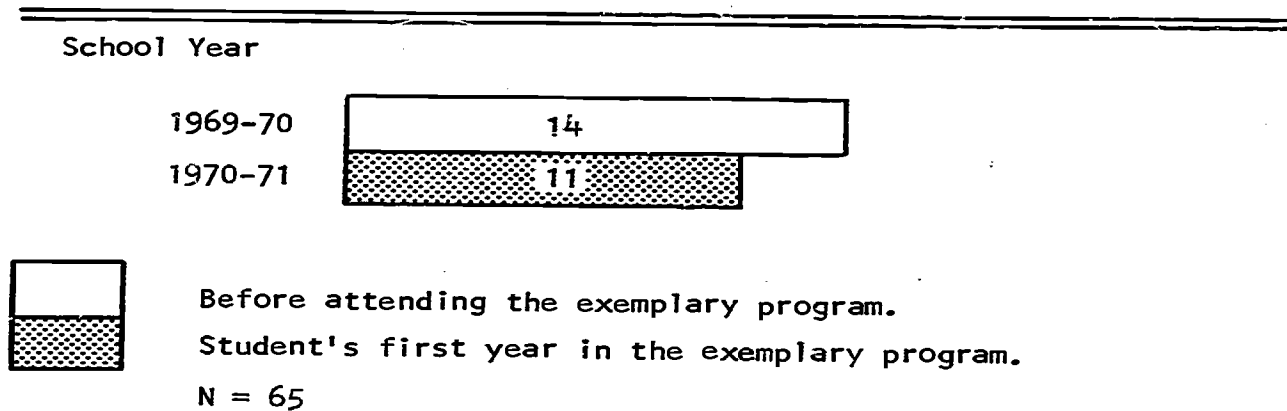
FIGURE 4-4
COUNSELING RECEIVED
BY EXEMPLARY AND COMPARISON GROUPS
IN DUVAL COUNTY
1970-71 SCHOOL YEAR



The number of individual counseling sessions was 78 for the exemplary group and 31 for the comparison group.

Data collected from law enforcement agencies reveal 11 confrontations by students in the exemplary group during their first year in the program and 14 confrontations by the same group during the year previous to entering the exemplary program (see Figure 4-5). Enrollment in the exemplary program did have some effect toward reducing the number of student confrontations with law enforcement agencies.

FIGURE 4-5
 CONFRONTATION WITH LAW ENFORCEMENT AGENCIES
 BY STUDENTS IN THE EXEMPLARY PROGRAM
 IN DUVAL COUNTY
 1969-70 AND 1970-71 SCHOOL YEAR



Instructional Techniques

Teachers of students in the exemplary and comparison groups were asked to complete the Instructional Technique Inventory - UWF Form #1007 (see Appendix C), relative to the number and frequency of use of the different techniques used in their teaching. Ten teachers of students in the exemplary group and 28 teachers of students in the comparison group responded. The checklist type instrument included 17 different instructional techniques with five categories for response to each technique. Only two of the five categories, "Often; two or more times per week" and "Never" are included in Table 4-2 to best illustrate the comparison of the two groups. The data indicate that teachers of the exemplary students were more active in their classrooms, they used different techniques more frequently than teachers of the comparison students. Of 17 different techniques included in the questionnaire the teachers of the exemplary students used nine more often and more frequently than teachers of the comparison students.

In the exemplary group 90.0% of the teachers indicated "Individual Instruction" as the technique most often used two or more times per week. In the comparison group this also was the technique most often used by 67.9% of the teachers. Sixty percent of the teachers in the exemplary group reported using the "Classroom Lecture" two or more times per week, while only 35.7% of the teachers in the comparison group reported the "Classroom Lecture" used two or more times per week.

TABLE 4-2

FREQUENCY OF INSTRUCTIONAL TECHNIQUES USED
BY TEACHERS IN EXEMPLARY AND COMPARISON GROUPS
IN DUVAL COUNTY
1970-71 SCHOOL YEAR

| Technique | Frequency of Use | | | | |
|--|--|---|-------|-------|-------|
| | Exemplary Comparison (N = 10) (N = 28) | Often: Two or more times per week | | Never | |
| | | Exp. | Comp. | Exp. | Comp. |
| Classroom Lecture | 60.0% | 35.7% | 0 | 3.6% | |
| Student Recitation | 50.0% | 57.1% | 10.0% | 7.1% | |
| Individual Instruction | 90.0% | 67.9% | 0 | 3.6% | |
| Large Gp. or Small Gp. Discussion | 40.0% | 17.9% | 0 | 7.1% | |
| Student Problem Solving | 60.0% | 42.9% | 0 | 7.1% | |
| Supervised Classroom Assignments | 60.0% | 64.3% | 0 | 0 | |
| Assigned Exercises | | | | | |
| . Supervised Classroom or Lab. | 60.0% | 57.1% | 0 | 0 | |
| . Homework | 0 | 28.6% | 70.0% | 35.7% | |
| Supervised Group Lab. Proj. & Prob. | 50.0% | 17.9% | 0 | 32.1% | |
| Supervised Individ. Lab. Proj. & Prob. | 60.0% | 14.3% | 0 | 42.9% | |
| Free Elective Lab. Projects | 30.0% | 10.7% | 0 | 32.1% | |
| Questions & Answers | 80.0% | 46.4% | 0 | 7.1% | |
| Written Exams | 10.0% | 14.3% | 40.0% | 7.1% | |
| Performance Exams | 40.0% | 17.9% | 0 | 14.3% | |
| Oral Exams | 20.0% | 14.3% | 10.0% | 32.1% | |
| Picture Exams | 20.0% | 3.6% | 20.0% | 46.4% | |
| Programmed Instruction | 0 | 10.7% | 40.0% | 42.9% | |
| Others (please list) | | | | | |

*Percent may not total 100.

Of the techniques less frequently used by teachers in the exemplary group, 40% reported "Written Exams" and "Programmed Instruction," 20% reported "Picture Exams" and 10% reported "Oral Exams" as techniques "Never" used.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The vocationally oriented exemplary program in Duval County, which consisted of 200 students, 21 teachers, and two counselors, was housed in the Career Education Center in the old business section in downtown Jacksonville.

For the purpose of the evaluation, 50 students and 15 alternates in the exemplary program were randomly selected as the exemplary group while the comparison group consisted of 50 students and 15 alternates selected from 150 students meeting the same criteria as students attending the exemplary program. The students in the comparison group attended other schools in the public school system. Data were collected from students in the exemplary and comparison groups and teachers, counselors, and administrators of students in both groups.

In the exemplary program, 18.00 hours of vocational related courses were offered for each student enrolled while an average of only 3.42 hours per student of the same type of instruction were offered in schools attended by students in the comparison group.

In the exemplary group 95.4% of the students were enrolled in vocational related courses while 59% of the students in the comparison group were enrolled in the same type courses.

Of the students in the exemplary group, 43.1% achieved five or more entry level job skills while only 10.7% of the students in the comparison group achieved to the same level.

There was no significant difference between the two groups relative to scores in vocabulary, reading, spelling, and math skills.

Students in the exemplary group rated more positive on attitudes toward school, peer relationship, and family relationship than did students in the comparison group. There were no witnessed significant differences between the two groups relative to attitudes toward the contribution of work in our society and self-concept.

There was no significant difference between the groups relative to school attendance and school drop-out rate.

In the exemplary group 70.8% of the students received some counseling while 46.1% of the students in the comparison group received the

same service. In the exemplary group 61.5% of the students received individual counseling while 36.5% of the students in the comparison group received the same service. In the exemplary group 23.1% of the students received group counseling while 11.1% of the students in the comparison group received the same service.

Interest in an occupational choice was expressed by 47.7% of the students in the exemplary group while only 20.6% of the students in the comparison group did likewise.

Students in the exemplary group experienced 11 confrontations with law enforcement agencies during their first year in the exemplary program while during the previous year they experienced 14 confrontations with law enforcement agencies.

Teachers of the exemplary students used more different teaching techniques more often than teachers of students in the comparison group. In the exemplary group 90.0% of the teachers used "Individual Instruction", two or more times per week while 40.0% never used "Programmed Instruction" and "Written Exams". Performance objectives written by teachers in both groups were vague and difficult to interpret.

Conclusions

Insofar as the instruments were valid, the data reliable and complete, and students were selected for the exemplary and comparison groups with common criteria, the following conclusions are suggested:

- A. Students in the exemplary program as compared to students in the academic-type program would be expected to:
 1. Achieve more manipulative-type job skills for entry level employment.
 2. Experience equal achievement in reading skills, communication skills, spelling skills, and math skills.
 3. Demonstrate more positive attitudes toward school, peer relationship, and family relationship; and demonstrate equally on positive attitudes toward work, self-concept, and work habits.
 4. Demonstrate an equal school drop-out rate and equal school attendance rate.
 5. Receive and pursue more instruction in vocational and related course.
 6. Receive more individual and group counseling.
- B. More students in the exemplary program would be expected to express an interest in an occupational choice than students in academic-type program.
- C. Students attending the exemplary program would be expected to experience fewer confrontations with law enforcement agencies than students attending traditional academic-type programs.

- D. Teachers in the exemplary program would be expected to use more different type teaching techniques more often than teachers in academic-type programs. Teachers in exemplary programs would be expected to use individual instructions to an extent that they are in harmony with the philosophy of the school. Teachers in both groups would be expected to experience difficulty writing performance objectives.

Recommendations

On the basis of the findings and conclusions of the evaluation, the following recommendations are suggested to the Duval County School Board for implementation:

1. Since students in the exemplary program achieved more manipulative-type entry level job skills and did not regress in basic academic achievement, more academic programs in Duval County should be evaluated relative to their purpose. Program modification should include instruction directed toward entry level job skills and career development.
2. One purpose of the exemplary program was to enable students to achieve more in academic basic education than students in traditional academic-type programs. Since data indicate that there was no significant difference between students attending the exemplary program and academic oriented programs relative to academic achievement, the instructional program should be modified to fulfill the objective.
3. Since indicators revealed no significant difference favoring the exemplary group in positive attitudes, work habits, and personal-social traits, the instructional program should be modified to include instruction to fulfill the purpose.
4. The counseling program should be structured to provide periodic group and individual counseling to every student enrolled in the exemplary program.
5. The teaching faculty and supervisory staff in the exemplary program should be provided intensive in-service teacher education to further develop skills in the use of individual instruction. It is further recommended that the teachers become aware of the philosophy of the exemplary program and teachers in both groups should receive help in writing performance objectives.

ACHIEVEMENT IN ESCAMBIA COUNTY

Program Description

The Escambia County Exemplary Program, which included 535 students, 40 teachers, and five counselors, was housed in the Beggs Educational Center, surrounded by homes of low income families, was located in an old downtown residential section in Pensacola. The once condemned school building had experienced some periodic repairs since the program began in August 1969. The facilities were less than adequate in quantity, quality, and organization; however, most supplies and materials ordered during the 1969-70 school year were received late in that school year and early in the 1970-71 school year. The faculty and staff appeared highly motivated and energetic while students seemed interested in the program. The program at the Beggs Educational Center may have been the most successful educational endeavor in Escambia County during the 1970-71 school year.

Fifty students and 15 alternates in the exemplary program were randomly selected as the exemplary group while the comparison group included 50 students and 15 alternates which were randomly selected from 150 students meeting the same criteria as students attending the exemplary program. Teachers of the 65 students in each sample were then identified and utilized as teachers of students in the exemplary group and teachers of students in the comparison group. For most of the information requested from students and teachers, the returns were less than 100%. The exact number is identified with the report of each type of data collected.

The purposes of the study were to ascertain answers to the following questions:

- A. Did students in exemplary programs as compared to students in traditional programs
 1. learn more entry level manipulative-type job skills?
 2. achieve more basic reading, communication skills, and math skills?
 3. develop more positive attitudes, personal traits, and work habits?
 4. demonstrate a higher attendance rate and a lower drop-out rate?
 5. receive more instruction in vocational and related courses?

6. receive more individual counseling, group counseling, support service, and as a result did more students express an interest in an occupational choice?
- B. Did students experience fewer confrontations with law enforcement agencies during their first year in the exemplary program than they did during the year previous to entering the program?
- C. Did teachers in exemplary programs utilize more different teaching techniques than teachers in traditional programs?

The purposes of this section are to report the students' achievements of the Escambia County Exemplary Program in the Beggs Educational Center during the 1970-71 school year.

Skills and Knowledge. Information relative to entry level job skills was collected from the laboratory teachers of both exemplary and comparison group students. The lab teacher was asked to write performance objectives of his course and then rate the designated students against the objectives (see Appendix B, "Course Inventory"). In the exemplary program 92.3% of the students pursued courses which offered manipulative-type employment skills while 60.3% of the students in academic programs pursued this type instruction.

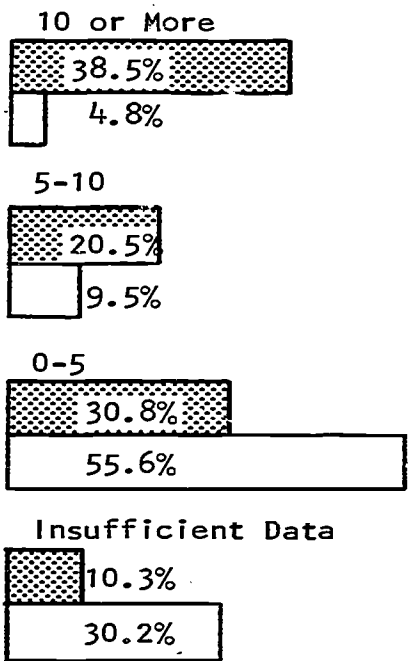
The criteria utilized in establishing the effectiveness of instruction relative to salable skills in both the exemplary and comparison groups were based upon the subjective evaluation of the instructor. Objectives were varied both within and between groups (see Appendix C). A number of instructors did not specify any objectives at all. These data were established as insufficient for purposes of quantification.


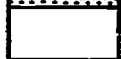
In Escambia County usable data were received on 39 students in the exemplary group as compared to 63 students in the comparison group, (see Figure 5-1). Based upon an entry level job skill attainment of "10 or more skills," 15 students, 38.5% of the exemplary group, acquired these numbers of skills. Three students, 4.8% of the comparison group, attained 10 or more skills.

Eight students, 20.5% of the exemplary group, acquired five to 10 entry level job skills while six students, 9.5% of the comparison group, did as well.

Twelve students, 30.8% of the exemplary group, failed to attain more than four entry level job skills, whereas 35 students, 55.6% of the comparison group, failed to acquire a like number. The data reported on four students, 10.3% of the exemplary group, relative to entry level job skill attainment were unusable while the data reported on 19 students, 30.2% of the comparison group, were insufficient for quantifying and unusable.

FIGURE 5-1
INSTRUCTOR'S EVALUATION OF STUDENT ACHIEVEMENT
OF ENTRY LEVEL JOB SKILLS
IN EXEMPLARY AND COMPARISON GROUPS
IN ESCAMBIA COUNTY
1970-71 SCHOOL YEAR

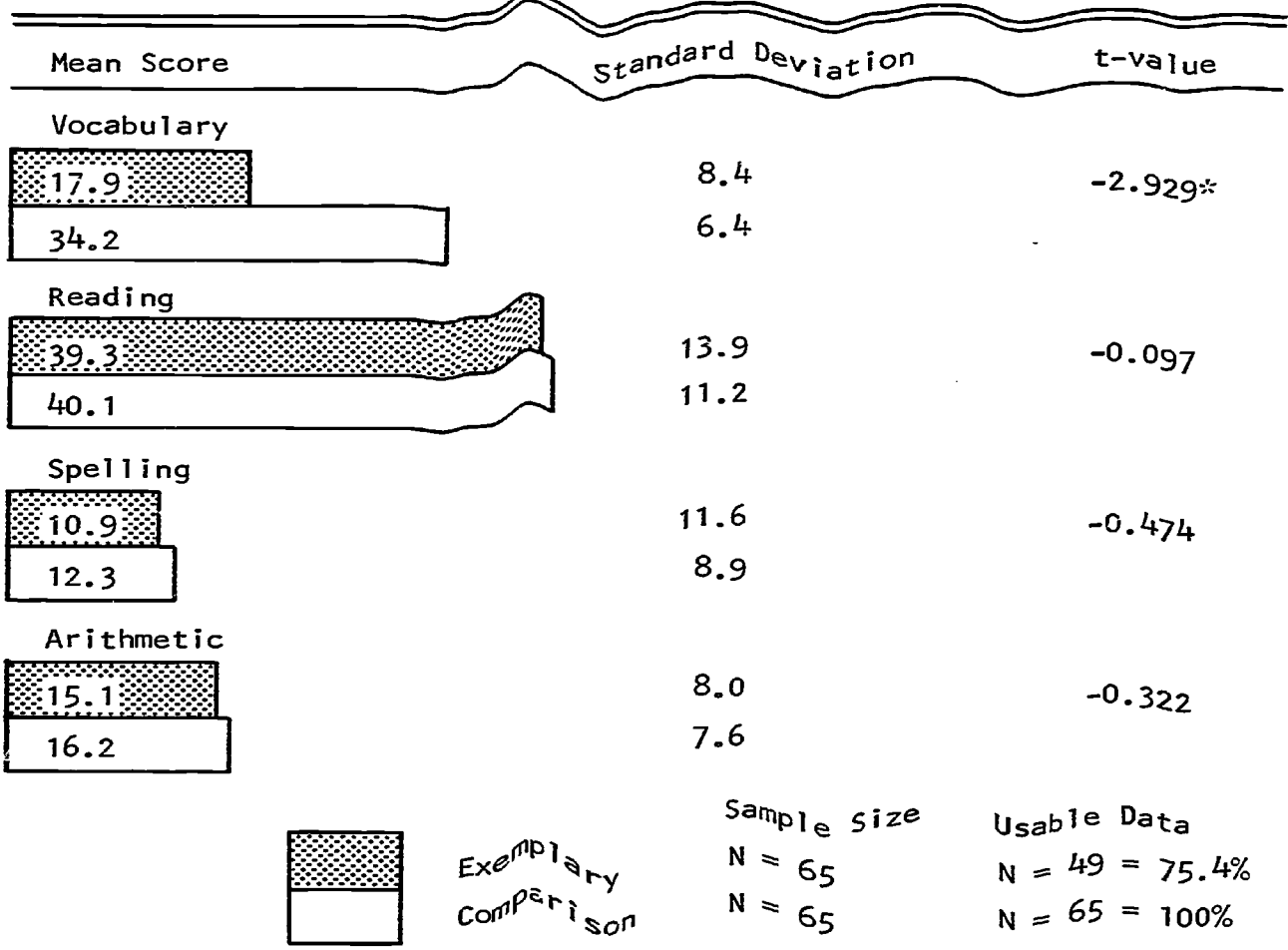


| | Sample Size | Usable Data |
|--|-------------|----------------|
|  Exemplary | N = 65 | N = 39 = 60.0% |
|  Comparison | N = 65 | N = 63 = 97.0% |

From the information as compiled, laboratory experiences provided a greater opportunity for students to acquire entry level job skills than did non-laboratory situations. The students in the exemplary group acquiring five or more entry level job skills represent 59% of that group while only 14.3% of the comparison group did as well.

Data relative to achievement in the academic areas of reading, communication skills, and mathematics (see Figure 5-2) were collected by means of the standardized instrument previously cited (Adult Basic Learning Exam). Subjective evaluation on the part of the instructors was eliminated by the use of this instrument.

FIGURE 5-2
 BASIC EDUCATION ACHIEVEMENT OF STUDENTS
 IN EXEMPLARY AND COMPARISON GROUPS
 IN ESCAMBIA COUNTY
 1970-71 SCHOOL YEAR



t-value ≥ 1.981 Significant at the .05 confidence level

Usable information was received for 49 students in the exemplary group and 65 students in the comparison group. In the academic areas of reading, spelling, and arithmetic the comparison group displayed higher scores than the exemplary group. None of the differences were appreciable and, therefore, as considered negligible.

In the vocabulary area the comparison group scored considerably higher than the exemplary group and it was significant at the .05 confidence level based upon a statistical t test.

Attitudes and Personal-Social Traits. In an attempt to measure the attitudes, personal-social traits and work habits achieved by the exemplary group as compared to the comparison group, three instruments were used. Two of the instruments--"How I See Myself" and "My Work-My School-My Country"-- were purchased from commercial publishers while one instrument, "Personal-Social Traits Inventory," was constructed by the investigator. "How I See Myself" includes 42 semantic differential-type items designed to enable the student to express self-concept. The instrument has established norms which permit the use of a mean score and t test for data analysis. "My Work-My School-My Country," an attitude inventory comprised of 39 items, was designed to collect data pertaining to the student's attitudes toward work, school, and country. The "Personal-Social Traits Inventory" includes 21 items designed to collect data from teachers about students (see Appendix C for Instruments).

Forty-nine students in the exemplary group and 65 students in the comparison group responded to the instrument "How I See Myself." Mean scores of 135.41 for the exemplary group and 123.92 for the comparison group and a t value of 0.450 were computed; no significant difference between the groups relative to self-concepts was indicated.

Information was collected, with the "Personal-Social Traits Inventory," on 43 students in the exemplary group and 59 students in the comparison group. A Chi Square was computed, from the data for each of the 21 items included in the instrument, comparing the response of teachers of the exemplary group with the response of teachers of the comparison group about their respective students. A Chi Square value large enough to indicate a significant difference between the two groups occurred on two items, "Attitude Toward Machine and Tool Use" and "Prompt and Punctual," both favoring the exemplary group at the .05 confidence level. There were no items with Chi Squares large enough to indicate significant differences which would favor the comparison group. The data would indicate that teachers of the exemplary group rated exemplary students higher on work habits than teachers of the comparison group rated comparison students. The data indicated no significant difference between the two groups relative to attitudes toward family relationship.

Forty-six students in the exemplary group and 65 students in the comparison group expressed agreement or disagreement with 39 statements in the instrument "My Work-My School-My Country." The Mann-Whitney U Test was used to analyze the data which would indicate no significant difference between the groups. However, a Chi Square computed for each of the 39 items in the instrument indicated a significant difference between the two groups relative to responses on five items, four of which favored the comparison group. Students in the comparison group indicate a more positive response toward the school and toward the contribution of work in our society while the exemplary group expressed a more positive attitude toward peer relationship.

Attendance and Drop-Out Rate. Data relative to attendance and drop-out rate were reported on 53 students in the comparison group and 65 students in the exemplary group. Information was collected from the students' cumulative record at the end of the school year. The ratio of days attended to the total number of school days enrolled yielded an attendance rate. A computed average of 81.0% for the exemplary group, 87.0% for the comparison group and a t-value of -0.412 favors the comparison group in attendance, however, the difference was not significant. Five students in the comparison group and 23 students in the exemplary group were reported as school dropouts. A computed Chi Square value of 20.68 indicated that the higher drop-out rate for the exemplary group differs significantly from the comparison group.

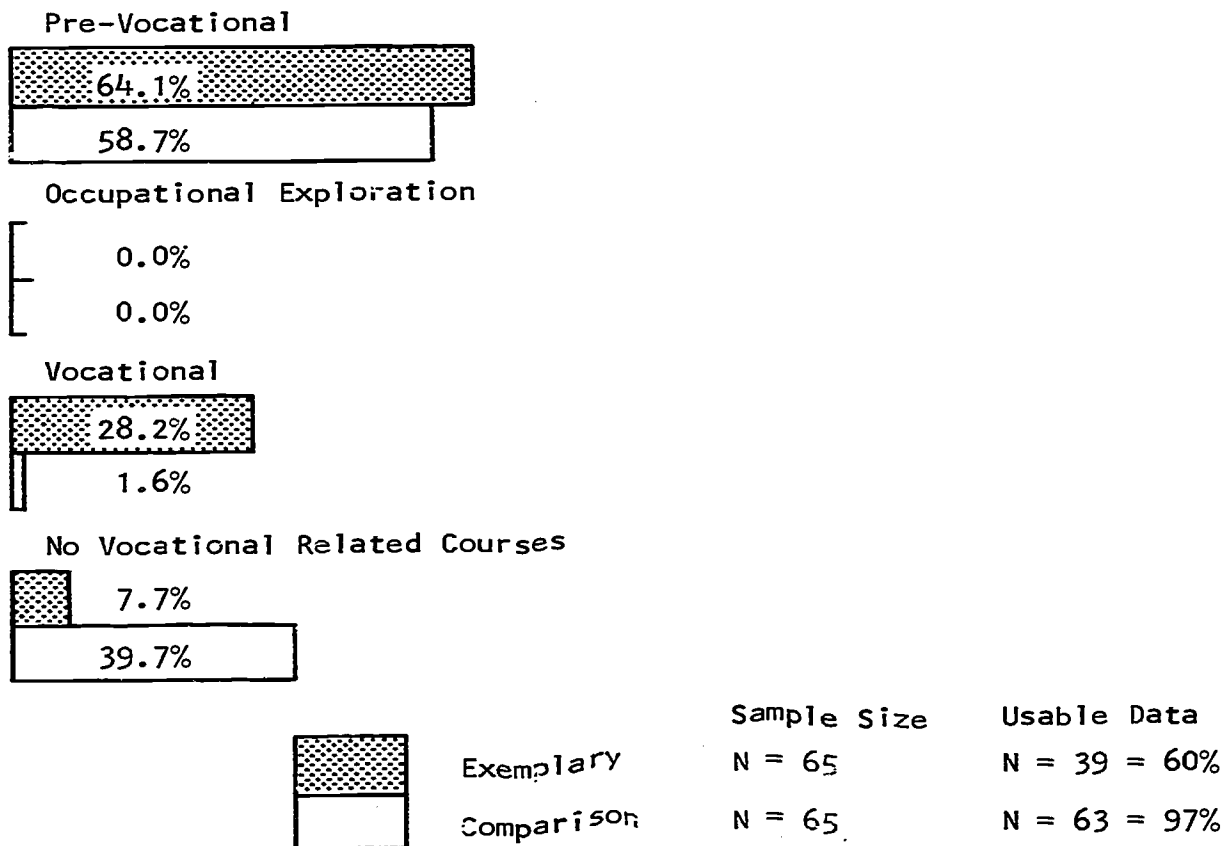
Student Enrollment in Vocational and Related Courses. Data related to student enrollment, included in Figure 5-3, were collected from teachers of the exemplary and comparison groups. The data would indicate that 60.3% of the students in the comparison group were enrolled in pre-vocational and vocational courses while 39.7% were not enrolled in any type of vocational or related courses. Data would further indicate that 92.3% of the students in the exemplary group were enrolled in some type of vocational related instruction. In the comparison group, enrollment in vocational courses was small since only one was offered.

Vocational and Related Courses Offered. Data in Table 5-1 were collected from administrators in the exemplary and comparison programs. The number of instructional hours per student in vocational and related courses differed considerably. While the exemplary program offered 3.17 hours per student, the comparison programs offered an average of .19 hours per student. The programs differed widely relative to the variety of occupational areas of study. A review of the curricula reveals that the comparison schools offered courses in art, industrial arts, home economics, and business education plus career orientation. The exemplary program offered courses in business education, health occupations, home economics, auto mechanics, auto body repair, home appliance repair, radio and T. V. repair, retail sales, tailoring, wood-working, building maintenance, masonry, and horticulture. Only the exemplary program offered cooperative work experience.

Individual and Group Counseling. Individual and group counseling information forms (Student Guidance Inventory - UWF Form #1005, see Appendix C) for recording counseling sessions and the student's expressed interest in an occupational choice were forwarded to Escambia County on April 19, 1971 and returned on June 21, 1971. The data included in Figure 5-4 represent counseling received by students in the exemplary group for only a portion of the school year. During the counseling process, 26.4% of the students in the exemplary group expressed an interest in an occupational choice.

FIGURE 5-3
STUDENT ENROLLMENT IN VOCATIONAL RELATED COURSES
IN EXEMPLARY AND COMPARISON GROUPS

IN ESCAMBIA COUNTY
1970-71 SCHOOL YEAR



The number of students in the exemplary group was 53. The comparison group did not report. In the exemplary group 26.4% of the students received some counseling.

In the exemplary group 22.6% of the students received individual counseling and 15.1% received group counseling. The exemplary group received 32 individual counseling sessions. The one item that stands out in a positive manner is that all students receiving counseling in the experimental group expressed an interest in an occupational choice.

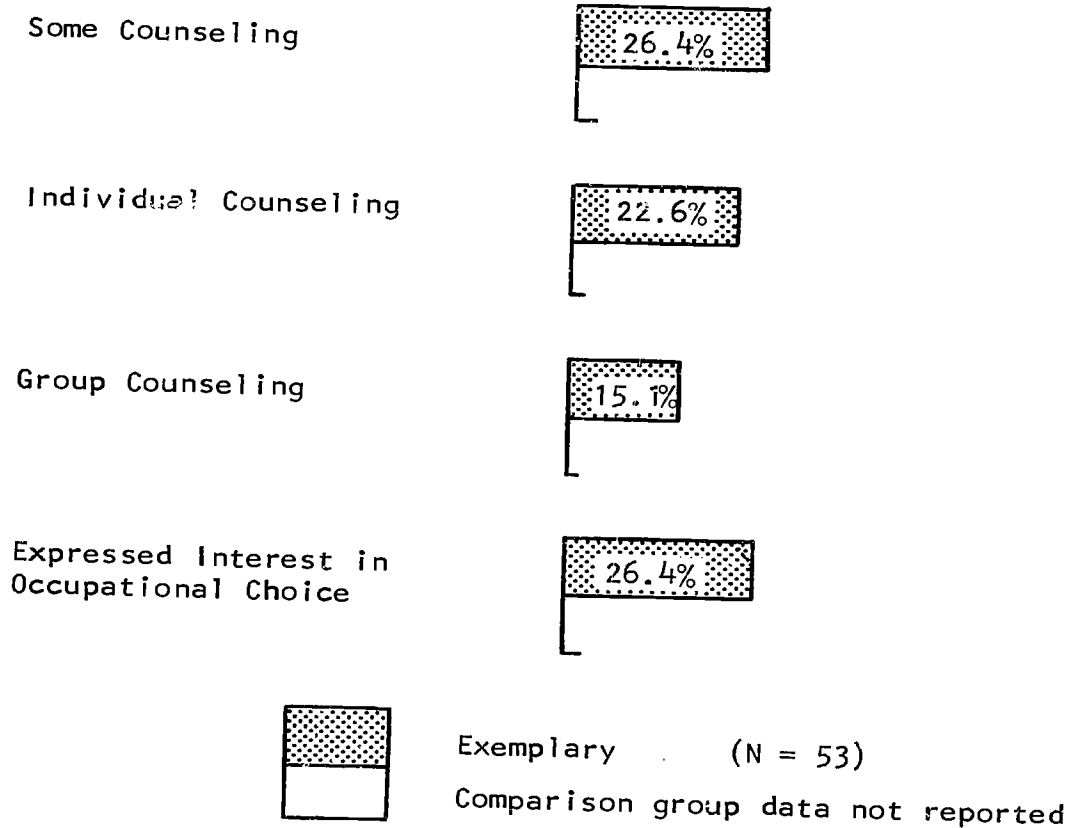
TABLE 5-1

VOCATIONAL AND RELATED COURSES OFFERED TO EXPERIMENTAL STUDENTS
 IN THE EXEMPLARY SCHOOL AND TO COMPARISON STUDENTS
 IN OTHER ESCAMBIA COUNTY SCHOOLS DURING
 THE 1970-71 SCHOOL YEAR

| SCHOOL CENTERS | NO. OF STUDENTS ENROLLED | VOCATIONAL AND RELATED COURSES OFFERED | | PURPOSE OF THE COURSE | | | NO. OF CO-OPERATIVE COURSES | |
|--|--------------------------|--|----------------------------------|------------------------------------|----------------|--------------------------|-----------------------------|---------------|
| | | NO. OF COURSES | TOTAL NO. OF INSTRUCTIONAL HOURS | NO. OF INSTRUCTIONAL HRS. PER STU. | PRE-VOCATIONAL | OCCUPATIONAL EXPLORATION | | VOCATIONAL |
| (for Experimental Students) E. Dixie Beggs Education Center | 540 | 16 | 1714 | 3.17 | 3 | 3 | 12 | 1 |
| (for Comparison Students) Bellview Middle School | 1,586 | 2 | 62 | .04 | 1 | 1 | 0 | 0 |
| Warrington Middle School | 1,355 <u>2,941</u> | 7 <u>9</u> | 495 <u>557</u> | .37 <u>.19</u> | 3 <u>4</u> | 3 <u>4</u> | 1 <u>1</u> | 0 <u>0</u> |

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FIGURE 5-4
 COUNSELING RECEIVED
 BY EXEMPLARY AND COMPARISON GROUPS
 IN ESCAMBIA COUNTY
 1970-71 SCHOOL YEAR

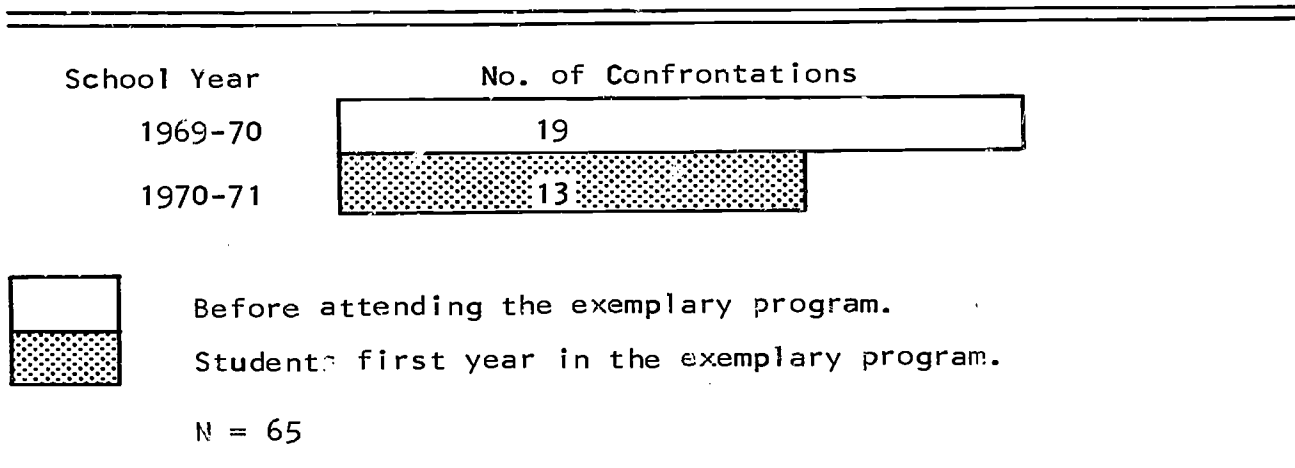


The number of individual counseling sessions was 32 for the exemplary group and the comparison group was not reported.

Confrontations with Law Enforcement Agencies

One purpose of this study was to ascertain answers to the question: do students experience fewer confrontations with law enforcement agencies during their first year in the exemplary program than they did during the year previous to entering the program?

FIGURE 5-5
 CONFRONTATIONS WITH LAW ENFORCEMENT AGENCIES
 BY STUDENTS IN THE EXEMPLARY PROGRAM
 IN ESCAMBIA COUNTY
 1969-70 AND 1970-71 SCHOOL YEAR



Data collected from law enforcement agencies reveals 13 confrontations by students in the exemplary group during their first year in the program and 19 confrontations by the same group during the year previous to entering the exemplary program. From the information presented, enrollment in the exemplary program would appear to have some effect toward reducing the number of student confrontations with law enforcement agencies.

Instructional Techniques

Teachers of students in the exemplary and comparison groups were asked to complete the Instructional Technique Inventory - UWF Form #1007 (see Appendix C) relative to the number and frequency of use of the different techniques used in their teaching. Thirty-seven teachers in the exemplary group and 97 teachers in the comparison group responded. The checklist type instrument included 17 different instructional techniques with five categories for response to each technique. Only two of the five categories, "Often; two or more times per week" and "Never" are included in Table 5-2 to best illustrate the comparison of the two groups. The data indicate that teachers of the comparison students were more active in their classroom, they used a greater variety of different techniques more frequently than teachers of the exemplary students. Of 17 different techniques included in the information, the teachers of the exemplary students used only seven more often and more frequently than teachers of the comparison students.

TABLE 5-2

FREQUENCY OF INSTRUCTIONAL TECHNIQUES USED
BY TEACHERS IN EXEMPLARY AND COMPARISON GROUPS
IN ESCAMBIA COUNTY
1970-71 SCHOOL YEAR

| Technique | Frequency of Use | | | | | |
|--------------------------------------|-------------------------|----------------------|---|-------|-------|-------|
| | Exemplary Comparison | (N = 37) (N = 97) | Often: Two or more times per week | | Never | |
| | | | Exp. | Comp. | Exp. | Comp. |
| Classroom Lecture | | | 21.6% | 39.2% | 8.1% | 12.4% |
| Student Recitation | | | 24.3% | 42.3% | 21.6% | 18.6% |
| Individual Instruction | | | 83.7% | 55.6% | 13.5% | 10.3% |
| Large Gp. or Small Gp. Discussion | | | 44.7% | 51.6% | 5.2% | 7.4% |
| Student Problem Solving | | | 70.3% | 61.8% | 0 | 15.5% |
| Supervised Classroom Assignments | | | 56.7% | 57.7% | 21.6% | 20.6% |
| Assigned Exercises | | | | | | |
| . Supervised Classroom or Lab. | | | 56.7% | 57.7% | 13.5% | 20.6% |
| . Homework | | | 4.9% | 29.9% | 48.8% | 42.3% |
| Supervised Group Lab. Proj. & Prob. | | | 24.3% | 19.6% | 37.8% | 44.3% |
| Supervised Indiv. Lab. Proj. & Prob. | | | 35.1% | 15.5% | 13.5% | 45.4% |
| Free Elective Laboratory Projects | | | 13.7% | 6.2% | 27.0% | 56.7% |
| Questions & Answers | | | 40.5% | 46.4% | 10.8% | 11.3% |
| Written Exams | | | 10.8% | 11.3% | 21.6% | 7.2% |
| Performance Exams | | | 27.0% | 19.6% | 18.9% | 19.6% |
| Oral Exams | | | 16.2% | 13.4% | 18.9% | 39.2% |
| Picture Exams | | | 10.8% | 3.1% | 35.1% | 56.7% |
| Programmed Instruction | | | 13.5% | 13.4% | 29.7% | 46.4% |

*Percent may not total 100.

In the exemplary group 83.7% of the teachers indicated "Individual Instruction" and 70.3% reported "Student Problem Solving" as the techniques most often used two or more times per week. In the comparison group the techniques most often used showed that 61.8% of the teachers reported "Student Problem Solving" and 57.7% reported "Supervised Classroom Assignments."

Of the techniques less frequently used, in the exemplary group 48.8% of the teachers reported "Assigned Homework," 37.8% reported "Supervised Group Laboratory Projects and Problems," as techniques never used. A large number of the exemplary teachers reported never using "Programmed Instruction," "Picture Exams," "Oral Exams," and "Performance Exams" which would seem to be inconsistent with the purposes of the program.

Although teachers in the exemplary group were less active in their utilization of many different teaching techniques, they were consistent with the philosophy of the program in general by preferring to use some of the individual performance oriented techniques.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The vocationally oriented exemplary program in Escambia County, which consisted of approximately 535 students, 40 teachers, and five counselors, was housed in the Beggs Educational Center in the urban section of Pensacola.

For purposes of the evaluation, 50 students and 15 alternates in the exemplary program were randomly selected as the exemplary group while the comparison group included 50 students and 15 alternates randomly selected from 150 students meeting the same criteria as students enrolled in the exemplary program. Students in the comparison group attended schools other than the Beggs Educational Center. Data were collected from students in the exemplary and comparison groups and teachers, counselors, and administrators of students in both groups.

The exemplary program offered 3.17 hours of vocational related instruction per student while an average of .19 hours per student was offered in the comparison program. The exemplary program also offered studies in more occupational areas than the comparison schools.

In the exemplary group, 92.3% of the students were enrolled in vocational related instruction while 60.3% of the students in the comparison group were enrolled in vocational related courses.

In the exemplary group, 59% of the students acquired five or more entry level job skills while in the comparison group only 14.3% of the students achieved to the same level.

Students in the comparison group scored higher in basic education in reading, spelling, arithmetic, and vocabulary than students in the exemplary group. The difference between the two groups in scores on vocabulary was significant at the .05 confidence level.

Students and teachers indicated that students in the exemplary group demonstrated more positive attitudes toward work habits and peer relationship than students in the comparison group while comparison group students demonstrated more positive attitudes toward the school and the contribution of work in our society than exemplary group students.

There was no significant difference between the groups in school attendance rate. The students in the exemplary group demonstrated a significantly higher school drop-out rate than students in the comparison group.

In the exemplary group, 26.4% of the students received some counseling. All students who received counseling expressed an interest in an occupational choice. Counseling data were not reported on students in the comparison group.

Students in the exemplary group experienced 13 confrontations with law enforcement agencies during their first year in the program while the same group experienced 19 confrontations during the year previous to entering the exemplary program.

Teachers of the exemplary students were less active in their utilization of different teaching techniques than teachers of the comparison group. Teachers of the exemplary group were consistent with the purposes of the program by using some of the individual performance methods. However, "Programmed Instruction," "Picture Exams," "Oral Exams," and "Performance Exams" were reported never used by a substantial number of teachers in the exemplary group. Teachers in both groups demonstrated difficulty in writing their instructional performance objectives.

Conclusions

On the assumption that the instruments were valid, the data reliable and complete, and students were selected for the exemplary and comparison groups with common criteria, the following conclusions are drawn:

- A. Students enrolled in exemplary programs as compared to students in academic-type programs would be expected to:
 1. Achieve more manipulative-type job skills for entry level employment.
 2. Score significantly lower in vocabulary.
 3. Demonstrate more positive attitudes toward peer relationship and work habits and less positive attitudes toward the school and the contribution of work in our society.
 4. Demonstrate a higher school drop-out rate.
 5. Score at the same level in basic education in reading, spelling, and arithmetic.
 6. Receive more instruction in vocational and related courses.
- B. Attendance in the exemplary program would be expected to have a positive effect toward reducing the number of confrontations with law enforcement agencies by students.
- C. Teachers in the exemplary program would be expected to use fewer instructional techniques less often than teachers in the comparison programs. All teachers would be expected to demonstrate difficulty in identifying and writing their student performance objectives.

Recommendations

On the basis of the findings and conclusions of the study, the following recommendations are suggested to the Escambia County School Board for consideration and implementation:

1. Since students in the exemplary program achieved more manipulative-type job skills for entry level employment and achieved almost equally well with students in academic-type programs in basic education, the academic-type programs should be evaluated relative to how well the student's needs are being served. Program modification should include instruction directed toward entry level job skills.
2. Since the students in the exemplary program achieved favorably in salable skills, the students were at least moderately motivated and should have achieved more than scores indicated in reading, math, and communication skills. It is recommended that the curriculum be reviewed and modified to better fulfill this objective.
3. Since only 26% of the students in the exemplary group received counseling service, a structured vocational guidance program should be implemented to provide service to every student on a periodic rotating basis.
4. Since teachers in the exemplary program did not use enough different individual performance teaching techniques to be consistent with the philosophy of the school, a strong in-service staff development program should be provided for the supervisors and teachers to become familiar with individual student performance teaching techniques. It is further recommended that that the faculty and staff become aware of the philosophy of the exemplary program.
5. Since teachers in both the exemplary and comparison groups experienced difficulties expressing their objectives, leadership should be provided to assist the teachers in identifying and writing their objectives so that they are meaningful, measurable, and can be read and understood by the student and parent.

ACHIEVEMENT IN HILLSBOROUGH COUNTY

Program Description

The Hillsborough County Exemplary Program, which included 200 students, 22 teachers, and four counselors, was housed in the George Washington Junior High School along with a traditional junior high school program which included approximately 420 students. The building, located in the urban section of Tampa, was old but basically sound and well kept while the community surrounding the school consisted of homes of middle to low income families and a few small retail businesses. Laboratory facilities, which were installed during the school year, appeared to be adequate in quality and quantity for a minimum exemplary program with 200 students. The faculty and staff appeared to be highly interested and motivated and were in the process of organizing instruction during the school year.

Fifty students and 15 alternates in the exemplary program were randomly selected as the exemplary group while the comparison group included 50 students and 15 alternates which were randomly selected from 150 students meeting the same criteria as students attending the exemplary program. Teachers of the 65 students in each sample were then identified and utilized as teachers of students in the exemplary group and teachers of students in the comparison group. For most of the information requested from students and teachers, the returns were less than 100%. The exact number is identified with the report of each type of data collected.

The purposes of the study were to ascertain answers to the following questions:

- A. Did students in exemplary programs as compared to students in traditional academic programs
 1. learn more entry level manipulative-type job skills?
 2. achieve more basic reading, communication skills, and math skills?
 3. develop more positive attitudes, personal traits, and work habits?
 4. demonstrate a higher attendance rate and a lower drop-out rate?
 5. receive more instruction in vocational and related courses?

6. receive more individual counseling, group counseling, and support service, and as a result did more students express an interest in an occupational choice?
- B. Did students experience fewer confrontations with law enforcement agencies during their first year in the exemplary program than they did during the year previous to entering the program?
- C. Did teachers in exemplary programs utilize more different teaching techniques than teachers in traditional programs?

The purposes of this section are to report the achievements of the Hillsborough County Exemplary Program in George Washington Junior High School during the 1970-71 school year.

Skills and Knowledge. Information relative to entry level job skills was collected from the laboratory teachers of both exemplary and comparison group students. The lab teacher was asked to write course performance objectives then rate the designated student against the objectives (see Appendix B, "Course Inventory"). Seventy-five percent of the students in the exemplary program pursued courses which offered manipulative-type employment skills while 32.8% of the students in academic programs pursued this type instruction.

The criteria utilized in establishing the effectiveness of instruction relative to salable skills in both the exemplary and comparison groups were based upon the subjective evaluation of the instructor. Objectives were varied both within and between groups (see Appendix C). A number of instructors did not specify any objectives. These data were established as insufficient for purposes of quantification.

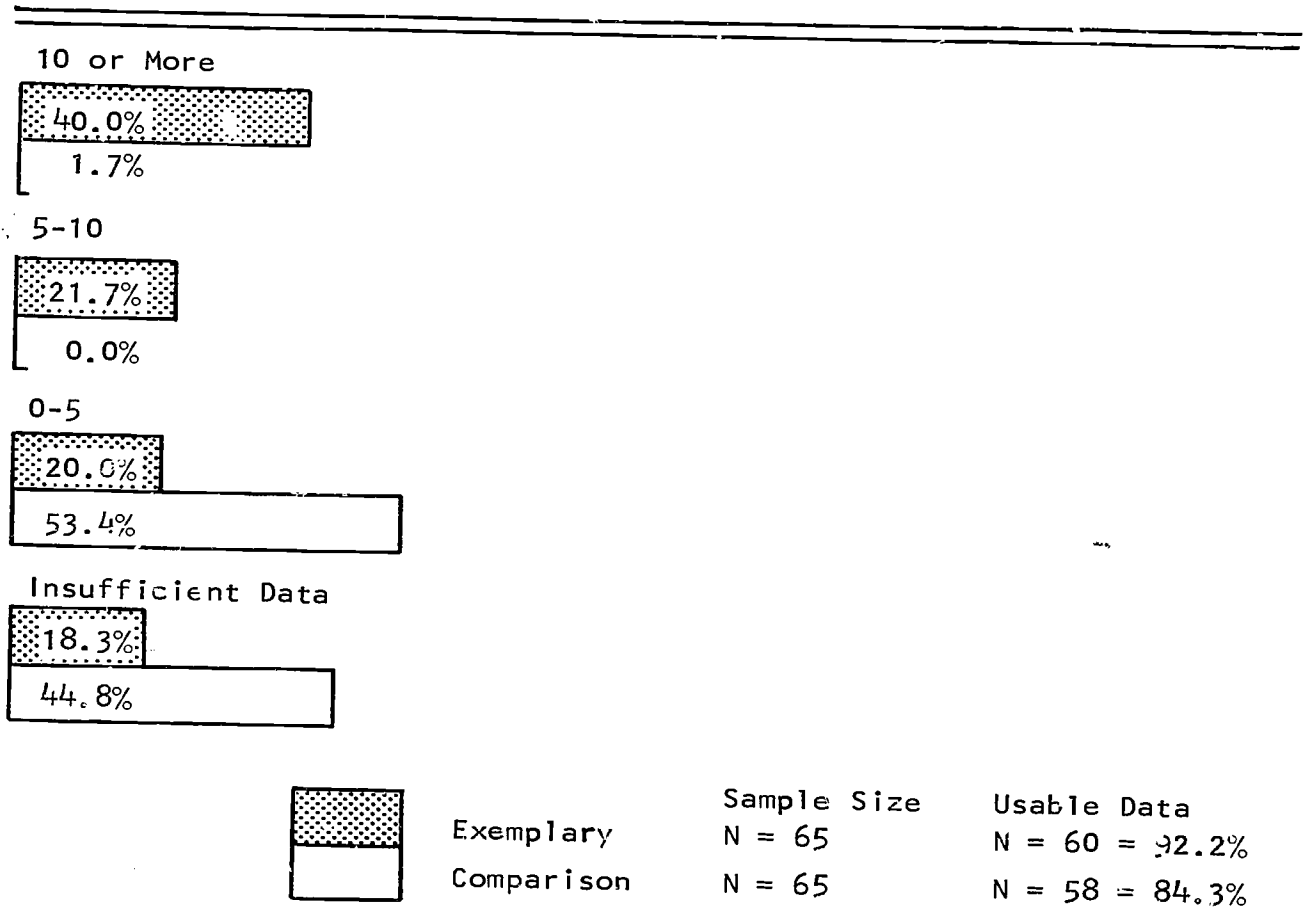
In Hillsborough County information was returned on 60 students in the exemplary group and 58 students in the comparison group (see Figure 6-1). Based upon an entry level job skill attainment of "10 or more skills," 24 students, 40.0% of the exemplary group, acquired these numbers of skills. One student, 1.7% of the comparison group, attained 10 or more skills.

Thirteen students, 21.7% of the exemplary group, acquired five to 10 entry level job skills while no students, 0% of the comparison group, did as well.

Twelve students, 20.0% of the exemplary group, failed to attain more than four entry level job skills, whereas 31 students, 53.4% of the comparison group, failed to acquire a like number.

The students acquiring five or more entry level job skills represent 61.7% of the exemplary group while only 1.7% of the comparison group did as well.

FIGURE 6-1
 INSTRUCTOR'S EVALUATION OF STUDENT ACHIEVEMENT
 OF ENTRY LEVEL JOB SKILLS
 IN EXEMPLARY AND COMPARISON GROUPS
 IN HILLSBOROUGH COUNTY
 1970-71 SCHOOL YEAR

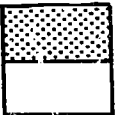
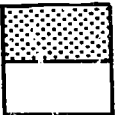


The data reported on 11 students, 18.3% of the exemplary group, relative to entry level job skill attainment were unusable while the data reported on 26 students, 44.8% of the comparison group, were insufficient for quantifying.

Data relative to achievement in the academic area of reading, communication skills, and mathematics (see Figure 6-2) were collected by means of the standardized instrument previously cited (Adult Basic Learning Exam). Subjective evaluation on the part of the instructors was eliminated by the use of this instrument.

FIGURE 6-2
 BASIC EDUCATION ACHIEVEMENT OF STUDENTS
 IN EXEMPLARY AND COMPARISON GROUPS
 IN HILLSBOROUGH COUNTY
 1970-71 SCHOOL YEAR

| Mean Score | Standard Deviation | t-value |
|------------|--------------------|---------|
| Vocabulary | | |
| 28.3 | 7.3 | 0.557 |
| 25.0 | 8.9 | |
| Reading | | |
| 41.4 | 9.4 | 0.255 |
| 39.2 | 9.1 | |
| Spelling | | |
| 13.3 | 10.0 | 1.502 |
| 8.6 | 9.7 | |
| Arithmetic | | |
| 14.8 | 6.6 | 0.092 |
| 14.5 | 7.8 | |

| | | | |
|---|------------|-----------------------|-------------------------------|
|  | Exemplary | Sample Size N = 65 | Usable Data N = 49 = 75.5% |
|  | Comparison | N = 65 | N = 44 = 67.7% |

t-value ≥ 1.987 Significant at the .05 confidence level

Data were returned on 49 students in the exemplary group and 44 students in the comparison group. In all academic areas the exemplary group displayed higher scores; however, none represented an appreciable amount and was considered negligible. Spelling was the one area in which the greatest difference existed but the difference was so small as to be negligible.

Attitudes, Personal-Social Traits, and Work Habits. In an attempt to measure the attitudes, personal-social traits, and work habits achieved by the exemplary group as compared to the comparison group, three instruments were used. Two of the instruments, "How I See Myself" and "My Work-My School-My Country," were purchased from commercial publishers while one instrument, "Personal-Social Traits Inventory," was constructed by the investigator. "How I See Myself" included 42 semantic differential-type items designed to enable the student to express self-concept. The instrument had established norms which permitted the use of a mean score and t test for data analysis. "My Work-My School-My Country," an attitude inventory which included 39 items, was designed to collect data pertaining to the student's attitudes toward work, school, and country. The "Personal-Social Traits Inventory" included 21 items designed to collect data from teachers about students (see Appendix C for Instruments).

Forty-three students in the exemplary group and 48 students in the comparison group responded to the instrument "How I See Myself." Mean scores of 143.48 for the exemplary group and 145.49 for the comparison group and a t value of -0.065 were computed from the data. This would indicate no significant difference between the groups relative to self-concepts.

Information was collected, with the "Personal-Social Traits Inventory" on 46 students in the exemplary group and 49 students in the comparison group. A Chi Square was computed from the data for each of the 21 items included in the instrument comparing the response of teachers of the exemplary group with the response of teachers of the comparison group about their respective students.

A Chi Square large enough to indicate a significant difference between the two groups occurred on six items; five items favored the exemplary group and one item favored the comparison group at the .05 confidence level. The data would indicate that teachers of the exemplary group rated exemplary students higher than teachers of the comparison group rated comparison students relative to attitudes toward school and work habits. Conversely, teachers of comparison students rated comparison students more positive than teachers of exemplary students rated exemplary students on attitudes toward family relationship. Data revealed no significant difference between the two groups relative to peer relationship.

Sixty students in the exemplary group and 65 students in the comparison group expressed agreement or disagreement with 39 statements in the instrument "My Work-My School-My Country." The Mann-Whitney U Test used to analyze the data indicated no significant difference between the groups. However, a Chi Square computed on each of the 39 items in the instrument indicated a difference, significant at the .05 confidence level, between the two groups relative to response on eight items

with three favoring the exemplary group and five items favoring the comparison group. From the data collected, the exemplary students demonstrated more positive attitudes toward school and work habits while the comparison group demonstrated more positive attitudes toward family relationship, work in our society, and self-concept.

Attendance and Drop-Out Rate. Data relative to school attendance and drop-out rates were collected from the students' cumulative record at the end of the school year. The ratio of days attended to the total number of days the student was enrolled yielded an attendance rate. A computed average of 90.9% for students in the exemplary group and 81.6% for students in the comparison group and a t-value of 0.597 favored the exemplary group in school attendance. However, the difference between the two groups was not significant. The data reported on 65 students in the exemplary group and 63 students in the comparison group further revealed that two students from each group were identified as school dropouts.

Vocational and Related Courses Offered. Data in Table 6-1 were collected from administrators in the exemplary school and administrators in the comparison school. In the exemplary program, 20 vocational and related type courses were offered to 190 students while in the comparison school only four courses in vocational and related type instruction were offered to 800 students. While the exemplary program offered 12.79 hours per student, the comparison school offered only 1.18 hours per student. The exemplary program also offered a wider variety of instruction in different occupational or career areas. Courses in the exemplary program include instruction in the metal trades, building trades, home economics, graphics trades, office occupations, fabric trades, electrical trades, and the mechanical trades. The comparison school limited their offerings to general agriculture, general home economics, and general shop industrial arts.

Student Enrollment in Vocational and Related Courses. Information relative to student enrollment, see Figure 6-3, were collected from teachers of the exemplary and comparison groups. The data indicate that 75.0% of the exemplary students were enrolled in vocational related courses while only 32.8% of the comparison students were enrolled in the same type courses.

Individual and Group Counseling. Individual and group counseling information forms (Student Guidance Inventory - UWF Form #1005, see Appendix C) for recording counseling sessions and the student's expressed interest in an occupational choice were forwarded to Hillsborough County on March 26, 1971 and returned on June 14, 1971. The data included in Figure 6-4 represents counseling received by students in both the exemplary and comparison groups for only a portion of the school year.

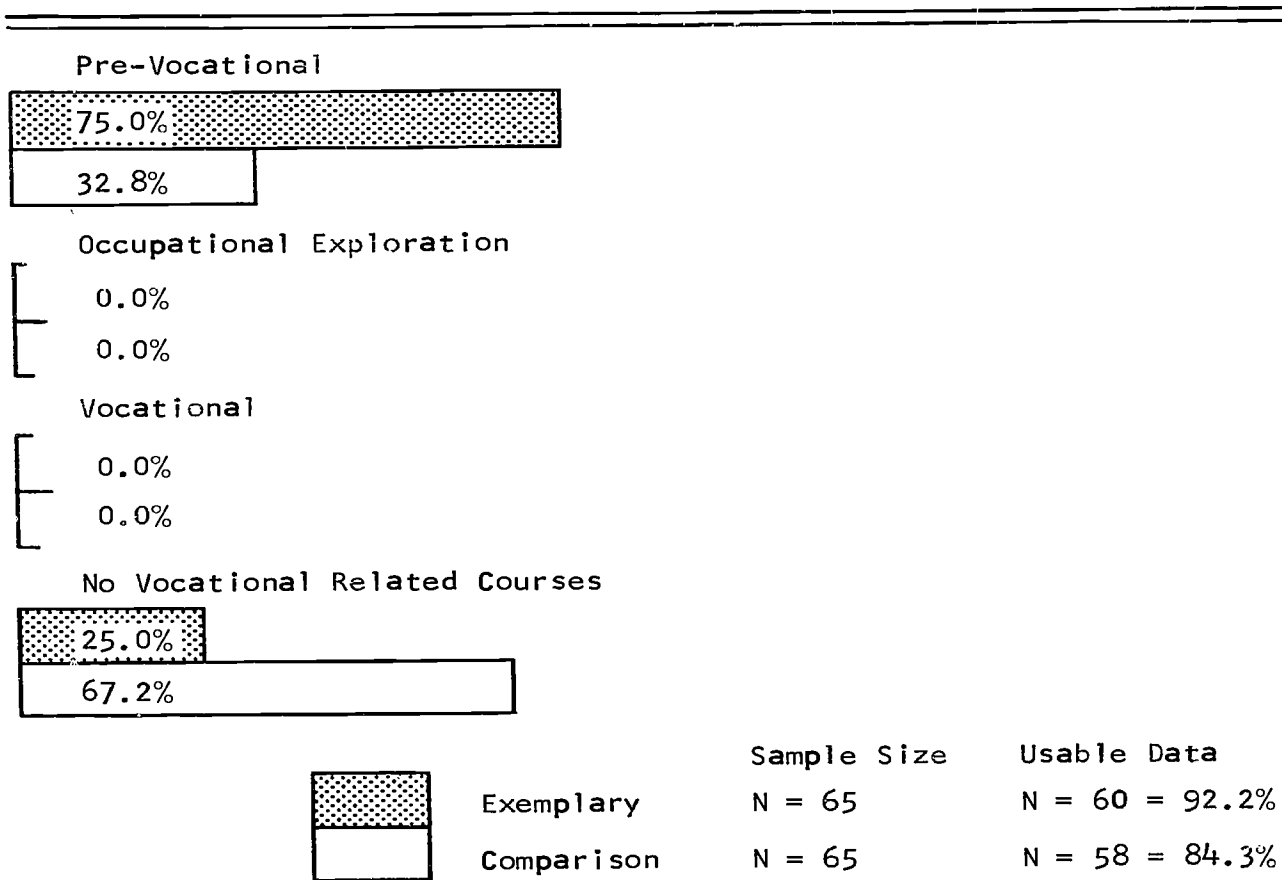
The number of students in both the exemplary and comparison groups was 64. In the exemplary group 67.2% of the students received some

TABLE 6-1

VOCATIONAL AND RELATED COURSES OFFERED TO EXPERIMENTAL STUDENTS
 IN THE EXEMPLARY SCHOOL AND TO COMPARISON STUDENTS
 IN OTHER HILLSBOROUGH COUNTY SCHOOLS DURING
 THE 1970-71 SCHOOL YEAR

| SCHOOL CENTERS | NO. OF STUDENTS ENROLLED | VOCATIONAL AND RELATED COURSES OFFERED | | PURPOSE OF THE COURSE | | | NO. OF CO-OPERATIVE COURSES |
|---|--------------------------|--|----------------------------------|-----------------------|--------------------------|------------|-----------------------------|
| | | NO. OF COURSES | TOTAL NO. OF INSTRUCTIONAL HOURS | PRE-VOCATIONAL | OCCUPATIONAL EXPLORATION | VOCATIONAL | |
| (for experimental students) GEORGE WASHINGTON JR. HIGH | 190 | 20 | 2430 | 16 | 4 | 0 | 1 |
| (for comparison students) WEST TAMPA JR. HIGH | 800 | 4 | 945 | 3 | 1 | 0 | 1 |

FIGURE 6-3
STUDENT ENROLLMENT IN VOCATIONAL RELATED COURSES
IN EXEMPLARY AND COMPARISON GROUPS
IN HILLSBOROUGH COUNTY
1970-71 SCHOOL YEAR

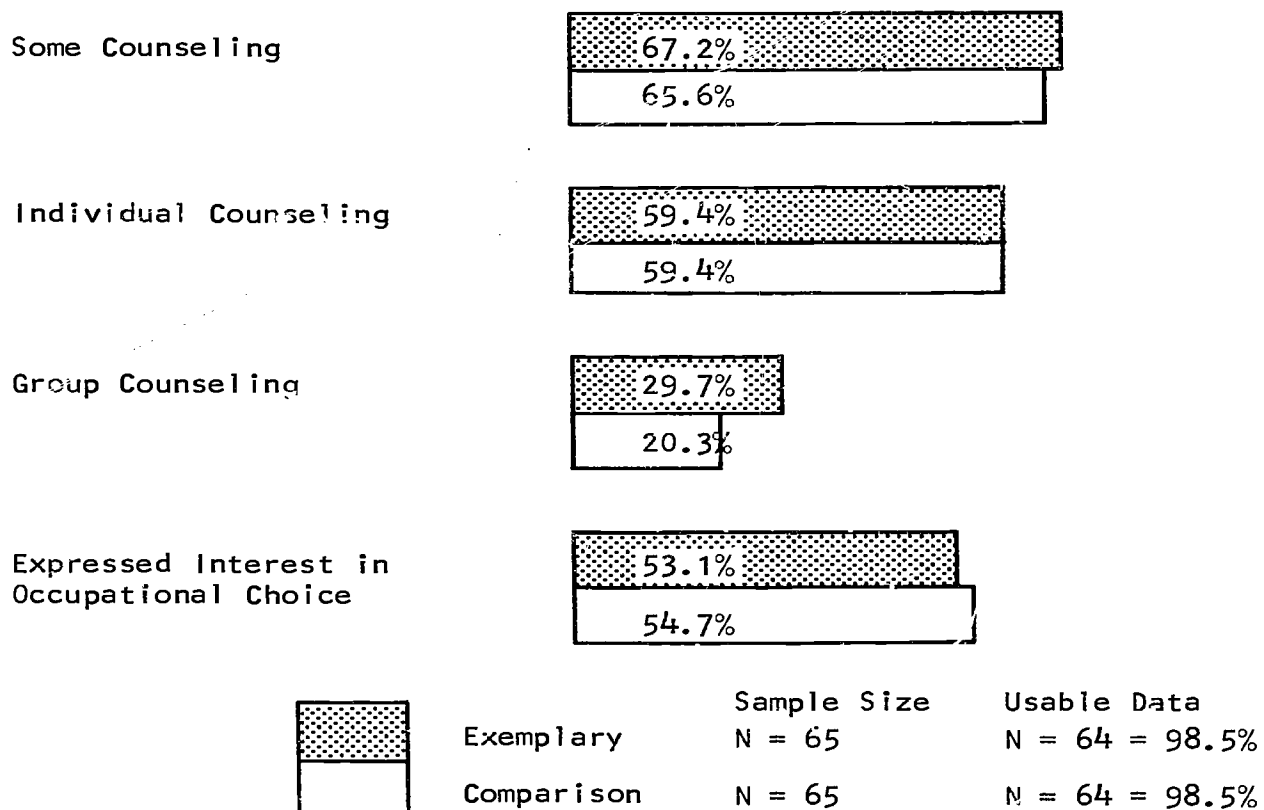


counseling while 65.6% of the comparison group was receiving counseling of some type.

Counseling on an individual basis was received by 59.4% of the students in both the exemplary and comparison groups. On a group counseling basis, 29.7% of the students in the exemplary group and 20.3% of the comparison group received this type counseling. The exemplary group had 71 individual counseling sessions while the comparison group had only 50.

During the counseling process 53.1% of the students in the exemplary group expressed an interest in an occupational choice whereas 54.7% of the students in the comparison group made such an indication.

FIGURE 6-4
 COUNSELING RECEIVED
 BY EXEMPLARY AND COMPARISON GROUPS
 IN HILLSBOROUGH COUNTY
 1970-71 SCHOOL YEAR

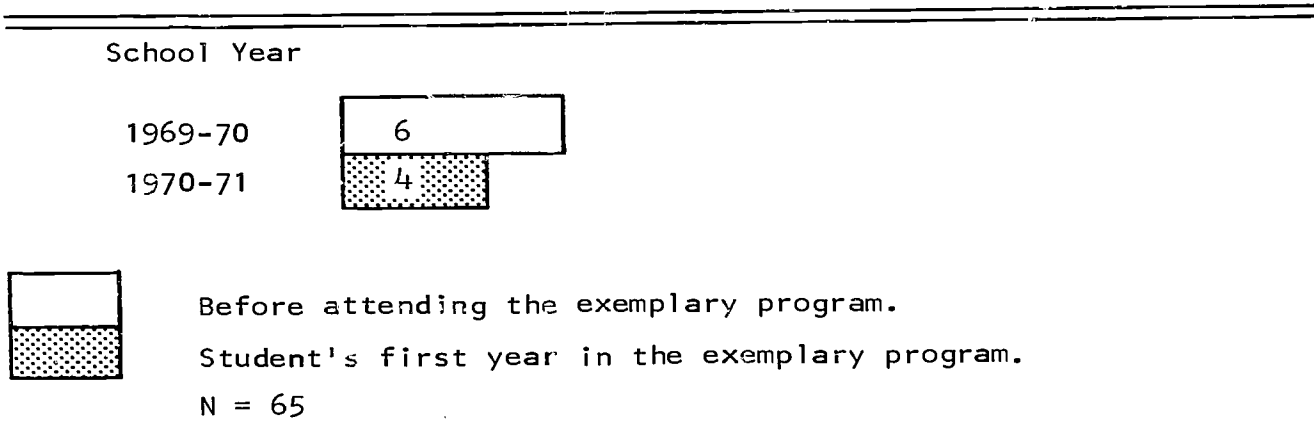


The number of individual counseling sessions was 71 for the exemplary group and 50 for the comparison group.

Confrontations with Law Enforcement Agencies

One purpose of this study was to ascertain answers to the question: do students experience fewer confrontations with law enforcement agencies during their first year in the exemplary program than they did during the year previous to entering the program?

FIGURE 6-5
 CONFRONTATIONS WITH LAW ENFORCEMENT AGENCIES
 BY STUDENTS IN THE EXEMPLARY PROGRAM
 IN HILLSBOROUGH COUNTY
 1969-70 AND 1970-71 SCHOOL YEAR



Data collected from law enforcement agencies (see Figure 6-5) reveals four confrontations by students in the exemplary group during their first year in the program and six confrontations by the same group during the year previous to entering the exemplary program. From the information presented, enrollment in the exemplary program had some effect toward reducing the number of student confrontations with law enforcement agencies.

Instructional Techniques

Teachers of students in the exemplary and comparison groups were asked to complete the Instructional Technique Inventory - UWF Form #1007 (see Appendix C), relative to the number and frequency of use of the different techniques used in their teaching. Twenty-two teachers of students in the exemplary group and 47 teachers of students in the comparison group responded. The checklist type instrument included 17 different instructional techniques with five categories, "Often; two or more times per week," and "Never" are included in Table 6-2 to best illustrate the comparison of the two groups. The data indicate that teachers of the exemplary students were more active in their classroom, they used a wider variety of different techniques more frequently than teachers of the comparison students. Of 17 different techniques included in the instrument the teachers of the exemplary students used 10 more often and more frequently than teachers of the comparison students.

TABLE 6-2

FREQUENCY OF INSTRUCTIONAL TECHNIQUES USED
BY TEACHERS IN THE EXEMPLARY AND COMPARISON GROUPS
IN HILLSBOROUGH COUNTY
1970-71 SCHOOL YEAR

| Technique | Frequency of Use | | | | |
|--|----------------------------------|---|-------|--------|-------|
| | Exemplary Comparison (N = 47) | Often: Two or more times per week | | Never | |
| | | Exp. | Comp. | Exp. | Comp. |
| Classroom Lecture | | 50.0% | 38.3% | 0 | 3.5% |
| Student Recitation | | 40.9% | 29.8% | 4.54% | 6.4% |
| Individual Instruction | | 81.8% | 57.5% | 4.54% | 2.1% |
| Large Gp. or Small Gp. Discussion | | 36.4% | 27.6% | 9.09% | 42.6% |
| Student Problem Solving | | 54.5% | 44.6% | 4.54% | 14.9% |
| Supervised Classroom Assignments | | 77.3% | 68.1% | 0 | 6.4% |
| Assigned Exercises | | | | | |
| . Supervised Classroom or Lab. | | 59.1% | 53.2% | 4.54% | 6.4% |
| . Homework | | 4.54% | 8.5% | 45.45% | 40.4% |
| Supervised Group Lab. Proj. & Prob. | | 36.4% | 10.6% | 22.7% | 43.9% |
| Supervised Individ. Lab. Proj. & Prob. | | 22.7% | 12.8% | 22.7% | 38.3% |
| Free Elective Lab. Projects | | 9.1% | 4.3% | 40.9% | 51.1% |
| Questions & Answers | | 54.5% | 38.3% | 4.5% | 2.1% |
| Written Exams | | 4.5% | 10.6% | 0 | 4.3% |
| Performance Exams | | 27.3% | 19.2% | 0 | 19.2% |
| Oral Exams | | 18.2% | 8.5% | 9.1% | 46.8% |
| Picture Exams | | 4.5% | 2.2% | 40.9% | 61.7% |
| Programmed Instruction | | 13.6% | 4.3% | 59.1% | 51.1% |

*Percent may not total 100

In the exemplary group 81.8% of the teachers indicated "Individual Instruction" as the technique most often used, two or more times per week, while in the comparison group "Supervised Classroom Assignments" was the technique most often used by 68.1% of the teachers, two or more times per week. Of the techniques also used often by the exemplary group, 77.3% of the teachers reported "Supervised Classroom Assignments," 59.1% reported "Assigned Exercises - Supervised Classroom or Lab," 54.5% reported "Questions and Answers," and "Student Problem Solving," 50.0%

reported "Classroom Lecture" as used two or more times per week. While in the comparison group 57.5% of the teachers reported "Individual Instruction," 53.2% reported "Assigned Exercises - Supervised Classroom or Lab," and 44.6% reported "Student Problem Solving" used two or more times per week.

Of the techniques less frequently used, in the exemplary group 59.1% of the teachers reported "Programmed Instruction," 40.9% reported "Free Elective Lab Projects" and "Picture Exams" as techniques "Never" used.

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Summary

The vocationally oriented exemplary program in Hillsborough County, which consisted of 200 students, 22 teachers, and four counselors, was housed in George Washington Junior High School along with 420 additional students enrolled in a traditional junior high school program.

For the purpose of the evaluation, 50 students and 15 alternates in the exemplary program were randomly selected as the exemplary group while 50 students and 15 alternates were selected from 150 students meeting the same criteria as students attending the exemplary program. The students in the comparison group attended schools other than George Washington Junior High School. Data were collected from students in the exemplary and comparison groups and teachers, counselors, and administrators of students in both groups.

The exemplary program offered 12.79 hours of vocational related instruction per student while an average of 1.18 hours per student were offered in the comparison schools. The exemplary school offered studies in more occupational areas than the comparison schools. In the exemplary group 75.0% of the students were enrolled in vocational and related instruction while 32.8% of the students in the comparison group were enrolled in vocational related courses.

In the exemplary group 61.7% of the students learned five or more entry level job skills while only 1.7% of the students in the comparison group did as well.

Students in the exemplary group scored slightly higher than the comparison group students on vocabulary skills, reading skills, spelling skills, and math skills. The difference was not significant.

Students in the exemplary group scored more positive than students in the comparison group on attitudes toward school and work habits while students in the comparison group scored more positive on attitudes

toward family relationship, the contribution of work in our society, and self-concept.

There was no significant difference between the groups relative to school drop-out and attendance rate.

In the exemplary group only 67.2% of the students received some counseling while 65.6% of the students in the comparison group received counseling of some type. While 59.4% of the students in each group received individual counseling, the exemplary group received 71 sessions while the comparison group received only 50 sessions. The exemplary students received more group counseling than the comparison students. While 53.1% of the students in the exemplary group expressed an interest in an occupational choice, 54.7% of the students in the comparison group made the same commitment.

Students in the exemplary group experienced four confrontations with law enforcement agencies during their first year in the program while the same group experienced six confrontations during the year previous to entering the exemplary program.

Teachers in the exemplary group used more different techniques in their classrooms than did teachers of the comparison group. While 81.8% of the exemplary teachers reported using individual instruction as the most often used technique, which would appear to support the purposes of the program, 59.1% of the same group reported that they never used "Programmed Instruction." Teachers in both groups demonstrated difficulty in writing performance objectives.

Conclusions

On the assumption that the instruments were valid, the data reliable and complete, and students were selected for both the exemplary and comparison groups with common criteria, the data suggests the following conclusions:

- A. Students enrolled in the exemplary program as compared to students in the academic-type program would be expected to:
 1. Develop more entry level manipulative-type job skills.
 2. Achieve equally well in vocabulary skills, reading skills, spelling skills, and math skills.
 3. Develop more positive attitudes toward the school and work habits, develop less positive attitudes toward family relationship, and the contribution of work in our society.
 4. Demonstrate an equal attendance rate and drop-out rate.

5. Receive and pursue instruction in more different vocational and related courses.
6. Receive more individual and group counseling.
- B. More students in the academic program would be expected to express interest in an occupational choice than students in the exemplary program.
- C. Students would be expected to experience fewer confrontations with law enforcement agencies after entering the exemplary program.
- D. Teachers in the exemplary program would be expected to use more different techniques more often than teachers in academic programs. Not enough teachers in the exemplary program will use individual student performance techniques to be consistent with the purpose of the program. Teachers in both groups will demonstrate difficulty identifying and writing performance objectives.

Recommendations

On the basis of the findings and conclusions, the following recommendations are presented to the Hillsborough County School Board for consideration and implementation:

1. Since students in the exemplary program developed considerably more manipulative-type job skills and achieved as well in basic education as students in academic-type programs, the traditional academic-type program should be closely evaluated as to the need of students. Program revisions should include a wide variety of instruction designed to enable students to make realistic career choices and pursue preparation directed toward their chosen career.
2. In the exemplary program, vocational counseling procedures should be structured to offer services to every student on a rotating, periodic schedule.
3. The exemplary instructional program should be evaluated and modified to produce higher achievement in basic education skills in reading, math, spelling, and communication and to produce more positive attitudes, self-concepts, and work habits.
4. Strong in-service teacher education programs should be offered to make teachers and supervisors in exemplary and academic programs familiar with the basic concepts of vocational education and the concepts and purposes of the exemplary program. Teachers and supervisors in both groups should receive instruction and assistance in identifying and writing course performance objectives.

ACHIEVEMENT OF FLORIDA'S VOCATIONAL EXEMPLARY PROGRAMS IN
DADE, DUVAL, HILLSBOROUGH, AND ESCAMBIA COUNTIES

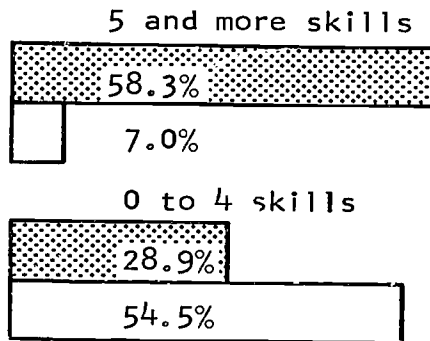
Program Description

The Beggs Educational Center in Escambia County and the Booker T. Washington Junior High School in Dade County along with the Career Education Center in Duval County and George Washington Junior High School in Hillsborough County were designated as exemplary vocational programs for the 1970-71 school year. The programs, located in the urban areas of Pensacola, Miami, Jacksonville, and Tampa, were established in old school buildings with inadequate facilities, materials, and supplies. The programs were designed to take students identified as the potential school drop-outs and push-outs who had experienced difficulties and frustration in traditional academic-type programs.

The purposes of the study were to ascertain answers to the following questions:

- A. Did students in exemplary programs as compared to students in traditional programs
 1. learn more entry level manipulative-type job skills?
 2. achieve more basic reading, communication skills, and math skills?
 3. develop more positive attitudes, personal traits, and work habits?
 4. demonstrate a higher attendance rate and a lower drop-out rate?
 5. receive more instruction in vocational and related courses?
 6. receive more individual counseling, group counseling, and support service, and did more students express an interest in an occupational choice?
- B. Did students experience fewer confrontations with law enforcement agencies during their first year in the exemplary program than they did during the year previous to entering the program?
- C. Did teachers in exemplary programs utilize more different teaching techniques than teachers in traditional programs?

FIGURE 7-1
 INSTRUCTOR'S EVALUATION OF STUDENT ACHIEVEMENT
 OF ENTRY LEVEL JOB SKILLS
 IN EXEMPLARY AND COMPARISON GROUPS
 IN DADE, DUVAL, ESCAMBIA, AND HILLSBOROUGH COUNTIES
 1970-71 SCHOOL YEAR




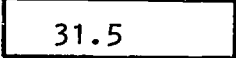


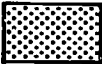

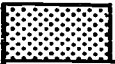

| | Sample Size | Returned Data |
|------------|-------------|-----------------|
| Exemplary | N = 260 | N = 228 = 87.7% |
| Comparison | N = 260 | N = 242 = 93.1% |



The purposes of this chapter are to report the achievements of the four exemplary programs in Florida during the 1970-71 school year.

In each exemplary program 50 students and 15 alternates were chosen as the exemplary groups while the comparison groups included 50 students and 15 alternates which were randomly selected from 150 students meeting the same criteria as students attending the exemplary program. Teachers of the 65 students in each group were then identified and utilized as teachers of students in the exemplary groups and teachers of students in the comparison groups. For most of the information requested from students and teachers, the returns were less than 100%.

Skills and Knowledge. Students enrolled in the vocationally oriented exemplary programs in the four centers in Dade, Duval, Escambia, and Hillsborough Counties did acquire more entry level job skills than comparison students enrolled in traditional academically oriented programs (see Figure 7-1). Usable data relative to entry level job skills were received for 87.7% of the students in the exemplary groups and 93.1% in the comparison groups. In the exemplary groups 58.3% of the students acquired five or more entry level job skills while only seven percent of the students in the comparison groups did as well. In the exemplary groups 28.9% failed to acquire at least four entry level job

FIGURE 7-2
 BASIC EDUCATION ACHIEVEMENT OF STUDENTS
 IN EXEMPLARY AND COMPARISON GROUPS
 IN DADE, DUVAL, ESCAMBIA, AND HILLSBOROUGH COUNTIES
 1970-71 SCHOOL YEAR

| Mean Scores | Standard Deviation | t-value |
|--|--------------------|---------|
| Vocabulary | | |
|  26.4 | 9.25 | -1.729 |
|  31.5 | 9.03 | |
| Reading | | |
|  41.3 | 11.14 | -0.0836 |
|  41.7 | 10.30 | |
| Spelling | | |
|  13.3 | 11.80 | +0.118 |
|  13.3 | 10.93 | |
| Arithmetic | | |
|  14.7 | 7.51 | -1.169 |
|  16.7 | 8.41 | |

| | | | |
|---|------------|------------------------|--------------------------------|
|  | Exemplary | Sample Size N = 260 | Usable Data N = 207 = 79.6% |
|  | Comparison | N = 260 | N = 221 = 85.0% |

t-value \geq 1.96 Significant at the .05 confidence level

skills while 54.5% of the students in the comparison groups performed at this level.

Academic Achievement. Usable data relative to academic achievement were received on 79.6% of the students in the exemplary groups and 85.0% of students in the comparison groups. Data were collected with the standardized instrument, Adult Basic Learning Exam (see Appendix C). Computed mean scores and t-values are included in Figure 7-2.

Data would indicate no significant difference between the two groups relative to scores on vocabulary, reading, spelling, and arithmetic.

Attitudes and Personal-Social Traits. Three instruments, "How I See Myself," "Personal-Social Traits Inventory," and "My Work-My School-My Country," were used to collect data from students and teachers in the exemplary and comparison groups relative to student attitudes and personal-social traits. Two hundred and two exemplary students and 227 comparison students responded to "How I See Myself"; 216 exemplary students and 243 comparison students responded to "My Work-My School-My Country" while teachers in the exemplary groups responded to the "Personal-Social Traits Inventory" on 216 of their students; and comparison group teachers responded to the same instrument on 229 of their students.

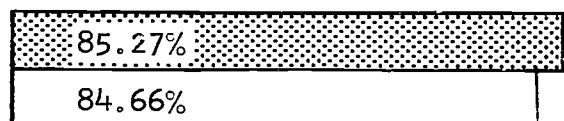
Data collected, tabulated by exemplary and comparison groups for the four counties, and treated statistically revealed that: there was no significant difference between the groups relative to scores indicating attitudes toward self-concepts, work in our society, school, family relationship, and peer relationship. There was a difference, significant at the .05 confidence level, favoring the exemplary group relative to scores indicating more positive attitudes toward work habits.

Attendance and Drop-Out Rate. Data relative to school attendance and drop-out rate were collected from the students' cumulative record at the end of the school year. Data were reported on 247 students in the exemplary groups and 256 students in the comparison groups. The ratio of days attended to the total number of days the student was enrolled in school yielded an attendance rate in percent (see Figure 7-3). A computed average of 85.27% for the students in the exemplary groups and 84.66% for students in the comparison groups and a t-value of 0.076 indicate no significant difference between the groups relative to attendance rate.

Thirty students in the exemplary groups were reported as dropouts while only 16 students in the comparison groups were reported as dropouts (see Figure 7-4). A computed Chi Square value of 5.26, significant at the .05 confidence level, indicates a higher drop-out rate for students in the exemplary groups.

Vocational and Related Courses Offered. Data relative to course offerings were collected from administrators of exemplary and comparison schools while data relative to student enrollment were collected from teachers of exemplary and comparison group students. Tabulated data indicate that students in the exemplary groups were offered more instruction in vocational related courses than students in the comparison groups. Averages computed for all four programs reveal that exemplary programs offered 10.1 hours per student while the comparison schools offered only 1.4 hours per student in vocational and related

FIGURE 7-3
 SCHOOL ATTENDANCE RATE BY STUDENTS
 IN THE EXEMPLARY AND COMPARISON GROUPS
 (MEAN SCORES IN PERCENT)
 IN DADE, DUVAL, ESCAMBIA, AND HILLSBOROUGH COUNTIES
 1970-71 SCHOOL YEAR



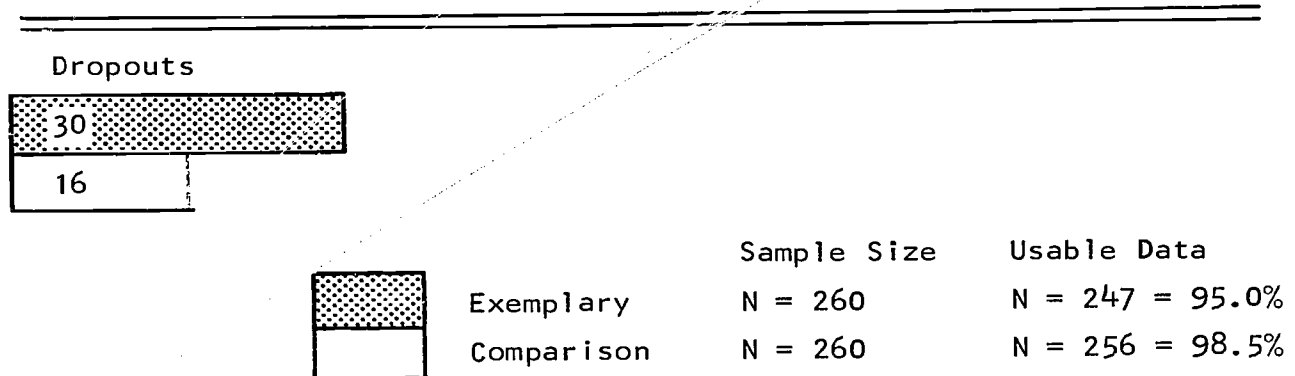
| | Sample Size | Usable Data |
|------------|-------------|-----------------|
| Exemplary | N = 260 | N = 247 = 95.0% |
| Comparison | N = 260 | N = 256 = 98.5% |

instruction. Students in the exemplary groups were offered a greater variety of instruction in different occupational or career fields than were offered to students in the comparison groups. While only 50.3% of the students in the comparison groups were enrolled in vocational related courses, 91.9% of the students in the exemplary groups were enrolled in vocational related courses (see Figure 7-5).

Counseling. Individual and group counseling information forms (see Appendix C - Student Guidance Inventory) for recording exemplary and comparison group counseling sessions and the student's expressed interest in an occupational choice were forwarded to the centers in late March and early April and returned to UWF after the schools terminated in June. The data collected represent counseling received for only a portion of the school year. Three counties reported information on both the exemplary and comparison groups while Escambia reported information only on the exemplary group.

Averages computed from the tabulated data for the four counties reveal a higher percentage of the students in the exemplary groups received counseling in groups with one or more other students than did students in the comparison groups (see Figure 7-6). A higher percentage of students in the exemplary group received individual counseling sessions than did students in the comparison group. Further, more students in the exemplary groups expressed an interest in occupational choice than did students in the comparison groups.

FIGURE 7-4
SCHOOL DROPOUTS
IN THE EXEMPLARY AND COMPARISON GROUPS
IN DADE, DUVAL, ESCAMBIA, AND HILLSBOROUGH COUNTIES
1970-71 SCHOOL YEAR



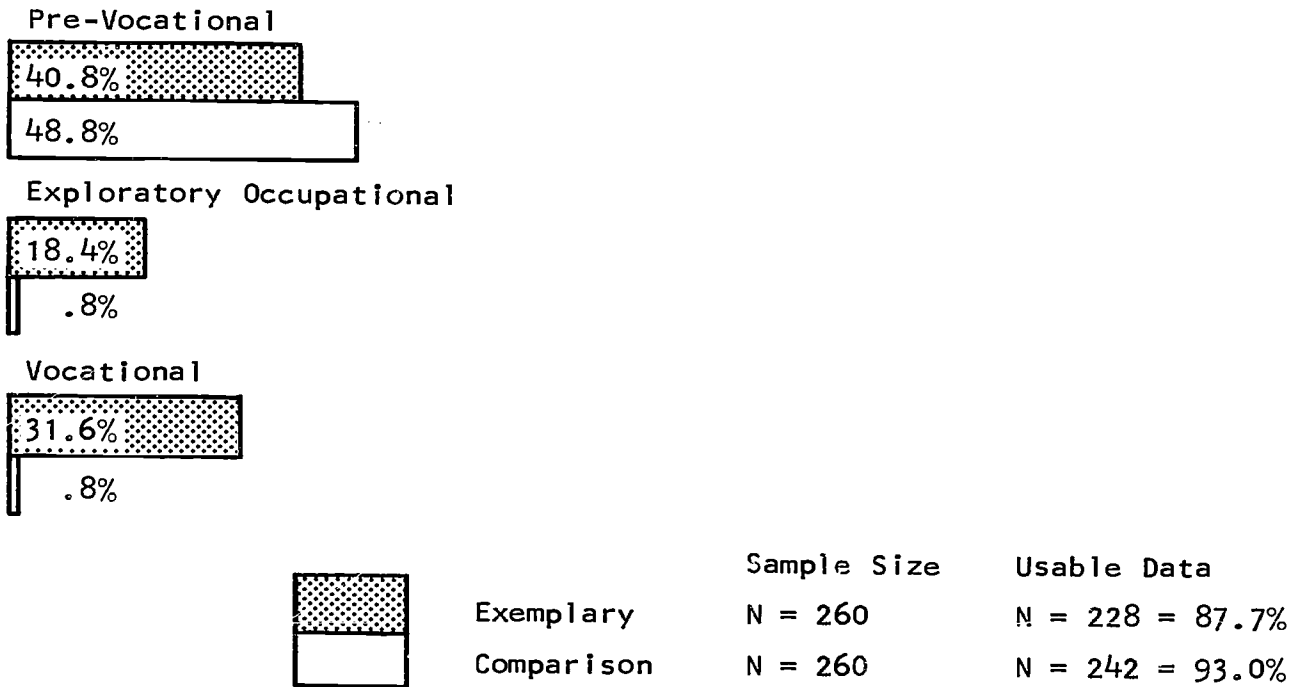
Confrontations with Law Enforcement Agencies. Data collected from law enforcement agencies revealed that students in the exemplary groups experienced fewer confrontations during their first year in the exemplary program than they did during the year previous to entering the program (see Figure 7-7). During the 1970-71 school year, 260 students in the four exemplary programs experienced 31 confrontations with law enforcement agencies. During the year previous to entering the exemplary program the same group experienced 42 confrontations.

Instructional Techniques. The "Instructional Technique Inventory" (see Appendix C for Instruments) was used to collect information from 86 teachers of the exemplary groups and 186 teachers of the comparison group students relative to the number of techniques used and the frequency of use. Tabulated data revealed that the exemplary teachers in Dade, Duval, and Hillsborough Counties used more techniques than did the exemplary teachers. Conversely, the comparison teachers in Escambia County used more techniques than did the exemplary teachers. A majority of the exemplary teachers in all four counties used individual instruction frequently while a large number of the same group indicated that they never used "Programmed Instruction" and "Picture, Performance, and Oral Exams." Teachers of both groups demonstrated difficulty in writing performance objectives.

Conclusion

Insofar as the instruments were valid, the data reliable and complete, and students were selected for the exemplary and comparison groups

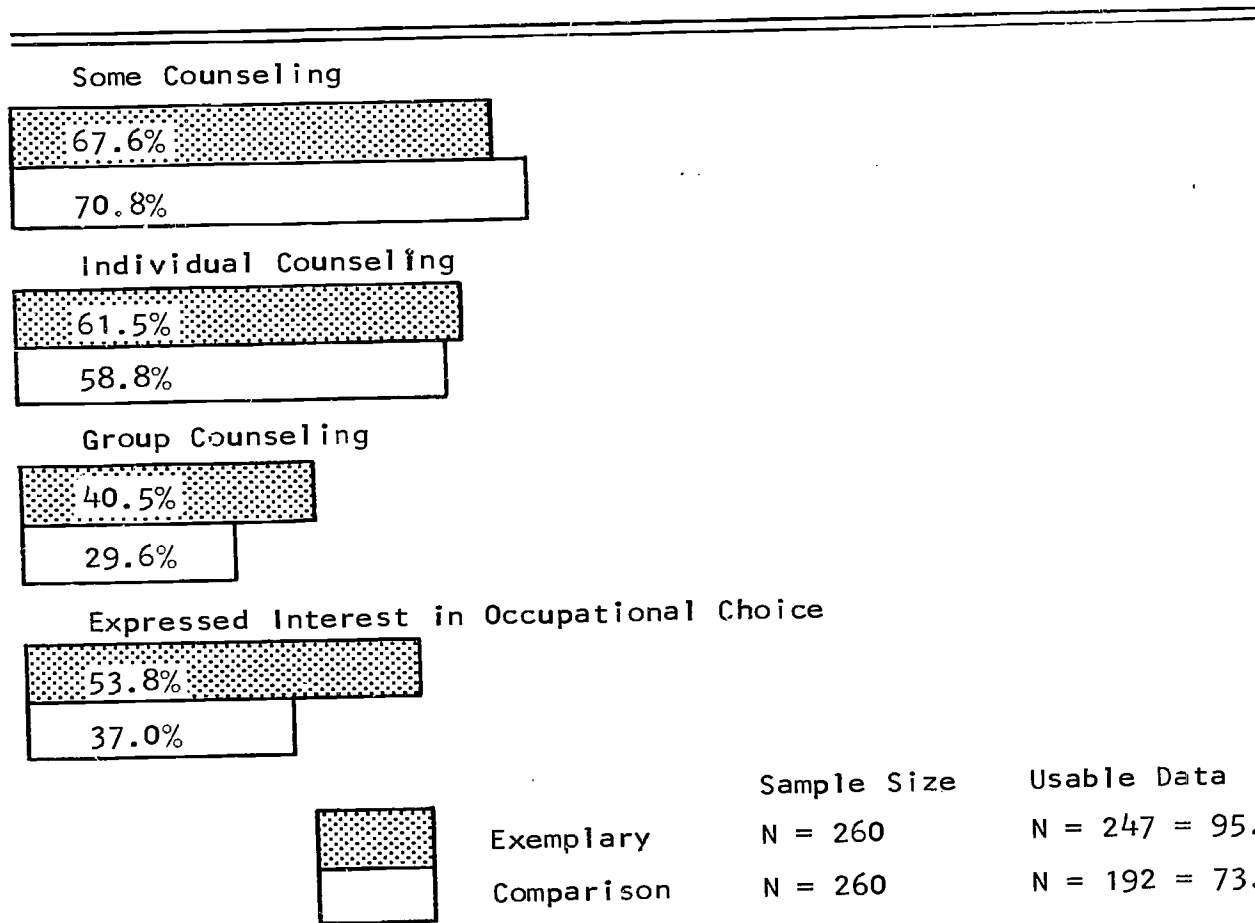
FIGURE 7-5
STUDENT ENROLLMENT IN VOCATIONAL RELATED COURSES
IN EXEMPLARY AND COMPARISON GROUPS
IN DADE, DUVAL, ESCAMBIA, AND HILLSBOROUGH COUNTIES
1970-71 SCHOOL YEAR



with common criteria, the data indicate the following conclusions:

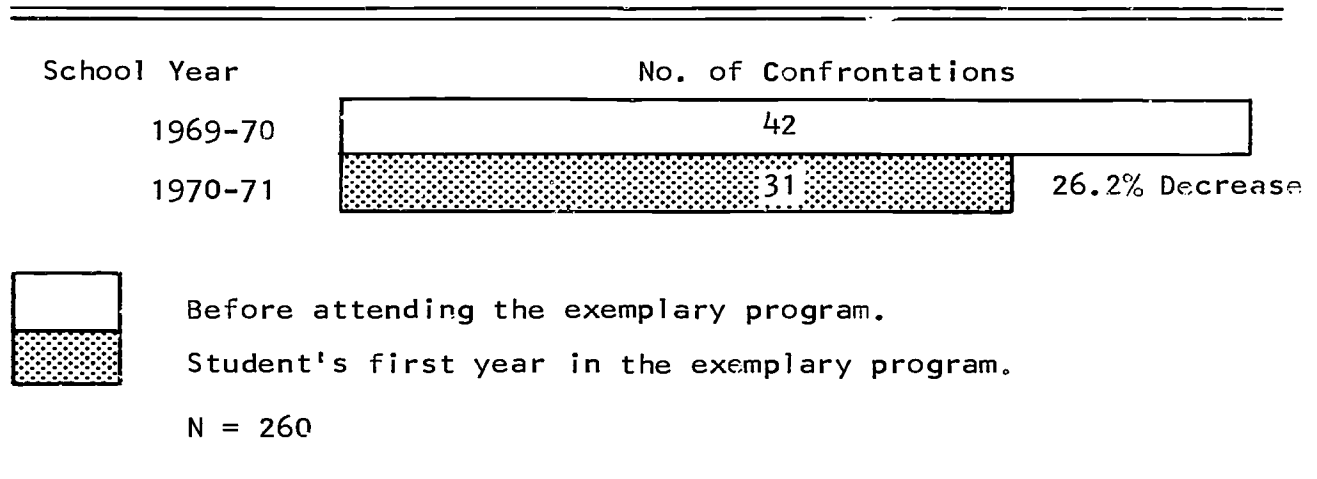
- A. Students enrolled in the exemplary programs as compared to students in traditional academic programs can expect to:
 1. learn more entry level manipulative-type job skills for employment.
 2. achieve equally well in reading skills, communication skills, and math skills.
 3. demonstrate more positive attitudes toward the school, peer relationship, work in our society, and work habits.
 4. demonstrate equal school attendance rate and a higher school drop-out rate.
 5. receive and pursue more instruction in vocational related courses.

FIGURE 7-6
 COUNSELING RECEIVED
 BY EXEMPLARY AND COMPARISON GROUPS
 IN DADE, DUVAL, ESCAMBIA, AND HILLSBOROUGH COUNTIES
 1970-71 SCHOOL YEAR



6. receive more individual and group counseling, and a larger percent of students in the exemplary program will express an interest in an occupational choice.
- B. Students attending exemplary programs can expect to experience fewer confrontations with law enforcement agencies during their first year in the exemplary program than they did during the year previous to entering the program.
- C. Teachers in the exemplary program can be expected to utilize different teaching techniques to the same degree as teachers in academic-type programs. While they can be

FIGURE 7-7
 CONFRONTATIONS WITH LAW ENFORCEMENT AGENCIES
 BY STUDENTS IN THE EXEMPLARY PROGRAM
 IN DADE, DUVAL, ESCAMBIA, AND HILLSBOROUGH COUNTIES
 1969-70 AND 1970-71 SCHOOL YEAR



expected to use individual instruction consistent with the purposes of the exemplary program, they can be expected to use other techniques which are inconsistent with the program. Teachers in both groups can be expected to exhibit difficulty writing performance objectives.

Recommendations

On the basis of the findings and the conclusions of the evaluation of four exemplary vocationally oriented programs in Dade, Duval, Escambia, and Hillsborough Counties, the following recommendations are presented to the Florida Department of Education for consideration and implementation:

- A. Since students in exemplary programs developed considerably more manipulative-type job skills for entry level employment and achieved as well in basic education as students in academic programs, county school boards should be encouraged to evaluate academic programs as to the needs of students. Program revision should include a wide variety of instruction designed to enable students to make realistic career choices and pursue preparation directed toward their chosen career.
- B. Since a higher percent of students in exemplary programs expressed an interest in an occupational or career choice

than students in academic programs, county school boards should be encouraged to provide adequate vocational guidance for the purpose of helping every student: (1) make a realistic career choice, (2) locate and enroll in training programs to become qualified for entry level employment, (3) become employed in the job trained for, and (4) adjust to the job.

- C. Since teachers in exemplary and comparison programs demonstrated difficulty identifying student performance objectives for their courses, county school boards should be encouraged to provide instruction for teachers in writing performance objectives which are measurable and can be read and interpreted by the student.
- D. Since recorded data relative to student achievement was vague and nonexistent in some programs, county school boards should be encouraged to provide adequate supervision to assist teachers in the analysis techniques of selecting course content and record keeping for improved instruction.

APPENDIX A

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APPENDIX B

CONSULTANTS FOR THE STUDY

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- Dr. Charles H. Wentz, Assistant Professor, Vocational-Technical Education, The University of West Florida, Pensacola, Florida.

APPENDIX C

INSTRUMENTS USED TO COLLECT DATA FOR THE STUDY

Instruments Purchased from Commercial Vendors

Adult Basic Learning Examination, Level II - Form A and B, Hartcourt, Brace and World, Inc., Test Department, 757 Third Avenue, New York, New York.

"How I See Myself" by Ira J. Gordon, Director, Institute for Development of Human Resources, College of Education, University of Florida, Gainesville, Florida.

My Work-My School-My Country, by Charles R. Lemley, The University of West Florida Bookstore, Pensacola, Florida.

Instruments Constructed by Investigator

Course Inventory, UWF Exemplary Form #1001.

Personal-Social Traits Inventory, UWF Exemplary Form #1003

Student Guidance Inventory, UWF Exemplary Form #1005.

Instructional Technique Inventory, UWF Exemplary Form #1007

Program Inventory, UWF Exemplary Form #1002.

COURSE INVENTORY

Student's Name _____ County _____ Date _____
 Sex: Male () Female () Age _____
 Name of Teacher Completing This Form _____

Course _____ Length in Hours _____
 Did student successfully complete this course? yes () no ()
 Total No. of Hours Student Attended _____ Did Student Drop Out? yes () no ()
 If yes, give the date _____
 Is this a cooperative type course? yes () no ()

Please indicate with a check mark (✓) the nature of this course.
 I () Pre-Vocational: Skill development course, Exploratory in Nature, (e.g. Industrial Arts, General Business, General Home Economics, or General Agriculture)
 II () Occupational Exploration: Instruction about occupations (e.g. job requirements, preparation, earnings, potential for advancement)
 III () Vocational: Instruction directed toward preparing students for entry level jobs

Directions: In this inventory the laboratory teacher is to write the major student performance objectives of his course in the space provided for below. Then he is to rate the designated students with a check mark (✓) in the columns provided indicating whether or not the student can perform the stated objectives (note the example).
 The major student performance objectives are to be filled in by the laboratory teacher.

| | | | | |
|---|--|--|--|--|
| Student can perform the task in a neat & workman-like manner. | | | | |
| Student can perform the task but has not developed speed & skill. | | | | |
| Student can perform the task if given time & directions. | | | | |
| Student cannot perform the task. | | | | |

Example: Student will be able to set a wiglet.

| | | | | |
|--|--|--|--|---|
| Course Objectives - Student Will Be Able To: | | | | |
| 1. | | | | ✓ |
| 2. | | | | |
| 3. | | | | |

Over - Use The Back Of This Sheet And Additional Pages If More Space Is Needed

PERSONAL-SOCIAL TRAITS INVENTORY

Student's Name _____ Date _____
 Sex: Male () Female () Age _____
 School _____ County _____
 Course _____ Teacher _____
 Number of hours student has been under the teacher's instruction _____

Directions to the teacher: Please furnish the information requested about the student whose name appears above on this information form. Also, furnish the information requested about the course and the teacher's name. On the form below indicate with a check mark (✓) in the block which in your judgment best describes where the student rates on the traits included. Do not approach the student for this information; this is confidential. Check only one block.

EXAMPLE: Students in Exemplary Vocational Programs are enrolled in:

- Special Schools
- Senior High Schools
- Junior Colleges
- Senior Colleges

1. Attitudes Toward Work - The student is:

- Not interested and does not generate much energy toward work.
- Mildly interested and wants to do only select jobs.
- Interested and seems to be motivated if instructed what to do and how to do it.
- Highly interested and he pursues work with energy and enthusiasm.

2. Attitudes Toward Self - The student's action and conversation appear to indicate that his self concept is:

- Low, he seems to have no confidence in his ability to learn and do things.
- Moderate, he seems to value his ability to learn and understands that his route to success comes through learning to do useful desirable things.
- High, he seems to know that success comes with determination.

STUDENT GUIDANCE INVENTORY

Student's Name _____ Age _____ Date (School Yr.) _____
 School _____ Sex: Male () Female ()
 County _____ Occupation of the: Father _____ Mother _____

DIRECTIONS: Please furnish the information about the student named above. Also, furnish the information for each counseling session with the student as indicated on the form below.

| COUNSELING SESSION | | | |
|--------------------|---|--|-------------------------|
| Date | No. of Students Present (check <input checked="" type="checkbox"/> one, <input type="checkbox"/> two or more) | Briefly Describe the Nature of the Session | Student's Occup. Choice |
| | | | |
| | | | |
| | | | |

INSTRUCTIONAL TECHNIQUE INVENTORY

Please give the information requested below.

Teacher's Name _____ School _____
 Date (School Year) _____ County _____
 Subject(s) Taught _____

Directions: Indicate with a check mark (✓) the frequency with which you use the instructional techniques listed below.

| Technique | Often: two or more times per week | Frequently: one time per week | Occasionally: once every 2 weeks | Rarely: once every 3 weeks or less | Never |
|---|-----------------------------------|-------------------------------|----------------------------------|------------------------------------|-------|
| Classroom Lecture | | | | | |
| Student Recitation | | | | | |
| Individual Instruction | | | | | |
| Large Group or Small Group Discussion | | | | | |
| Student Problem Solving | | | | | |
| Supervised Classroom Assignments | | | | | |
| Assigned Exercises | | | | | |
| Supervised Classroom or Laboratory Home Work | | | | | |
| Supervised Group Lab Projects & Problems | | | | | |
| Supervised Individual Lab Projects & Problems | | | | | |
| Free Elective Laboratory Projects | | | | | |
| Questions & Answers | | | | | |
| Written Exams | | | | | |
| Performance Exams | | | | | |
| Oral Exams | | | | | |
| Picture Exams | | | | | |
| Programmed Instruction | | | | | |
| Others (please list) | | | | | |

PROGRAM INVENTORY

School _____ County _____ Date _____

DIRECTIONS: Please list, in the space provided below, all of the vocational and related courses offered in your school during the school year. Also, indicate the length of the course in hours and the primary purpose of each, in columns I or II or III, and if the course is a cooperative arrangement with business or industry, in column IV, as in the example.

Total School Enrollment _____

PURPOSE OF THE COURSE:

- I Pre-vocational: Skill development course, Exploratory in Nature, (e.g. Industrial Arts, General Business, General Home Economics, or General Agriculture)
 - II Occupational Exploration: Instruction about occupations (e.g. job requirements, preparation, earnings, potential for advancement)
 - III Vocational: Instruction directed toward preparing students for entry level jobs
 - IV Cooperative Type Course: Instruction given by the school along with the cooperation of business or industry
- Length of Course in Hours _____

| NAME OF COURSE | | IV | III | II | I |
|---------------------------|----|----|-----|----|---|
| EXAMPLE: General Business | 90 | | | | ✓ |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
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| 19. | | | | | |
| 20. | | | | | |

USE THE BACK OF THIS SHEET IF MORE SPACE IS NEEDED

APPENDIX D
TYPICAL OBJECTIVES

Exemplary Groups

Measure and record vital signs (pulse, respirations, and blood pressure).
Operate cash register.
Properly build and install high fidelity and stereo equipment.
Bathe a baby properly.
Construction from a simple schematic diagram.
Demonstrate the safe and proper procedure for lighting a gas torch.
Perform basic tune ups on automobiles.
Wire circuits in series and parallel.
Learn the proper way to give a manicure.
Use a credit card correctly.
Develop an awareness of self realization.
Operate with competence duplicating machines and reproduction.
Read and use meters.
Properly build simple test equipment.
Change, rotate, and balance tires.
Use properly the hand tools of the electrical trade.
Locate the pulse areas.
Use of Ohm's law.
Properly test a battery with a hydrometer.
Mixing mortar.
Window cleaning.

Comparison Groups

Design an experiment to test for presence of CO_2 .
Buy wisely.
Be able to use whole numbers and fractions.
Fit and hang a cabinet door.
Identify parts of speech.
Tell the difference in plants.
Construct a simple garment.
Arc weld on mild steel.
Set up circular saw and cut a miter.
Add, subtract, multiply, and divide.
Print pictures from a roll of film.
List important events in U.S. history.
Mechanical drawing.
Rubber stamp making.
Printing on press.
Produce parts and assemble products.
Read and understand maps.
Student performs well on test.
Type 24 words a minute
Plan and prepare a nutritious meal.
Feed and care for farm animals.

APPENDIX E
CORRESPONDENCE FROM COUNTY SUPERINTENDENTS
APPROVING USE OF INSTRUMENTS



D T. CHRISTIAN
OMMISSIONER

STATE OF FLORIDA
DEPARTMENT OF EDUCATION

TALLAHASSEE 32304

September 16, 1970

CARL W. PROEHL
DIRECTOR
DIVISION OF VOCATIONAL, TECHNICAL,
AND ADULT EDUCATION

Dr. Cecil Hardesty
Superintendent of Schools
508 Duval County Courthouse
Jacksonville, Florida 32202

Dear Dr. Hardesty:

This letter is in regard to the exemplary program "An Exemplary Model for a Total Ecological Approach to Non-Graded Vocational Programs in Separate Educational Centers" funded in part through grants from this office.


As part of the operation of exemplary programs, it is required that an evaluation by an outside agency be conducted. The Department of Education has approved a proposal for evaluating the four exemplary programs established in Florida to be conducted by Dr. Hobdy Perkins, Chairman, Vocational Department, University of West Florida.

Dr. Perkins is developing evaluative instruments and selecting appropriate existing tests to be used in the evaluative program. Copies of the proposed instruments to be used and a time schedule for the administration of those instruments will be submitted to you for approval. When approval is granted, copies of the instruments will be submitted to the U. S. Office of Education for approval. Only those instruments approved by you, the Division of Vocational Education, and the U. S. Office of Education will be utilized to assess the effectiveness of exemplary programs in Florida. I am attaching a copy of the approved evaluation project so you will be aware of the procedure to be used.

Dr. Cecil Hardesty
September 16, 1970
Page 2

I appreciate your continued efforts to improve vocational programs. Please let me know if I can be of further assistance to you.

Cordially yours,


Carl W. Proehl, Director
Division of Vocational, Technical
and Adult Education

CWP:KE:lm

Attachment

cc: Mr. Dave Brown
Mr. Robert McDuffie
Mr. Wayne Cantrell
Mr. Marion Bishop
Mr. C. M. Lawrence
Dr. Hobdy Perkins



STATE OF FLORIDA
DEPARTMENT OF EDUCATION

TALLAHASSEE 32304

September 16, 1970

CARL W. PROEHL
DIRECTOR
DIVISION OF VOCATIONAL, TECHNICAL,
AND ADULT EDUCATION

DYD T. CHRISTIAN
COMMISSIONER

Dr. Hobdy Perkins, Chairman
Department of Vocational Education
University of West Florida
Pensacola, Florida 32504

Dear Dr. Perkins:

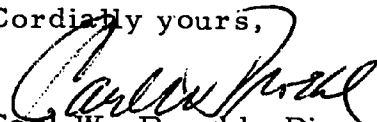
Enclosed are some articles about evaluation and evaluative instruments which may be helpful in your search. Also, enclosed are copies of letters sent to district superintendents to explain your mission.

It is necessary to approve evaluation instruments before they are submitted to district superintendents for approval; therefore, I shall appreciate your keeping me informed as progress is made in program evaluation and instrument development.

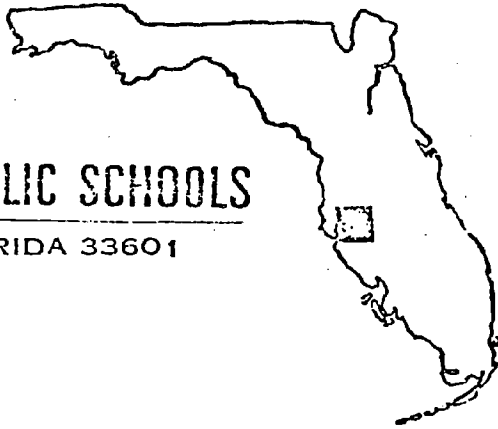
Thank you for copies of the final report for the summer workshop conducted at the Beggs Center. I shall refer it to appropriate personnel on my staff for review.

Please contact me if I can be of assistance with your exemplary evaluation efforts.

Cordially yours,


Carl W. Proehl, Director
Division of Vocational, Technical and
Adult Education

CWP:KE:lw
Encl.



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SUPERINTENDENT OF SCHOOLS
 RAYMOND O. SHELTON

HILLSBOROUGH COUNTY PUBLIC SCHOOLS

P. O. BOX 3408 TAMPA, FLORIDA 33601

(813) 223-2311

November 20, 1970

Dr. Carl W. Proehl, Director
 Division of Vocational, Technical
 and Adult Education
 Department of Education
 Tallahassee, Florida 32304

Dear Dr. Proehl:

The evaluative instruments for the George Washington Junior High School Exemplary Program were reviewed by Mr. Erwin's staff. It is our judgment that the Adult Basic Learning Examination, Level 2, Form A, and Level 1, Form A, are appropriate for use in our program.

Several of the inventories developed by the University of West Florida will be useful in our evaluation. These are the Inventories of Occupational Exploration Courses, and the Inventories of Pre-Vocational Skill Development Courses. Also the Self-Rating Scale for students developed by the Institute for the Development of Human Resources, at the University of Florida, seems sufficient for evaluating attitudinal changes.

We feel that the tests of Adult Basic Education, Level M, Form 1, and Level D, Form 1, and the Inventories of Salable Skills Developed, and Vocational Courses Taken, are not compatible with the Junior High School Exemplary Program. These instruments may very well be appropriate for some of the other exemplary programs, but we feel that the nature of our program is such that they could not be of value in our assessment.

Thank you very much for your continued interest in, and support of the Vocational Programs in Hillsborough County.

Yours truly,

Raymond O. Shelton
 County Superintendent

ROS:RLS/am

- cc: Dr. Kenneth M. Eaddy
 Mr. D. G. Erwin
 Mr. R. L. Smouse, Jr.
 Mr. John Alfano
 Mr. Carl Miller
 Mr. James Woods

100



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J. E. HALL
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 SUPERINTENDENT
JORDAN
 DIRECTOR

November 17, 1970

Dr. Carl W. Proehl, Director
 Division of Vocational, Technical and
 Adult Education
 State Department of Education
 Tallahassee, Florida 32304

Dear Dr. Proehl:

Members of the County Staff and the Staff at Beggs Educational Center
 have examined the instruments for evaluation of the exemplary programs
 and find them acceptable.

We recommend they be used with these programs.

Very truly yours,

J. E. Hall, Superintendent

nl

NOV 19 1970
 DIVISION OF VOCATIONAL EDUCATION
 & ADULT EDUCATION

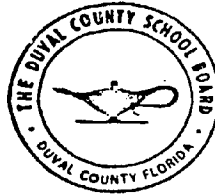
THE DUVAL COUNTY SCHOOL BOARD

11-25-4

DUVAL COUNTY COURTHOUSE

330 EAST BAY STREET

JACKSONVILLE, FLORIDA 32202



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CECIL D. HARDESTY
SUPERINTENDENT OF SCHOOLS

23 November 1970

Dr. Carl W. Proehl, Director
Division of Vocational, Technical
and Adult Education
State Department of Education
Tallahassee, Florida

Dear Dr. Proehl:

Members of the district staff have reviewed the instruments to be used by the University of West Florida in collecting data.

Based on the staff's review and recommendation, I grant permission for said instruments to be used in the district's Career Education Center Exemplary Program.

The district is grateful for the opportunity to participate in the Exemplary Program and will cooperate in every possible way.

Sincerely yours,

Cecil D. Hardesty
Superintendent of Schools

CDH:DAB:bb

cc- Dr. D.W. Johnson
cc- Dr. Kenneth Eaddy
cc- Mr. B.J. McDuffie

11-30-15

DADE COUNTY PUBLIC SCHOOLS
ADMINISTRATION OFFICES

E. L. WHIGHAM
SUPERINTENDENT OF SCHOOLS

LINDSEY HOPKINS BUILDING
1410 N. E. 2ND AVENUE MIAMI, FLORIDA 33132

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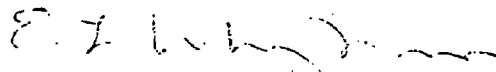
November 24, 1970

Dr. Carl W. Proehl, Director
Division of Vocational, Technical
and Adult Education
State Department of Education
Tallahassee, Florida 32304

Dear Dr. Proehl:

Please accept this letter as permission to use the instruments attached to your correspondence of November 2, 1970, for collecting data in the Vocational Exemplary Project provided that agreement is reached to the identity of the students to be tested and the time and place of such testing.

Sincerely yours,

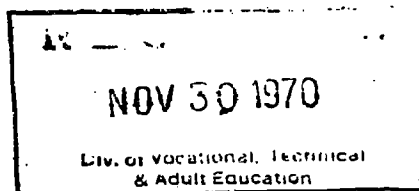


E. L. Whigham
Superintendent of Schools

ELW/EU/km

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APPENDIX C

CURRICULUM MATERIALS DEVELOPED

APPENDIX C

Curriculum Materials Developed

Curriculum and instructional materials have been submitted to the Division of Vocational and Technical Education, Bureau of Adult, Vocational and Technical Education, Office of Education, Department of Health, Education and Welfare, and to the Educational Resources Information Center.

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THE
HISTORY
OF
THE
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STATES
OF
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