DOCUMENT RESUME

ED 086 870 95 CE 000 905

TITLE	Mobile County and Phenix City Research and Development Project in Career Education. Final Report.
INSTITUTION	Alabama State Dept. of Education, Montgomery. Div. of Vocational Education.
SPONS AGENCY	Bureau of Adult, Vocational, and Technical Education (DHEW/OE), Washington, D.C.
REPORT NO	V261011L
PUB DATE	27 Aug 73
GRANT	OEG-0-72-0791
NOTE	223p.
EDRS PRICE	MF-$0.65 HC-$9.87
DESCRIPTORS	*Career Education; Community Involvement; *Educational Objectives; Elementary Grades; Evaluation; Instructional Programs; Leadership Training; Middle Schools; Placement; *Program Development; *Research Projects; Secondary Grades; Self Concept; Testing; Vocational Counseling
IDENTIFIERS	*Alabama; Career Awareness

ABSTRACT

Goals of the career education research project, January 1972-July 1973, at Mobile County Public School System, Alabama, were to produce a model for implementing career education programs in local schools and to developmentally implement a program of career education. Additional goals at Phenix City Public School System, Alabama were to broaden occupationally related experiences of the student and to develop positive attitudes toward work, school, and self (occupational orientation program, elementary school; career education program, middle school; placement service, high school). The Phenix City project involved a 20-day workshop, development of 54 instructional units through which career education could be implemented in the classroom. Student reaction to career education was overwhelmingly positive and teacher attitudes were highly favorable towards the concept of career education. The report includes coverage of leadership training, teacher training, counseling, placement, instruction, community involvement, management, dissemination, and evaluation aspects, and testing results of The Career Development Inventory, self-concept scales, and the semantic differential measure. About one-third of the report is devoted to appendixes. (EA)

FINAL REPORT

Project No. V261011L
Grant No. OEG-0-72-0791

Mobile County and Phenix City Research and Development Project in Career Education

Conducted Under
Part C of Public Law 90-576

Dr. James R. Bishop
State Project Director
Division of Vocational-Technical & Higher Education
Alabama State Department of Education
501 Dexter Avenue
Montgomery, Alabama 36104

August 27, 1973

FINAL REPORT

Project No. V261011L
Grant No. OEG-0-72-0791

Research and Development Project in Career Education

Conducted Under
Part C of Public Law 90-576

The project reported herein was performed pursuant to a grant from the Bureau of Adult, Vocational, and Technical Education, Office of Education, U.S. Department of Health, Education and Welfare. Grantees 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.

Dr. James R. Bishop
State Project Director
Division of Vocational-Technical
and Higher Education
Alabama State Department of Education
501 Dexter Avenue
Montgomery, Alabama 36104

August 27, 1973

TABLE OF CONTENTS

LISTS OF TABLES AND FIGURES

TABLES

FIGURES

ABSTRACT

Project development: Phase I began with:

a. conceptualization of the project;

b. establishing communications with appropriate agencies;

c. identifying and contacting informational, support and consultative sources; and

d. employment of a project director and a project secretary.

The project director then assumed the responsibilities for developing the theoretical framework for the project, for finalization of the project proposal and for interviewing and employing the remaining project personnel (funded positions). Finally, the identification and structuring of community resources as a usable tool was accomplished during this phase.

Phase II consisted of:

a. Staff development activities for project leadership personnel;

b. A four-week workshop for the eight elementary liaison teachers; and

c. In-service activities for project school faculties.

Phase III implemented research and development which included:

a. Assessment of the existing curriculum;

b. Compiling a bibliography of available materials;

c. Structuring grade level and subject area objectives and processes;

d. Identification of content;

e. Continual assessment, redefinition, and restructuring of objectives, processes and content; and

f. Implementation of counseling and placement services.

V. Summary of the Report

A. Time period covered by the project was January 13, 1972, through July 31, 1973.

B. Goals and Objectives of the Project.

Two LEA sites were chosen to carry out the project, Mobile County Public School System and Phenix City Public School System. The goals of the project were:

1. Mobile

a. To develop a comprehensive plan for fusing career education concepts with the existing curriculum, thus producing a model for implementing career education programs in local schools.

b. To developmentally implement a program of career education in the Mobile County Public Schools, through research and development, in ten pilot schools.

2. Phenix City

Goals a and b were directed toward broadening the occupationally related experiences of the student and toward developing positive attitudes toward work, school and self.

a. To provide an occupational orientation program at the elementary school level (grades 1-5).

b. To provide a career education program at the middle school level (grades 6-8).

c. To provide a placement service for work study, work experience and work exploratory programs for students in grade levels 11 and 12 and on a restricted basis for grade levels 9 and 10 and to provide a placement service for graduating seniors in either post-secondary education or a job.

C. Procedures Followed:

1. Mobile

Staff: Seven full-time persons and ten pilot schools were involved. These schools were four elementary, four middle schools, and two high schools.

Phase IV consisted of program analysis, recommendations for modifications, completion of the career education model and dissemination.

2. Phenix City

The project was initiated via a twenty-day workshop in which twenty-two teachers and two coordinators participated. Fifty-four instructional units through which career education could be implemented in the classroom were developed.

Staff: Five full-time persons and three pilot schools. These schools were one elementary, one middle, and one high school.

Project development:

a. Through guidance, counseling, and classroom activities selected occupational information was disseminated to develop the student's capability of making wise choices.

b. In the elementary school an integrated approach was used to refocus appropriate segments of the curriculum around a career awareness theme.

c. At the middle school the procedures used were:

(1) to refocus traditional subject matter around the career education theme;

(2) to survey and utilize products of recent curriculum developments;

(3) to develop a curriculum based on the 15 career clusters; and

(4) to develop 4 to 6 week mini-courses in occupational exploration.

d. Set up a part-time placement effort at high school level in cooperation with the placement coordinator, counselors, and vocational staff.

D. Results and Accomplishments

1. Mobile

a. Leadership Training

After using various activities to introduce the career education concept to project leadership, these people have so internalized the career education concepts and objectives that including them as a normal and integral part of all instructional efforts has become second nature.

b. Teacher Training

A variety of teacher training activities were utilized and at the close of the school year, approximately three hundred twenty-five of the three hundred eighty project school teachers had been identified as being actively engaged in implementing career education in their classrooms.

c. Counseling

In addition to working with teachers, the two middle school resource persons and one of the high school resource persons were engaged in group counseling.

All sixth grade students in the four project middle schools, all ninth and tenth grade students at one school, and all eleventh and twelfth grade students at another school were involved in at least one group counseling session per week for twelve weeks.

d. Community Involvement

At the close of the project, over five hundred community resource persons had been used in the project; one hundred seventy-five field trips had been taken; and over six thousand pieces of free, occupationally-related material had been collected.

e. Materials Production

Materials produced by the project are as follows:

(1) A bibliography of career education related materials available in the materials center and in the project schools;

(2) eight career education units;

(3) an elementary career education evaluation instrument; and

(4) a career education model including implementation techniques and approximately three hundred adaptions of career education and existing curriculum concepts and objectives which can be used by teachers.

2. Phenix City

Teacher attitudes were highly favorable towards the concept of career education. Surveys indicated that most were pleased with their involvement in career education and felt it was beneficial to students. All teachers noted that it did require extra effort and in the beginning was more difficult than traditional teaching. Very few negative comments were received. Student reaction to career education was overwhelmingly positive. On a 14-item questionnaire for students to react anonymously to their teacher's use of career education, the students reacted positively over 84% for all but three items. These three items related to not enough field trips, resource persons and hands-on-experiences. Conclusions drawn from this questionnaire and terminal projects submitted by the students indicate that the project was highly successful.

Parent and community reaction to the project was positive. The business community was highly cooperative in efforts to obtain resource persons, places for field trips, and other assistance.

The project resulted in involving 227 students in grades K-5, 1,500 students in grades 6-8 in the cluster curriculum exploratory effort and some of these 1,500 students were exposed to a subject relating curriculum effort in eight classes in the three grade levels.

The high school placement program was involved on a pilot basis in the placement of 129 students in part-time employment in addition to the 140 students who were in the cooperative education program.

E. Evaluation:

1. Mobile

The third party evaluation of this project was under the directorship of Dr. Ray M. Loree, University of Alabama.

The evaluation was divided into the following four areas:

a. Personnel;

b. Staff development;

c. Program objectives; and

d. Program implementation.

1-A Results of Evaluation

a. Personnel were assigned who met the qualifications specified in the project proposal. A close fit was found between the assigned personnel and the duties they performed as determined by a sample of activity reports prepared by the Career Resource Specialist, and by a sample of activities outlined in quarterly reports.

b. A thorough job of staff development took place. Regular meetings of the project leadership personnel occurred. Pre-school workship periods were planned and the plans were carried out and an extensive in-service program for participating teachers and other key personnel was developed.

c. Program objectives were evaluated through the use of the Career Development Inventory at the middle and high school level and by an instrument developed localiy at the elementary level. These tests were administered to a sample of fourth, fifth,

eighth, and eleventh grade students in May, 1973. The analysis of variance technique was used to analyze the test results from the eighth and eleventh grade students. Two effects were examined: experimental group versus the control and students from schools located in low socio-economic neighborhoods (henceforth called "Low Press") versus students from schools located in high socio-economic neighborhoods (henceforth called "High Press"). Scores on each of the three parts of the Career Development Inventory were examined in the above manner. Statistical significance at the .05 level was found in the following cases: High Press versus Low Press on the Information and Decision Making part of the test at the eighth grade level; Experimental versus Control and Interaction on the Planning Orientation part of the test at the eleventh grade level; and Experimental versus Control and Interaction on the Information and Decision Making part of the test at the eleventh grade level.

No analysis was performed on the locally constructed elementary test, since the test was known to need revision. An item-analysis is presently being done on this instrument at the University of Alabama and a revised instrument will be completed by September, 1973.

d. The program implementation component was evaluated by comparing the planned program and the implemented program. This was accomplished through examination of quarterly reports. An exceptionally fine job of production and selection of learning activities was noted, particularly at the elementary school level. The successful effort to involve the community was impressive. A good start was made in the development of the counseling and the placement components of the program. The effort to fuse career education concepts to the existing curriculum is deserving of high praise. A very good correspondence was found between the planned program and the implemented one.

2. Phenix City

The third party evaluation results are reported in Table I.

	GRADE LEVEL	INSTRUMENT	CRITERIA	RESULTS
COGNITIVE	1-2	Occupational picture matching test	75% will match 10 picture groups of workers to picture groups of items used by the workers with 75% accuracy.	82% attained 75% accuracy
	1,2,3	None		
	3,4,5	Teacher made test of Occupational Knowledge	75% will name a minimum of 8 jobs in each of 4 occupational clusters and give at least 2 duties for each job.	81% achieved this
	6,7,8	Teacher made Occupational Knowledge Test	80% will name a minimum of 10 occupations for each occupational cluster to which exposed, give at least 2 duties of each occupation, and indicate what level of training is required for each occupation with 70% accuracy.	86% attained criteria
	6,7,8	Teacher made test	80% will name a minimum of 5 jobs for which each of his basic subjects (Language, Arts, Math, Social Studies, & Science) are needed with 70% accuracy.	93% attained criterion

TABLE I

	GRADE LEVEL	INSTRUMENT	CRITERIA	RESULTS
COGNITIVE	11,12	Placement High School Questionnaire	96% will indicate a knowledge of the Placement Service.	99% of 100 students indicated knowledge of the placement service
AFFECTIVE	1,2,3	I Feel--Me Feel	75% develop a more positive attitude toward self.	64% showed an increase
	4,5	Self Esteem Inventory	75% develop a more positive attitude toward self.	50% showed an increase
	4,5,6, 7,8	Semantic Differential	75% develop a more positive attitude toward school.	41% developed a more positive attitude toward school--52% more negative
	4,5,6, 7,8	Semantic Differential	75% develop a more positive attitude toward work.	46% developed a more positive attitude toward work--46% more negative

TABLE I, (Cont.)

	GRADE LEVEL	INSTRUMENT	CRITERIA	RESULTS
AFFECTIVE	6,7,8	Self Esteem Inventory	75% will develop a more positive attitude toward self.	54% exhibited positive gains
	6,7,8	Student Evaluation of Teacher Questionnaire		Positive response
COGNITIVE-AFFECTIVE	4,5	Occupational Questionnaire	45% showed increase in understanding of value of work. 25% no change in attitude. 30% exhibited slight decrease.	
	6,7,8	Occupational Questionnaire	49% increase in understanding of value of work. 27% no change. 24% decrease.	

All instruments were administered to a randomly selected sample of students. The instruments measuring affective change were administered pre and post. The cognitive measures were determined from post tests. The cognitive-affective instruments were given pre and post.

TABLE I, (Cont.)

F. Conclusions and Recommendations:

1. Mobile

The following are indicative of the justification for implementing Career Education locally at the earliest possible date:

a. In September, it was found that only 15-20 percent of the senior-class students enrolled in one of the project high schools had definite plans for furthering their education or pursuing an occupation after graduation from high school.

b. Steady increases in student requests for career counseling were noted by project school guidance counselors during the project period.

c. Student reactions to Career Education activities have been overwhelmingly positive.

d. Only about ten percent of the 10,000 youths, ages 16-21, who annually apply for work at the local Youth Opportunity Center can be placed. The main deterrent to placement is lack of job-entry skills.

e. There are unfilled jobs in the community and there are unemployed persons in the community who could fill them if they had the training.

f. Considerable amounts of career-related materials are already available in existing school libraries and in the Materials Center. Although many of the materials need updating and revising, this finding has implications for the implementation of Career Education in schools at <u>minimal initial</u> costs for materials.

g. Although the evaluation results indicated more gains by career education in schools located in lower socio-economic areas, it is believed that development of more sensitive instruments will better detect increases in schools in higher socio-economic areas.

Career Education is so logical and so obvious that it is almost inconceivable that professional educators could have ignored it for so long. It is recommended that all resources in the school system be utilized in the immediate implementation of Career Education at all levels and in all areas of the instructional program so that upon leaving school, all students will have made at least tentative career choices commensurate with their interests and potential and are sufficiently prepared to enter: (1) a job; (2) a post-secondary job-training program; and/or (3) a baccalaureate program.

2. Phenix City

Recommendations:

Based upon the results of the evaluation, the following recommendations regarding the Career Education program are offered:

a. Due to the success of the Career Education project and the positive influence it has exerted throughout the school system, the program should be continued for the following school year.

b. The units of instruction, the program of teacher preparation, and the general design and format of the Phenix City project should be made available to other school systems intending to initiate a Career Education program.

c. Since Career Education is basically an integrative educational effort, emphasis in future programs should be focused on integrating Career Education concepts into the subject relating areas with a decreased emphasis on the mini-course exploratory clusters.

d. The curriculum effort in Career Education, limited to the Elementary and Middle School levels in the present project, should be extended to include all Grade levels 1-12.

e. More emphasis should be placed on terminal placement services at the Varsity level in future programs.

A. PROBLEM

1. Mobile

Project Problem

The problem toward which the project was directed was in the area of interpreting the scope and sequence of the career education concept for local implementation; developing career education concepts and objectives for implementation in the classroom; and determining processes for fusing career education concepts and objectives with the existing curriculum.

Purpose of Project

As outlined on page 22 of the project proposal, the purposes of the project were:

1. To develop a comprehensive plan for fusing career education concepts with the existing curriculum which could serve as a model for implementing career education programs in local schools.

2. To developmentally implement a program of career education in the Mobile County Public Schools, through research and development, in ten project pilot schools.

Research and Development

Research and development was half of the dual role of the project in that it was perceived as being concerned with development of a career education model for long-range implementation.

Research and development activities involved:

1. Assessment of priority needs.

2. Review of literature in psychology, sociology, economics, occupational information, and education methods and materials.

3. Collection and review of free, loaned, and purchased commercial materials for examination, classroom testing, and evaluation prior to purchasing or recommending.

4. Reviewing current curriculum concepts and objectives in approved courses of study for all grade levels.

5. Identification of a scope and sequence of career development concepts.

6. Development of career development objectives.

7. Selecting curriculum concepts for exemplary fusion of career education concepts.

8. Testing of career curriculum fused teaching adaptations in pilot schools.

9. Developing an elementary evaluation instrument.

10. Item analysis of elementary evaluation instrument for revision indicators prior to using for pre-post test.

11. Selection of an evaluation instrument for middle and high pilot schools.

12. Supplementation and testing of middle and high guidance model.

13. Implementation and testing of placement model.

14. Collection of evaluation data and summarization.

15. Recommendations for revision of model.

16. Finalization of implementation design for local school system.

"Stop-gap" Implementation

"Stop-gap" implementation was the second half of the project's role and was based on two assumptions:

1. "Students in the project schools had little or no exposure to career education."

2. "Anything is better than nothing."

"Stop-gap" was not a sequentially developed and coordinated effort among teachers, grade levels and subject areas although teachers had received career education orientation and were constantly involved in training with project leadership personnel. Teachers were simply asked to:

1. Assess the present status of their students' career awareness.

2. Use their own initiative and imagination in providing remedial career education experiences for students within the framework of their respective teaching fields.

"Stop-gap" activities engaged in were:

1. Teacher internalization of career education scope and sequence and objectives.

2. Identification of related concepts in existing state and local courses of study.

3. Discussing subject-related careers.

4. Setting up career education centers of interest in classrooms.

5. Using textbook material in pointing up career opportunities.

6. Making posters and using bulletin boards.

7. Using community resource persons.

8. Taking students on field trips.

9. Utilizing work observation experiences for interested students.

10. Worker interviews.

11. Providing experiences for students to "look" at themselves.

12. Production of supplementary career education units for elementary social studies.

13. Student assembly programs with a career theme.

14. Role-playing.

15. Occupational seminars.

16. Use of counseling materials.

2. Phenix City

Project Problem

It is an accepted fact that gains have been made in providing Career Education, but Phenix City still faces a major dilemma in arriving at a comprehensive program. The problem is:

1. How can secondary schools become preparatory institutions for all students?

2. How can the total curriculum be related to the real life goals of the students to motivate them to choose the direction they will take after high school, whether it is on-the-job-training, apprenticeship, junior college, private and/or state vocational school, or a four year college?

The public schools should be responsible for providing every young person with educational opportunities that will enable him or her to develop full potentials. This would mean that schools have a three-fold objective.

1. Help young people discover their individual interests and abilities.

2. Explore the many avenues of productive activity that might challenge and enlarge their individual talents.

3. Learn the wise exercise of freedom of choice, self-direction, self-discipline, and responsibility.

Rationale for Project

Placing a new emphasis on "Career" Education will advance many solutions to aid in solving the problems of a majority of students attending schools today. Friendship, life style, community service, voting habits, citizenship, leisure time, and family life are all virtually affected by "career consciousness". It can and should pervade teaching and learning and should seek to remove the distinction between vocational and academic subjects.

Persons are going to enter the labor force and produce goods and services needed by society whether or not the public education establishment concerns itself with the task. Learning through on-the-job employer training programs, military training, post-secondary training, private schools, full or part-time programs, and training programs operated by other agencies of government will continue to share in the total effort. In public schools there should be an approach aimed at the development of skills and understandings which relate to families of occupations. Selected occupations should be clustered in logical groups in which the occupations are related because they have similar teachable skill and knowledge requirements. This structure not only will have a motivational effect but will prepare students for entry into a broad family of occupations rather than only one specific occupation.

There is ample evidence to indicate that students are interested in their career development at early ages and this interest continues as they mature. Evidence also indicates that traditional curriculums do not emphasize career planning, that is, students receive more career information from sources outside than inside the school system.

Recent consensus seems to support the premise that work has potential for meeting more than just economic needs. Among other things, it also provides for social interaction, personal dignity, self-identity, and an entrance into adulthood. Traditional curriculums have not assisted individuals to perceive work as having personal relevance, as being critical to one's determining his own life style, or as being a means that contributes to self-fulfillment.

Many youth have a limited awareness of the career choices that may be open to them. This seems especially true to those who have been reared in so-called disadvantaged environments. Social class restrictions, much like traditional curriculums,

have tended to limit opportunities for career development.

The career development curriculum proposed in this project is designed to alleviate some of the problems mentioned.

In several speeches, Dr. Sidney P. Marland has repeatedly emphasized the importance of preparing students for the real world. This preparation must be a continuing process from the early years through adult life to the retirement years. In commenting on this, Dr. Marland cites Career Education as a change needed in contemporary education.

> Career development is self-development. It is the process of helping an individual to understand accurately both himself and the world of work, the specific educational and job requirements of occupations, entry and progress in education pursuits and ultimately the choice of a vocation.
>
> This on-going process of career development is based on the assumption that an individual actually reaches his ultimate career decision, not at any single moment in time, but through a series of experiences and resultant decisions over a period of years. Career development is sequential building on vocational development tasks at each level, and is implemented throughout the curriculum.
>
> Career development is every teacher's responsibility. Every teacher must teach for transfer of their subject into the world of work. Teachers cannot assume that the students will make the relevant interpretation on their own. (1971; 21)

Traditionally few students have been properly prepared in our schools to make occupational decisions. To many students the dilemma of what to do after: dropping out of school or completing high school or college is more chance than choice. Many students who don't make it to high school have no conception of how to get along in the outside world. Of those who graduate from high school few know what their future training or work will be. More tragic are the students who spend four to six years in post secondary education and still are not prepared to make the transition from school to career. Our

current vocational programs are inadequate to meet the needs of a large group of students and too late in the students' secondary training to make the needed impact.

Since the working world has become more complex and students can no longer relate to their father's occupation, it becomes more urgent that they be provided opportunities for exploring the world of work.

The concept of vocational maturity is relatively new as stated by Super. (1953; 26). He describes vocational behavior for the early adolescent as, (1) orientation to vocational choice, (2) information and planning, (3) consistency of vocational choice, (4) crystallization of vocational tracts, and (5) wisdom of vocational choice. Super further characterized the determinates of career patterns as, (1) individual characteristics and experiences, (2) individual personal situations, (3) individual environment, and (4) non-predictable factors. These determinates include attitudes toward work, work values, self-concepts, and levels of aspiration as well as intellectual and physical characteristics.

The orientation of the proposed study is in agreement with Ertel's (1971;7) contention that:

> ....occupation freedom involves both informed choice of alternatives and competence to work effectively. The economy needs constantly larger numbers of workers possessing new capabilities. But youth can only evaluate those occupational choices that they perceive. They are free to perform only the kinds of work for which they acquire competence.

Isaacson (1966;15) states that the high school inevitably moves toward viewing itself as being against a background of the world of work. Occupational information and career activities are a part of the traditional information phase and also must provide the student with an opportunity to try out his self-concept. The exploratory phase should be one of the traditional functions of the high school. Isaacson further says that students are typically several years away from making a firm occupational world as they move toward it. A large portion of youth have had at least casual work experiences and hopefully these contacts lead to increasing awareness of the importance of wise vocational

planning.

In a further statement, Isaacson says that if one accepts a developmental view, it is reasonable to assume that many students will become involved in certain stages or phases of growth and maturity at approximately the same time. Therefore, group procedures can enable the school to work with many of the students collectively on certain aspects of their development. Teachers should become familiar with the techniques of group guidance as well as the background of vocational occupational information which is available since neither knowledge nor technique is adequate alone. Teachers must have both knowledge about the world of work and knowledge of group procedure if effective occupational information programs are to be conducted in the schools.

The proposed program in Phenix City will provide information about the world of work at the elementary level. This information will be incorporated into regular classroom activities to help students relate information to occupations. Students will be stimulated to think about and seek answers to such questions as; why do people work? what kinds of work are there in society beyond the immediate community? what kinds of work are there in the community? what kinds of people go into various kinds of work? what kind of work do parents of students do? how do people get their jobs? what are the characteristics of people in different jobs? and what are the fundamental tools, materials, and processes involved in the work people do?

In discussing why and how vocational education activities should be extended to the elementary school level, Frank (1965;8) in Summer Study noted that:

> The use of inter-disciplinary units, which are rooted in the child's interest and prior experience and by which interest and experience expand, enhance the child's reliance on the use of his own resources and his ability to reason. The child should mainly be answering "How?" and "Why?", rather than "What's?" and "Who's?", and "When's?" in trying to explain the "How's" and "Why's". These, by establishing an intellectual framework will enable him to remember the other better.

Orientation, exploration, and relevance of the world of work for elementary youth was also noted in a program by Hunt (1965;14). She stated after much study and research that it

is a must "that we 'teach' technology in some intellectually honest form at the earliest possible moment. The early years are the crucial years". She is suggesting elementary school and maybe even nursery school. The Technology for Children Project was responsible for placing the teaching of technology in many elementary schools in New Jersey today. She also noted that "research now suggests that children can and are being introduced to concepts at pre-school age that were once thought to be strictly the domain of secondary schools and colleges."

The investigation of Project Talent (1968;3) noted that:

> a pilot investigation led us to conclude that to meet the needs of prospective vocational education students, a guidance system must help these students in educational and vocational planning, interest them in the exploration of training opportunities for skilled trades, and motivate them to seek information and perhaps pursue enrollment at such institutions.

It was suggested that this be done at the elementary and secondary levels.

In Summer Study (1965;8) there was substantial agreement on a number of basic issues for program development in vocational education. One of the operational implications from that study for the Phenix City program is that the junior high activities should evolve continuously and be connected with activities of education in senior high school. There will be no terminal education goals, but rather the programs will provide foundations for continuing education whether it be on the job or formal post high school curricula.

In addition to the occupational orientation and the guidance and counseling functions for all students the project will provide instruction for employment opportunities. Most of these will be offered through cluster programs at the upper junior high level and community work experience and cooperative education for senior high school students. Special programs will be provided for those students who are academic, socio-economic or otherwise handicapped and students not previously enrolled in Vocational Education. Special efforts will be made to encourage potential dropouts to stay in school and to get dropouts back into vocational programs and provide them with an opportunity to develop a salable skill, and proper job attitudes to be successful in the world of work.

In the case of the potential dropout an effort will be

made to help the student see the relationship between the academic instruction and occupations. Since these students may be entering the labor markets with a more limited educational background and with fewer basic skills than most other workers the program will allow them to capitalize upon whatever assets they have.

Along with the advantages gained by knowledge about the world of work the students need to gain experience in making decisions. O'Hara notes that we need to create situations in which the learner feels the consequences of the decisions which he makes. (1967;36). Experiences will be built into the simulated situations where decision making is necessary and emphasis will be placed on accepting the responsibility for such decisions.

Another aspect of O'Hara's study that is applicable to the Phenix City project is his emphasis on hands-on-experience at the earlier levels of learning. He states that, "Program goals for students at the high school level should materially involve little planning and much hands-on-experiences or a functional skills approach as contrasted to university graduate level where skills would be more theoretical and less "hands-on". An adaptation of his model is shown including elementary and middle school in figure 1.

An evaluation report, Neighborhood Youth Project by Aller (1967;1), indicates if programs are to keep youth of low-income families in school and encourage out-of-school youth to return to school they should:

1. Provide training-related jobs; and

2. Increase counseling services.

Havighurst and Stiles (1961;11), reported.....

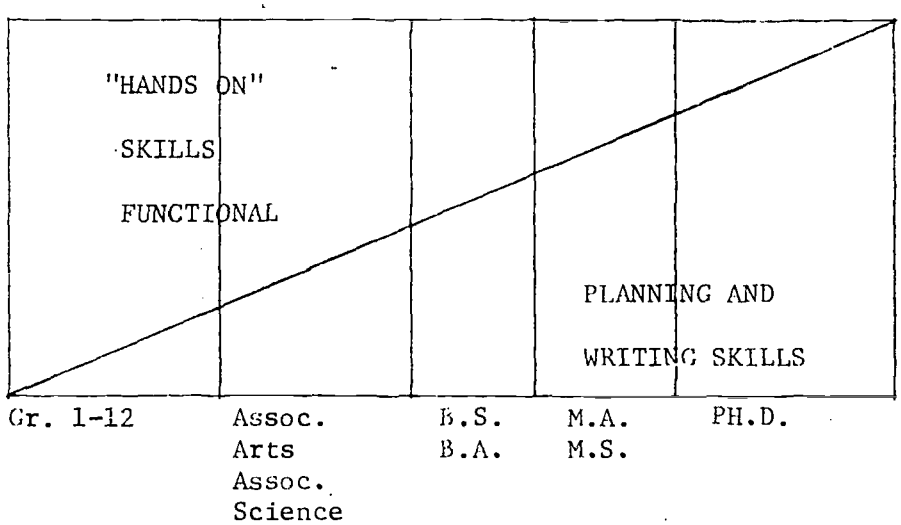
> "The work experience program, as applied to potential dropouts, is a significant education instrument to return "alienated youth", those who "have quit learning and have dropped out of school psychologically two or three years before they drop out physically".

Savitgky, (1962;20) after much work in many programs, observed that:

> ....There had been undue emphasis on the necessity to structure work experience programs for potential drop-outs for skill training in specific jobs, especially the less demanding, low-level occupations. This has,

FIGURE 1

Relationship between Job Characteristics and Formal Education Experience.



This chart expresses a point that should be incorporated in Career Education so that it does not become just a listening or a writing or viewing exercise but should involve as much doing as is practical and profitable. While this particular effort seems to be difficult for teachers to adjust to, it will receive special emphasis in this project.

> in part, been responsible for either shunning, or accepting grudgingly, placements which appear unattractive or have no future; e.g., messenger work. This development loses sight of the fact that the potential dropouts in work experience programs are troubled with problems growing out of maladjustments, many bearing the scars of negative environmental factors such as broken homes. Their confusion and malaise have not, at the point of joining the class, cleared sufficiently to make a decision as to job preference, training and vocational choice. For many, their lack of competency and ambition is not due to innate intellectual inadequacies but to a temporary malfunction for reasons which have already been indicated. Their immediate needs are for large scale changes which will restore their sense of belonging and for opportunities to experience success, so that they can later transfer to, and rejoin, the normal track of schooling without additional props or enter the world of work far better equipped educationally and socially. The job experience is a tool, one of the tools to help achieve this rehabilitation. It is a laboratory for learning the dignity of all work, how to hold a job, and how to accept responsibilities. Work habits and attitudes become all important, especially since findings by Menninger and others have shown that more than 70 per cent of persons discharged from employment are dismissed because of personality and social inadequacies.

Work experience in this project will not be just for the potential dropout or handicapped. Beam and Clary (1967;2) stated that...."There is no way for a person to be certain that he has chosen the right occupation until he has actually worked in it long enough to find out for himself." A California Evaluative Study Committee (1967;1) dealing with work experience concluded that the primary purpose of work experience education was to provide a sound basis for an informed career choice. They further suggested that a prerequisite for work experience was adequate vocational guidance prior to placement in the training station.

Intensive occupational guidance and counseling during the last years of school should be provided. Initial placement and followup of all students should be done at the completion of their schooling. Several successful pilot projects associated with the aforementioned elements have been conducted throughout

the United States. The successful aspects from these projects will be reviewed for consideration in the Phenix City project.

B. PROJECT OBJECTIVES

1. Mobile

In accord with the objectives outlined in the project proposal and in relation to the aforementioned purposes, the project was further committed to the following specific objectives:

Leadership Training Objectives

1. Through staff inservice activities which consist of examination and study of available materials and professional literature and utilization of consultant services, project leadership personnel will develop and implement a plan of inservice training which will help teachers acquire the necessary knowledge and skills for implementing career education in the pilot schools. This objective will be evaluated in terms of the development of a plan and the extent to which teacher participants favorably evaluate inservice activities through use of a rating scale. A majority of favorable ratings will be considered an acceptable minimum.

2. Through the examination and study of the existing curriculum and career related materials, project leadership personnel will acquire the necessary skills and knowledge for assisting teachers with the selection and/or development of career materials for fusing career themes into the curriculum. Effectiveness will be determined by teacher production of materials.

3. By examination of professionally and commercially prepared materials, project leadership personnel will compile a bibliography of career education materials for distribution to participating teachers in the pilot schools. Accomplishment of this objective will be self-evident.

4. Through staff inservice activities, project leadership personnel will exhibit an attitude change toward the career education concept. Evidence of an attitude change will be obtained from a self-report statement.

5. Having experienced an attitude change, project leadership personnel will acquire the necessary skills and

knowledge through inservice activities for assisting teachers with an attitude change toward the career education concept. Acquisition of skills and knowledge will be evidenced by a change in teacher attitude.

6. With assistance from community, business and industry resources, and school system personnel, appropriate project leadership personnel will design a plan of student placement. Accomplishment will be determined by production of the plan.

7. Through examination and study of available materials, professional literature and utilization of consultant services, project leadership personnel will design a plan of career counseling for grades 6-12. Accomplishment will be determined by production of the plan.

Teacher Training Objectives

1. Having participated in a program of inservice training and orientation, teachers will exhibit an attitude change toward the career education concept. Evidence of an attitude change will be obtained from a self-report statement.

2. Through inservice training and orientation, teachers will acquire the necessary skills and knowledge for developing and implementing curriculum changes which will fuse career education objectives with the present curriculum objectives. Acquisition of skills and knowledge will be evidenced in production of materials and implementation of curriculum changes.

3. Having acquired the necessary skills and knowledge, teachers will develop and implement, on a developmental basis, curriculum changes which will fuse career education objectives with the present curriculum. Effectiveness of curriculum changes will be measured in terms of accomplishment of project instructional objectives.

4. Having participated in a program of inservice training and orientation, teachers will be prepared to assist in continuous evaluation, development and modification for recycling a more refined program. Preparation will be evidenced by provision of assistance.

Counseling Objectives

1. Experiences will be provided which are designed to assist students in assessing their abilities in relation to job requirements and the abilities to other students. Provision of such experiences will be self-evident.

2. Experiences will be provided which are designed to assist students in identifying career areas of interest. Provision of such experiences will be self-evident.

3. Experiences will be provided for exploration in career areas of interest. Provision of such experiences will be self-evident.

4. Experiences will be provided which are designed to assist students with development of a career plan. Provision of such experiences will be self-evident.

Placement Objectives

1. Through utilization of community advisory committees and cluster committees, available community job opportunities for students will be identified. Accomplishment of this objective will be self-evident.

2. Through utilization of community advisory committees and cluster committees, community job-training programs will be identified. Accomplishment of this objective will be self-evident.

3. Participating employers and training program directors will be provided with sufficient information for a clear understanding of project objectives. Accomplishment of this objective will be self-evident.

4. Job placement will be provided for those project school students who are adequately prepared to fulfill the requirements of jobs available in the community. Accomplishment of this objective will be self-evident.

5. Placement in job-training programs will be provided for project school students who are adequately prepared to fulfill entrance requirements of available job-training programs in the community. Accomplishment of this objective will be self-evident.

Instructional Objectives

Elementary School Objectives

1. Through relating work done in the home, community, country and world to school experiences, students will learn more about occupational clusters. Evidence of increased knowledge will be obtained from an objective test to be constructed.

2. Through experiences gained in a classroom environment in which each person and his contribution to daily living is appreciated and respected and through activities that illustrate the interdependence of man in procuring goods and services, students will exhibit more positive attitudes toward the social significance of work. Evaluation will be accomplished by use of teacher/counselor-kept anecdotal records and a self-report attitude scale to be constructed.

3. Through relating career choices to personal needs and satisfactions and through positive reinforcement of work tasks completed, students will exhibit more positive attitudes toward the personal significance of work. Evaluation will be accomplished by use of teacher/counselor-kept anecdotal records and a self-report attitude scale to be constructed.

4. As they work independently and with others, students will demonstrate more productive work habits. Measurement will be obtained from a rating scale of relevant abilities to be constructed.

5. As a result of more meaningful school experiences, students will exhibit greater motivation as measured by length of attention span on work assignments.

Middle School Objectives

1. Through career-related activities and classroom experiences, students will gain more knowledge about occupational opportunities and occupational requirements. Evidence of increased knowledge will be obtained from an objective test to be constructed.

2. As they work independently and with others, students will demonstrate more productive work habits. Measurement will be obtained from a rating scale of relevant abilities to be constructed.

3. The career education program will provide more student participation in career-related activities. Evaluation will be accomplished by use of an activities checklist administered to experimental and control groups.

4. Through experiences gained in a classroom environment in which each person and his contribution to daily living is appreciated and respected and through activities that illustrate the interdependence of man in procuring goods and services, students will exhibit more positive attitudes toward the social significance of work. Evaluation will be accomplished by use of teacher/counselor-kept anecdotal records and a self-report attitude scale to be constructed.

5. Through relating career choices to personal needs and satisfactions and through positive reinforcement of work tasks completed, students will exhibit more positive attitudes toward the personal significance of work. Evaluation will be accomplished by use of teacher/counselor-kept anecdotal records and a self-report attitude scale to be constructed.

6. As a result of more meaningful school experiences, students will exhibit greater motivation as measured by length of attention span on work assignments.

7. Through orientation and exploration in all occupational clusters, more students will identify cluster areas of interest for indepth exploration. Students who identify cluster areas of interest will be listed and the extent to which each makes an indepth exploration will be noted. This will be done at different times in the project in determining if there is an increase in the number of students identifying cluster areas of interest.

High School Objectives

1. Through career-related activities and classroom experiences, students will gain more knowledge about occupational opportunities and occupational requirements. Evidence of increased knowledge will be obtained from an objective test to be constructed.

2. As they work independently and with others, students will demonstrate more productive work habits. Measurement will be obtained from a rating scale of relevant abilities to be constructed.

3. The career education program will provide more student

participation in career-related activities. Evaluation will be accomplished by use of an activities checklist administered to experimental and control groups.

4. Through experiences gained in a classroom environment in which each person and his contribution to daily living is appreciated and respected and through activities that illustrate the interdependence of man in procuring goods and services, students will exhibit more positive attitudes toward the social significance of work. Evaluation will be accomplished by use of teacher/counselor-kept anecdotal records and a self-report attitude scale to be constructed.

5. Through relating career choices to personal needs and satisfactions and through positive reinforcement of work tasks completed, students will exhibit more positive attitudes toward the personal significance of work. Evaluation will be accomplished by use of teacher/counselor-kept anecdotal records and a self-report attitude scale to be constructed.

6. As a result of more meaningful school experiences, students will exhibit greater motivation as measured by length of attention span on work assignments.

7. Through orientation and exploration in all occupational clusters, more students will identify cluster areas of interest for indepth exploration. Students who identify cluster areas of interest will be listed and the extent to which each makes an indepth exploration will be noted. This will be done at different times in the project in determining if there is an increase in the number of students identifying cluster areas of interest.

8. Through a project program of student placement, more students will be placed in jobs upon leaving school. This objective will be evaluated by obtaining base line data about previous placements and periodic checks to determine rate of placement.

9. Through a project program of student placement, more students will be placed in job-training programs upon leaving school. This objective will be evaluated by obtaining base line data about previous placements and periodic checks to determine rate of placement.

10. As a result of experiences provided by the career education project, more students will make appropriate

occupational choices. The appropriateness of choices will be determined by application of criteria (to be developed) which will be indicative of appropriateness for the individual.

2. Phenix City

Elementary School Level (grades 1-5)

The general objectives of this project are to provide an occupational orientation program at the elementary level which will broaden the occupationally related experiences of the students through an integrated approach and to provide a Career Education program that will develop positive attitudes toward work, school and self.

1. At least 75% of the students in the class grade levels 1-5 will develop a more positive attitude toward self as measured by pre and post attitude scales.

2. At least 75% of the students in the class grade levels 1-5 will develop a more positive attitude toward school as measured by pre and post attitude scales.

3. At least 75% of the students in the class grade levels 1-5 will develop a more positive attitude toward work as measured by pre and post attitude scales.

4. At least 75% of the students in the class grade level 1 will match 10 picture groups of workers studied to picture groups of items used by the workers with a minimum of 70% accuracy.

5. At least 75% of the students in class grade levels 2 will match a list of 10 workers with a list of items used by the workers with 70% accuracy.

6. At least 75% of the students in class grade levels 3-5 will name a minimum of 8 jobs in each of the 4 occupational clusters exposed at each grade level and give at least two duties for each job.

Middle School Level (grades 6-8)

The general objectives of the middle school level are to provide a Career Education program that will develop positive attitudes toward self, school and work and to provide an exploratory program which will further broaden the occupationally related experiences of students through an integrated and unit curriculum approach.

1. At least 75% of the students in grade levels 6-8 will develop a more positive attitude toward self as measured by pre and post attitude scales.

2. At least 75% of the students in grade levels 6-8 will develop a more positive attitude toward school as measured by pre and post attitude scales.

3. At least 75% of the students in grade levels 6-8 will develop a more positive attitude toward work as measured by pre and post attitude scales.

4. At least 80% of the students in grade levels 6-8 will name a minimum of 10 occupations for each occupational cluster to which exposed, give at least 2 duties for each occupation and indicate what level of education or training is required for each occupation with 70% accuracy.

5. At least 80% of the students in grade levels 6-8 will name a minimum of 5 jobs for which each of his basic subjects (language arts, mathematics, social studies and science) are needed with 70% accuracy.

Varsity School Level (grades 9-12)

The general objective of this component of the project is to provide a placement service for work study, work experience and work exploratory programs for students in grade levels 11 and 12 and on a restricted basis for grade levels 9 and 10 and to provide a placement service for graduating seniors in either post secondary education or a job.

1. At least 95% of the students in grades 11 and 12 will indicate a knowledge of a placement service in the school as determined by a questionnaire.

2. At least 90% of the students in grades 11 and 12 who apply for placement service will be referred to interviews for part time jobs for work experience or work exploration.

3. Ninety per cent of the students on levels 11 and 12 who terminate their school experience through proper channels before graduation and desire placement will be referred to interviews for job placement.

4. At least 90% of the students who graduate in the school year 1973 and desire placement will be placed in either post secondary education or referred to an interview for job placement.

C. PROJECT DESIGN AND PROCEDURES

1. Mobile

Descriptive Data

Geographical Area, Economic Base and Population

Mobile County is located in southwest Alabama on the coast of the Gulf of Mexico and Mobile Bay. The county has a diverse economy in that it is comprised of a number of rural communities, as well as a larger metropolitan area, each of which is centered around a particular industry: Citronelle, oil and forestry; Bayou la Batre, seafood industries; and Theodore-Grand Bay-Semmes, agriculture and horticulture. The major industries of the Mobile-Prichard-Chickasaw-Saraland-Satsuma metropolitan areas are paper mills, aluminum manufacturing, petro-chemical industries, ship building and repair, cement manufacturing, shipping and naval stores. According to the 1970 census, Mobile County has a total population of 317,703 and a racial composition of 32.5% non-white and 67.5% white.

Public School System

The Mobile County Public School System encompasses all of Mobile County. The school system's eighty-four schools enrolled 66,978 students of which 58% were white and 42% non-white. The urban area of Mobile-Prichard-Chickasaw had a school enrollment of approximately 47,000 students in fifty-three schools of which approximately 53% were Negro.

Project Schools

The efforts of the Career Education project were concentrated in ten schools within two feeder patterns located in the metropolitan area. The rationale for selection of the project schools is outlined as follows:

1. There was a clearly identified need for career education in both feeder patterns.

2. The geographical proximity of the feeder patterns to each other and to such resources as business, industry and the school system's central office facilities facilitated project travel and administration.

3. The communities served by the feeder patterns appeared to represent a cross-section of occupational interests.

4. The feeder patterns served communities which contrast racially and socio-economically.

5. The two high schools selected had identifiable and contiguous feeder patterns.

Statistical data pertaining to the project schools are provided in Table I.

TABLE I
Participants in Mobile Project

Schools	Grades	No. of Teachers	No. of Counselors	No. of Pupils
		PATTERN I		
Toulminville	9-12	51	1	1,332
Phillips	6-8	54	1	1,415
Washington	6-8	40	1	1,003
Stanton Road	K-5	35		789
Crichton	1-5	25		517
		PATTERN II		
Rain	9-12	49	2	1,247
Eanes	6-8	58	1	1,550
Hall	6-8	39	1	1,034
Williams	1-5	15		425
So. Brookley	1-5	16	_	530
TOTAL		382	7	9,842

Project Design

Planning Strategy

The strategy used in planning the career education project was: (1) to make use of materials and ideas, commensurate with the local concept and objectives of career education which had been developed by existing programs in career education; (2) to utilize the knowledge and expertise of recognized consultants; and (3) to utilize the ideas and assistance of all persons and groups who were to be involved and/or affected by the career education program. Examples of groups and chief areas of their involvement are:

1. Administrators and central office support personnel: Personnel assisted in developing objectives and procedures for fusing career education into the curriculum and in devising implementation strategies such as inservice activities and scheduling.

2. Teachers and counselors: Teachers and counselors were involved in reviewing materials; developing subject area, grade level and counseling objectives; and in developing procedures for accomplishing objectives and evaluation.

3. Vocational supervisors, coordinators and counselors: Vocational personnel were involved at the same time and in the same manner as central office support personnel, teachers and counselors.

4. Local community: Local community leaders were heavily involved in the following areas:

   a. Identification of job sources and assisting with placement.

   b. Identification of job-training programs and placement.

   c. Identification of community resource persons and obtaining their assistance.

   d. Obtaining cooperation of business and industry in providing observational and hands-on work experiences for students.

   e. Procurement of business and industry prepared occupational materials.

   f. Development of objectives.

5. Parents: Parents were involved as follows:

   a. In serving as resource persons for their particular occupations.

   b. In chaperoning, transporting and arranging observational and hands-on experiences for children in the world of work.

   c. In gaining community acceptance of career education concepts through personal, social and professional contacts.

d. In working with counselors and teachers in helping their own children design a career plan.

6. Students: Students were involved as follows:

   a. In providing input for development of objectives and procedures.

   b. In the evaluation process.

   c. In sharing of world-of-work experiences through group activities.

7. Consultants; Consultants were utilized in the areas of development of objectives, materials development, counseling and evaluation.

Project Development and Schedule

The project was designed and implemented in four phases: Phase I, planning and organization; Phase II, staff development; Phase III, implementation of research and development; and Phase IV, program analysis, modifications and recommendations.

Phase I: Phase I began with: (1) conceptualization of project; (2) establishing communications with appropriate agencies; (3) identifying and contacting informational, support and consultative sources; and (4) employment of a project director and a project secretary. The project director then assumed the responsibilities for developing the theoretical framework for the project, for finalization of the project proposal and for interviewing and employing the remaining project personnel (funded positions). Finally, the identification and structuring of community resources as a usable tool was accomplished during this phase.

Phase II: Phase II consisted of:

1. Staff development activities for project leadership personnel which included briefings and orientations by the project director, utilization of consultative resources and review of available materials and in-service trips.

2. A four-week workshop for the eight elementary liaison teachers which consisted of orientation and briefings by project leadership personnel, utilization of consultative resources, review of available materials, field trips and materials development.

3. Inservice activities for project school faculties which included orientation and briefing by project leadership personnel, utilization of consultative resources, review of available materials, field trips and Glasser-type sessions.

Phase III: Phase III implemented research and development which included:

1. Assessment of the existing curriculum.

2. Compiling a bibliography of available materials.

3. Structuring grade level and subject area objectives and processes.

4. Identification of content.

5. Continual assessment, redefinition, and restructuring of objectives, processes and content.

6. Implementation and experimentation in the classroom.

7. Implementation of counseling and placement services.

Phase IV: Phase IV consisted of program analysis, recommendations for modifications, completion of the career education model and dissemination.

Project Leadership Personnel

Seven full-time persons were employed by the project as follows:

Project Director
Elementary school resource specialist
Middle school resource specialists (2)
High school resource specialists (2)
Project secretary

The project director, the elementary school resource specialist, and the project secretary were employed for the duration of the project. The middle and high school resource specialists were employed for twelve months.

Project Consultants

Dr. Leeman Joslin and Dr. Ralph Roberts, University of Alabama,

were engaged as consultants to the project.

Dr. M. Ray Loree, University of Alabama, was employed as the third-party evaluator.

Staff Development Procedures

Leadership Training

Staff leadership training consisted of:

1. Review and study of available professional literature.
2. Review and study of materials produced by existing programs of career education.
3. Use of consultant services.
4. Seventeen inservice trips to existing programs and career education conferences.
5. An examination of the existing curriculum.
6. Staff sessions in which information and ideas were shared and assessed.

Teacher Training

Teacher training activities consisted of:

1. A four-week summer workshop for the eight elementary liaison teachers.
2. Inservice activities conducted by project leadership personnel during teacher planning periods, released time, faculty meetings, regular inservice programs, classroom visitations, and pre-school orientations.
3. A study of appropriate professional literature.
4. A study of selected materials produced by existing programs of career education.
5. Use of consultant services.
6. An examination of present instructional objectives and procedures.

7. Glasser-type sessions.

Instructional and Counseling Procedures

Procedures for accomplishing instructional objectives included:

Elementary School

1. Use of audio-visual aids.
2. Role playing.
3. Use of career models such as parents.
4. Use of community resource persons.
5. Simulation techniques.
6. Career-related games.
7. Field trips.
8. Hands-on experiences.
9. Use of commercial kits.
10. Glasser class meetings.
11. Interviews.
12. Volunteer work.
13. Relating subject matter to practical usage in the world of work.

Middle School

1. Use of audio-visual aids.
2. Role playing.
3. Use of career models such as parents.
4. Use of community resource persons.
5. Simulation techniques.

6. Career-related games.

7. Field trips.

8. Hands-on experiences.

9. Use of commercial kits.

10. Glasser class meetings.

11. Interviews.

12. Volunteer work.

13. Relating subject matter to practical usage in the world of work.

14. Group counseling techniques.

15. On-the-job observations in clusters of interest.

16. Job surveys.

High School

1. Use of audio-visual aids.

2. Role playing

3. Use of career models such as parents.

4. Use of community resource persons.

5. Simulation techniques.

6. Career-related games.

7. Field trips.

8. Hands-on experiences.

9. Use of commercial kits.

10. Glasser class meetings.

11. Interviews.

12. Volunteer work.

13. Relating subject matter to practical usage in the world of work.

14. Group counseling techniques.

15. On-the-job observations in clusters of interest.

16. Job surveys.

17. Aptitude testing.

18. On-the-job training:

    a. Vocational education programs.

    b. Part-time work.

    c. Summer work.

    d. Cooperative programs of short-term non-pay internships.

2. Phenix City

Acceptance of the concepts of occupational choice and vocational maturity is a process which begins early in childhood and continues well into adulthood. There is an indicated need for a comprehensive occupational education program with structure, and processes which provides students with occupational information, guidance, and learning experiences at appropriate times as they move toward vocational maturity and the transition from school to work.

This design to implement the career development concept spans all levels of the educational ladder. It places heavy emphasis upon reorientation of the traditional school concept about occupational education. During the process, students will be exposed to occupational education as they enter the elementary school and continue learning about, and preparing for the world of work in their progress through elementary, middle and varsity schools.

The procedure views the levels of occupational education as being a pyramid, with students making decisions about careers

and needed training based upon broad exploratory experience and counseling obtained through the program. As students narrow their choices about occupational selections, individual occupational experiences should become more sophisticated and intensified.

The design for this project is conceived as an integrated vertical structure of three levels of activity which coincide with the elementary, middle and varsity school organizational pattern of the Phenix City Schools. There will be planned coordination of services within and between levels of this program and with other programs in the schools involved.

TABLE II

SCHOOLS AND PROGRAMS IN SYSTEM

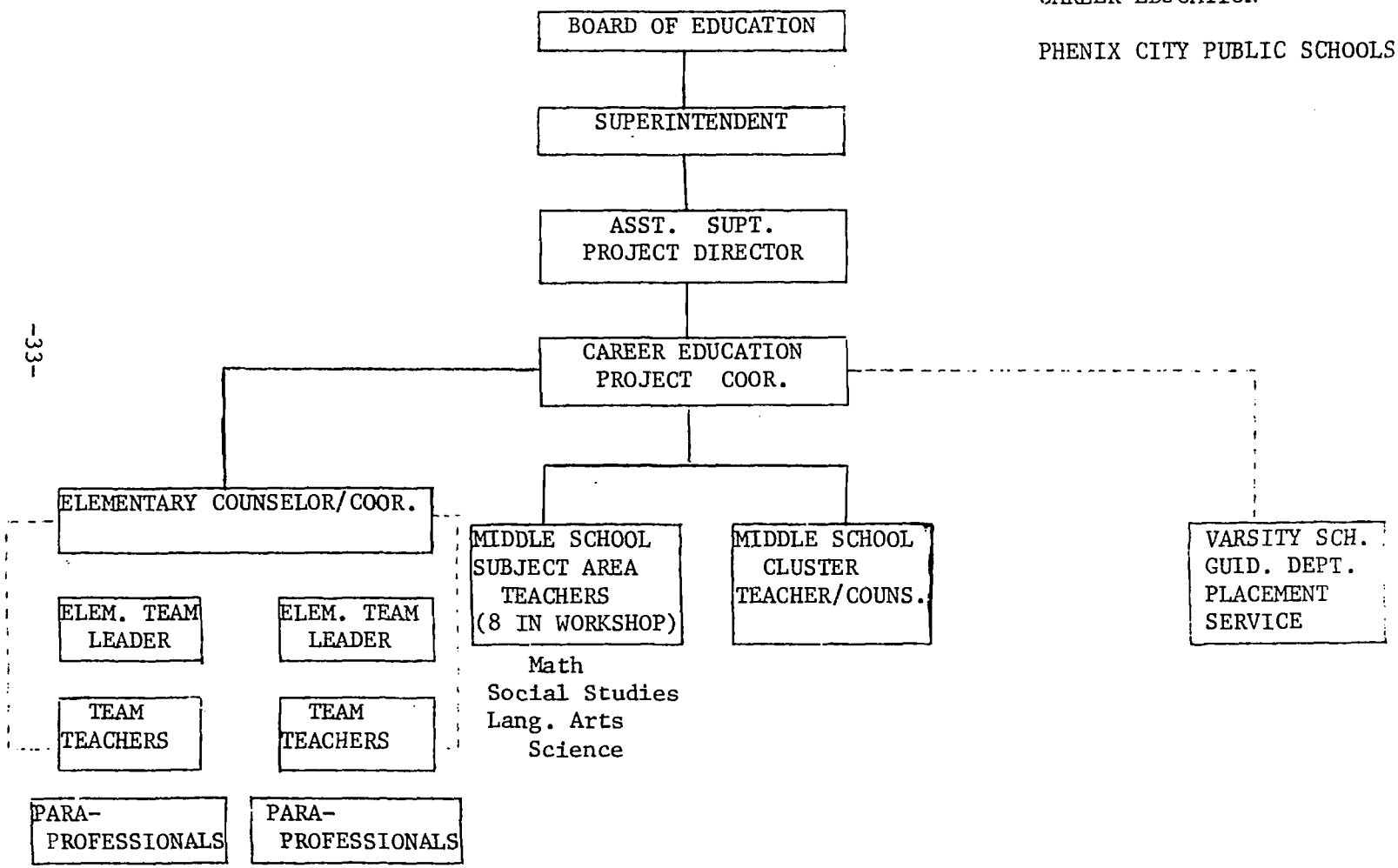
Level	Grades	No. of Schools	No. of Counselors	No. of Pupils
Elementary	1-5	8	0	2,471
Middle Sch.	6-7-8	1	1	1,527
Jr. Varsity	9-10	1	2	1,115
Varsity	11-12	1	1	863

Administrative organization is reflected in the organizational chart on the following page. (Figure 2)

A Career Education summer workshop, which was considered to be a vital part of the total program, was designed to provide background information and methods for the teachers. The workshop was held for 5 hours each day for 20 days during the month of June. The teachers received $20.00 per day remuneration. In addition to the workshop during the morning, a professional development course was designed by Auburn University and held in the afternoon three days a week. All workshop participants were enrolled at their own expense for four quarter hours credit course.

The first week of the workshop included an orientation and information emphasis on the concept and philosophy of Career Education. Consultants from the State Department of Education were used to inform the teachers on the status of Career Edu-

FIGURE 2 ORGANIZATION OF CAREER EDUCATION PHENIX CITY PUBLIC SCHOOLS



cation in the state and on the use of a career guidance in the elementary and middle school classroom. An outside consultant was employed to present a motivational and informational session on the Career Education movement as a national emphasis and on experiences in the program in Georgia. Local project objectives and organizational procedures were explained along with expectations for the workshop participants. Based on this week of orientation the three remaining weeks were devoted to development of units during the morning workshop. A total of 54 units were produced by workshop participants. See Appendix II for a list of the units. The local media staff was instrumental in obtaining materials and supplies for the workshop.

The task of accumulating and assembling the materials already in the school system and obtaining supplementary materials was implemented prior to the workshop. The workshop center was fitted with the necessary hardware to support the teachers in previewing and preparing desired audio visual aids to supplement their units. A media practicum student who was assigned to the workshop on a part-time basis from Auburn University assisted the teachers with art work and provided handcraft suggestions for hands-on-experiences. This resource person, also, produced a slide tape presentation which was used to relate the experiences of the workshop. This material was subsequently used in orienting all the teachers in the school system to the Career Education program and for other school systems who visited for on-site observation.

The professional development course taught by Dr. Edwin Kurth was used to supplement the workshop efforts. Dr. Kurth designed and piloted a course which later became a part of the curriculum of Auburn University. This course included: philosophy of Career Education, introduction to occupational information materials such as the Dictionary of Occupational Titles and Occupational Outlook Handbook, preparation and use of audio visual materials, unit writing, behavioral objectives, community resources simulation, hands-on-experiences and special emphasis on integrating career experiences into a subject area classroom.

1. Elementary School:

   The Westview Elementary School was designated by the board of education as the pilot elementary school for the project. Westview is an open space school with a team teaching concept which includes levels 1-5 and serves approximately 250 students.

During the month of June, 1972, the local director, project coordinator and elementary counselor/curriculum coordinator introduced the Career Education program to the Westview faculty in a workshop program. The unit development was based on a curriculum refocusing effort organized around the 15 USOE occupational clusters.

Efforts of teachers centered around student acquisition and development of positive attitudes toward work, dignity of work, enthusiasm, personal satisfaction, pride in accomplishment, life aspirations, value of cooperation, development of varied interest, self-worth, occupational information and occupational awareness. See Appendix III for listings of units and activities provided in this component.

Project-coordinator and counselor-coordinator provided continuous inservice education and were responsible for the location, development, distribution, evaluation, and promotion of curriculum materials at this level. They also provided assistance in helping teachers organize this curriculum around the career development theme.

The counselor-coordinator provided leadership in identifying and utilizing resource persons. Setting up field trips was also a prime responsibility of this person.

Continuous inservice training is seen as one key to success in the project. The teachers depended heavily upon workshop experiences in implementing their program.

This elementary pilot component will be a model for the other elementary schools in the system and will serve as a resource for Career Education materials and methods. Successful elements of the program will be incorporated in the school system in the following school years.

2. Middle School:

The Phenix City Middle School includes all public school students on grade levels 6, 7, and 8 on one campus. The three levels of the middle school serve approximately 1500 students.

During the month of June, 1972, the local director and project coordinator who served as the middle

school counselor-coordinator introduced the Career Education program to the faculty members of the middle school who were on the Career Education development task force team (c.e.d.t.). A total of 16 c.e.d.t. members were involved in the workshop and professional development program. Included within this team were 8 career exploratory mini-course teachers and 8 basic subject area teachers.

The workshop and professional development program included familiarization with the concept of Career Education, the use of occupation information in the classroom, counseling and guidance techniques and time for the development and adaptation of materials for implementation in the classroom during the 1972-73 school year.

A primary effort of the middle school program was the refocusing of subject matter toward Career Education. The c.e.d.t. members from the basic subject areas developed units which relate Career Education to the appropriate career clusters for each subject area and grade level. These c.e.d.t. members assisted by the mini-course teachers and the middle school counselor/coordinator worked with the other subject area teachers in inservice and planning periods to help them implement units in their classes. A summary of the units taught and activities involved in the units is provided in Appendix IV.

The unit development by the cluster exploration mini-course teachers was based upon assigned career clusters as identified by the U. S. Office of Education.

A second effort of the project was the development of a series of 15 exploratory mini-courses. These exploratory mini-courses were arranged in a sequence so that a student would explore the 15 career clusters in the three years he is in the middle school program.

The exploratory courses were built around and upon existing exploratory courses where possible. The following is a breakdown by grade level of the exploratory mini-courses and the existing courses upon which they were built: (Figure 3)

FIGURE 3

EXPLORATORY CURRICULUM DESIGN SHOWING EXISTING EXPLORATORY PROGRAM PRIOR TO IMPLEMENTATION OF THE PROJECT

Grade Level	Cluster Exploratory Mini-Course	Existing Exploratory Course
6	Fine Arts and Humanities	Music Appreciation
7	Communications and Media	Art
7	Transportation	Personal Development
	Hospitality and Recreation	Personal Development
7	Agri-Business	[1]New Course Set Up
	Natural Resources and Environment	New Course Set UP
	Personal Service	New Course Set Up
	Public Service	New Course Set Up
8	Consumer and Homemaking	Exploratory Home Economics (girls Only)
8	Health Careers	Personal Development
8	Business and Office	Typing Exploratory
8	Marketing and Distribution	[2]New Course Set Up
	Construction	New Course Set Up
	Manufacturing	New Course Set Up
8	Marine Science	[3]8th Grade Science Curr.

[1]These four units were set up to complete the 7th grade exploratory curriculum and to balance the schedule to allow the exploratory program. This necessitated an additional teacher unit.

[2]These three units were set up to complete the 8th grade exploratory curriculum and to balance the schedule to allow the exploratory program. This necessitated an additional teacher unit. All other exploratory courses were conducted by personnel outside the financial obligations of the project.

[3]The Marine Science exploratory course was limited to one 8th grade Science class; therefore, only one-third of the student body was exposed to it. Plans are to include this unit in all Science classes in the future.

The experiences that the students have in the mini-courses allow them to explore various occupations in each cluster so that they will have the occupational information for a background for future career decisions. See Appendix IV for listing of the activities involved in this component.

Efforts of teachers centered around student acquisition and development of responsibility, appropriate occupational information self-evaluation, information concerning educational training requirements, work characteristics, dignity of work, dependability, and specific job information.

All junior high school students were administered and assisted in interpreting an interest inventory test to assist them in appraising themselves in relation to the world of work before selection of courses for the ninth grade.

3. Varsity School:

The Phenix City School System has a unified varsity school program located on 2 campuses. South Girard High with grade levels 9 and 10 and Central High with grade levels 11 and 12, serve approximately 2,000 students. Due to the financial limitations of this project, the subject relating effort was limited to the encouragement of teachers through inservice meetings. The current preparatory programs and cooperative programs were supplemented by a placement service which was established in the high school.

The placement coordinator served as the career curriculum coordinator for the middle school and overall project coordinator. This individual spent a portion of his time on the middle school campus directing the career curriculum program and a portion of his time on the varsity school campus developing and implementing a placement service.

The placement service was a cooperative effort with the guidance counselors, the cooperative education coordinators, the vocational teachers, and the Alabama Employment Service.

During the months of July through August, 1972, the placement officer made a canvass of potential employers for opportunities for students who wanted to work part time while continuing in school; for students who

dropped out of school and needed to work full time; and for students graduating from the 12th grade. A current file of part time and full time job opportunities was maintained. Throughout the 1972-73 school year, the placement service operated and continued to refine its procedure on the basis of accumulating experience. See Appendix V for examples of application form, report cards and employer contact letters. Based on it's work with exiting students, the placement service will provide the school districts' curriculum committee with recommendations for needed revisions and improvements in the on-going educational program.

In addition to the cooperative programs, the placement component of the varsity school program will offer additional opportunities for students not in the cooperative program to gain exploratory experiences and work experience. This component placed and supervised students in the following types of programs:

a. A work experience program in the business community (remunerative) for students who needed to work after school and on weekends.

b. A work study program (remunerative) for disadvantaged students who needed to work and earn money to stay in school.

c. An in-school (non-remunerative) work experience program for students who wanted to gain experiences in such fields as office work, maintenance, printing, library and teaching. Job descriptions and work experience programs were constructed in cooperation with the school administration.

The placement component was primarily for the varsity school, but was made available to the junior varsity on a needs basis.

The existing facilities and equipment in the Phenix City School System were utilized and adapted for use in the project. No major equipment items were required in the administration of the project. Most of the materials purchased were reference and resource materials for the teachers use in developing instructional units and a limited amount of audio visual aids and expendable supplies related to the accomplishment of the objectives.

D. PROJECT RESULTS AND ACCOMPLISHMENTS

1. Mobile

Staff Development

Leadership Training

Project leadership personnel have so internalized career education concepts and objectives that including them as an integral and normal part of the instructional program has become second nature.

More specifically, project leadership personnel have:

1. Acquired an understanding of the rationale for career education.

2. Received a thorough world-of-work orientation.

3. Acquired an understanding of career education concepts and objectives.

4. Become familiar with processes (activities) to be utilized in accomplishing career education objectives.

5. Become familiar with available career education materials and resources.

6. Acquired the necessary knowledge and skills for fusing career education concepts and objectives with the existing curriculum.

7. Acquired the necessary knowledge and skills for assisting teachers with classroom implementation of career education.

Teacher Training

At the close of the school year, approximately 325 of the 400 project school teachers had been identified as being actively engaged in classroom implementation of career education.

More specifically, the majority of the project school teachers have:

1. Acquired an initial understanding of the rationale for career education.

2. Received an initial world-of-work orientation.

3. Acquired an initial understanding of career education concepts and objectives.

4. Become familiar with the more appropriate processes (activities) to be utilized in accomplishing career education objectives.

5. Become familiar with locally available career education materials and resources.

6. Acquired initial knowledge and skills for fusing career education concepts and objectives with the existing curriculum.

Counseling Component

Since there were only two project counselors for the four middle schools of approximately 4,000 students enrolled, project counselors concentrated their efforts in the sixth grade. Each counselor spent two days per week in each of their two schools. They counseled approximately 15 students per session in five counseling sessions per day for a total of 300 students per week each of half of the total sixth grade. The remaining half of the sixth grade was counseled the second half of the school year. The rationale for selection of the sixth grade was as follows:

1. Logistical necessity.

2. Less remediation was needed in the lower grades; therefore, counseling the sixth grade lended continuity to a K-6 attempt to shorten the necessity for "stop-gap" efforts.

3. Sixth grade students were at the beginning of the exploration phase.

The seventh and eight grades were counseled by in-school counselors to the extent possible bearing in mind that there

was a 1-1,000 counselor-student ratio. Project counselors used the fifth day of each week in working with teachers and materials development.

With assistance from in-school counselors and a vocational counselor, the one project high school counselor worked with the ninth and tenth grades at Rain High School and the eleventh and twelfth grades at Toulminville High School on a half year rotation basis as in the middle schools. The high school counselor also counseled 15 students per session, five periods per day, four days per week with the fifth day being reserved for materials development and working with teachers. Rationale for this arrangement was as follows:

1. Logistical necessity.

2. The sixth, ninth and twelfth grades provided the project with access to the three critical stages of secondary career education (e.g. the beginning of exploration, the beginning of career development and the end of secondary career development.)

3. The in-school and vocational counselors worked with the eleventh and twelfth grades at Rain and the ninth and tenth grades at Toulminville to the extent possible bearing in mind as excessive counselor-student ratio.

Placement Component

The placement component was regarded as an extension of the guidance program. The placement officer worked in each high school two days per week in assisting students with the execution of plans to enter either a job, a job-training program or higher education as follows:

To the extent possible, students who desired and were prepared for immediate employment upon graduation were assisted as follows:

1. Identification of available counseling services.

2. Instruction related to completion of applications and preparation for interviews.

3. Identification of potential employers.

4. Provision of references.

5. Arranging interviews.

Students who planned to enter higher education or a job-training program were assisted as follows:

1. Identification of available counseling services.

2. Identification of an appropriate institution or training site.

3. Assistance in securing entrance into the training program or institution.

Although seniors and students leaving school received priority, as much time as possible was spent in assisting students with location of part-time and summer employment.

Special attention was given to cases in which the part-time employment sought was considered on-the-job training for future full-time employment.

Students from both project high schools participated in a survey of potential employers in seven different areas of the city. The survey was designed to: (1) identify employers who are willing to accept students for observation and/or work experience; and (2) identify employers who are willing and in need of employing high school students or graduates full-time, part-time or in the summer. All survey teams reported excellent reactions from employers contacted with eighty-one percent (81%) indicating a willingness to accept students for observation and/or work experience.

The total number of students placed at the end of the school year was as follows:

Observation	Work Experience	Part-time Employment	Full-time Employ.
127	59	12	3

Although placement efforts continued after the close of school, figures were not available in regard to additional placements as of this writing.

Students in all of the system's high schools were surveyed to determine vocational interests and in identifying seniors' needs for assistance in the areas of: (1) full-time employment; (2) job training; (3) higher or technical education; and (4) part-time employment. After completion of the survey, all information

was handled by the school system's Data Processing Center for sorting, recording, storage and retrieval. Results of the survey will be used as a basis for further planning of the placement service. The following are the most popular career interests, as determined by the survey, in order of number preferring them as their 1st, 2nd, or 3rd choices:

1. Child care
2. Auto Mechanics
3. Nursing
4. Sports and recreation
5. Airline hostessing
6. Field sports
7. Music
8. Fashion designing
9. Construction
10. Communications
11. Art
12. Hair styling/beauticians
13. Military
14. Electronics
15. Interior decorating
16. Stenography
17. Medicine
18. Cooking/home making
19. Teaching/school administrations
20. Accounting
21. Engineering

Materials Development and Review

Materials development and review consisted of efforts to provide updated instructional materials designed for fusing career education concepts and objectives with the existing curriculum and for dissemination. Such efforts have produced:

1. Six supplemental units in elementary social studies.
2. A complete unit in elementary social studies.
3. Two units in high school English.
4. A bibliography of locally available career education materials.
5. Approximately 300 career education curriculum adaptations.
6. A career education implementation model.
7. A scope and sequence of career education concepts.
8. Career education objectives for grades K-12.
9. Libraries of free career education materials for two high schools.
10. A career education brochure.
11. An instrument for evaluating career education success with elementary school students.
12. A review and screening of career education materials of betterknown commercial procedures.

Community Involvement

Fundamental to the success of career education is the extent to which community involvement and support can be achieved. In this regard, the following activities and accomplishments were pursued and realized:

1. A career education advisory committee of seven persons from the community was formulated for the purpose of advising the project in the initial stages of development.

2. On the recommendation of the advisory committee, standing committees for each of the fifteen occupational clusters were formed of leaders in the community. The areas in which they were asked to assist are as follows:

   a. Input related to the "big picture" of specific occupational cluster.

      (1) Cluster information.

      (2) Cluster materials.

   b. Resource persons representing specific occupations within respective clusters.

      (1) Identification of such persons.

      (2) Obtaining their assistance.

   c. Assistance in arranging work experiences.

      (1) Field trips.

      (2) Hands-on (work) experiences.

      (3) Job placement.

   d. Assistance in providing information and obtaining community support through professional and personal contacts.

3. A door-to-door canvass of businesses in the project high school areas was conducted by students. Eighty-one per cent (81%) of the businesses contacted agreed to provide observation and work experiences for students.

4. Over 500 persons from the community, including a number of parents, served as resource persons to project school teachers and students.

5. Approximately 175 field trips were taken within the community by project school students.

Dissemination

Dissemination activities were as follows:

1. As a public service, two half-hour television programs were taped by a local station. Both programs were presented twice. Content of the programs were as follows:

   Program A - A panel discussion of project goals, processes and schedule by three members of the community advisory committee, the project director, and moderated by a station newscaster.

   Program B - A fourteen minute segment of the United States Office of Education career education film with questions and answers about career education by a station newscaster and the project director.

   The project has received coverage in newscasts and public service programs on eight (8) other occasions.

2. A career education brochure was printed by the school system's printing facilities which depicted the components, goals, and objectives of the project.

3. The project exhibited at the annual meeting of the Alabama Educational Association in Birmingham and at a career education conference sponsored by the University of West Florida in Pensacola.

4. Career education presentations were made to ten PTA groups.

5. Career education presentations were made to seven civic and professional groups.

6. The project director conducted faculty inservice meetings at three non-project schools.

7. The project director made career education presentations to teacher education classes at the University of South Alabama and Mobile College.

8. The project received local newspaper coverage on seventeen different occasions.

9. Sixteen visits were made to the project by out-of-town visitors.

10. A number of requests for materials and information from other school systems were fulfilled.

11. Informational handouts were distributed in all orientation sessions of community committees and resource persons.

2. Phenix City

The far reaching effects of a project such as this cannot be measured in the short term.

Actual student involvement in Career Education included 250 students in the elementary awareness level in grades K through 5, at Westview Elementary School. These students were all exposed to various units at each grade level. A list of the experiences to which each student was exposed by grade level can be seen in Appendix III. While this elementary school was the primary focus of the awareness effort, other schools did get involved on an informal basis. The expertise of the Career Education development team was used when requested in other schools. Other schools became interested and involved as a result of their knowledge of the activities at the pilot school. This effort will be spread to other elementary schools in the future.

Middle school student involvement in the exploratory phase of the project took two channels. There were 8 basic subject matter teachers involved in the project. Each teacher reached some 150 students in his class. It would be impractical to attempt to determine the exact number of students involved, since some students may have been exposed to two or three of the teachers. They were not in a block schedule that would have them exposed to all Career Education teachers. Some students may have had exposure in only one class while others could have had as much as three periods of subject relating Career Education exposure. See Appendix IV for a listing of experiences and activities involved in this phase of the program.

The second channel of emphasis for the middle school involved all students in grades 6, 7, and 8 except some 150 students who were in grade 6, but not located in the 6th grade

building. Career cluster exploratory effort exposed approximately 1500 students to the exploratory experiences. Of these 1500 students, some were exposed to the subject relating effort in addition to these experiences in the cluster exploration. Refer to figure 3 for the listing of the exploratory courses and to Appendix IV for a listing of the experiences and activities included in this phase of the program.

There was no formal project curriculum effort in the high school; however, a noticeable spin-off was evident. The project did offer its services to any interested teacher at this level and did have the opportunity to assist by: speaking to students about the "Career Education concept", assisting teachers in planning for career units, helping obtain resource materials, working with administration and guidance departments in implementing school-wide career programs and arranging field trips. The primary emphasis on this level was to supplement existing cooperative programs with a placement service.

The Central High School student body (grades 11 and 12) had a population of 800 for the 1972-73 school year. The following figures reflect the number of students who were in the work programs:

Cooperative Education (3½ teacher units) (Not under direction of placement officer)	140
Work Study Program (for credit)	60
Work Experience Program (for credit)	39
Work Experience Program (no credit)	30
TOTAL STUDENT INVOLVEMENT IN WORK EXPERIENCES	269

In the cooperative education program the students received 2 credits and received skill training on the job supplemented by related study in the classroom.

Work Study Program participants were involved in a vocational training class but were not working on jobs which necessarily related to their class. The purpose of this program was to help keep the student in school and provide some work experience. Students worked 28 hours per month, attended class and received 1 credit.

Work experience students were allowed to work in the community and gain experience in various fields. The students

had no vocational or related study class. They received credit based on the employers evaluation of their work.

The other students who were involved in work experience for no credit were released from school from 1 to 2 periods early to work if their schedule permitted them to gain enough credits to satisfy graduation requirements and if parents consented.

Due to limited funds in the project and responsibilities on other levels (middle school) the terminal placement program which was originally intended was not carried out as an official function of the project. The usual efforts of the guidance department were extended to the students. A follow-up program will be implemented in the fall to attempt to locate all terminating students from the 1972-73 school year.

Numerous examples could be cited to indicate individual instances of project success. All students in the 8th grade were administered an individual interest inventory and assisted by a counselor in interpreting the results along with other information in their record files. This experience was considered valuable near the end of their year of exploration and just prior to pre-registering for the 9th grade. All 8th graders experienced a field trip to a vocational technical training facility during the year.

Teacher attitudes towards the program were very positive as reflected in unedited responses to "What do you think of Career Education now that you have been involved?" See Appendix VI. While there were some minor negative remarks, they were constructive and will be taken into consideration in future program efforts.

Parent attitudes were highly positive. Many parents openly expressed pleasure that their children were given the opportunity to explore careers. The recurring statement was "I wish I had been able to have those experiences while I was in school". The only negative comments were from parents who did not want their children to tour the hospital or a funeral home.

Dissemination activities for this project although somewhat limited, we feel have been of assistance to other school systems interested in Career Education. A total of 10 delegations from other school systems have been provided on-site visitation tours and written materials from the project. A total of 87 visitors outside the school system have toured

the project site. Presentations have been made to 6 groups throughout the state detailing the Phenix City program of Career Education. Numerous newspaper articles appeared in the local media promoting the concept of Career Education. Of the units which were produced several were disseminated from local production. Twenty-three of the units which have been revised have been turned over to the State Department of Education for dissemination to other interested school systems. The balance of the units are being revised and retyped and will be disseminated upon completion.

E. EVALUATION

1. Mobile

Program Evaluation

The question facing the evaluator is that of assessing the extent to which the planned program actually was implemented. Did deviations from the plans occur primarily because the project leadership personnel developed improved ways of realizing the project objectives? Or did such deviations occur because of limitations of time, energy and resources? Or did such deviations occur for other reasons?

The implementation of the planned scope of the program will be discussed under the following headings:

1. Personnel - the assembly of the project's leadership personnel, teachers, counselors, other personnel within the Mobile School System, and human resources outside of Mobile.

2. Staff development - both project leadership personnel and all teachers and counselors who had direct responsibilities for the achievement of the program's objectives.

3. Program Objectives - process of development.

4. Program implementation.

Personnel

(1) Supervisory personnel committee: A committee consisting of representative supervisory personnel of the central office staff played a key role in planning and developing procedures for the career education project during the quarterly report period, January 13 - April 13, 1972.

(2) Project leadership personnel: By July 1, 1972 the leadership personnel team had been assembled. This team was composed of:

Dr. H. H. Pope	Project Director - engaged during the first quarterly report period.
Mrs. Glenys Mason	Elementary School Career Resource Specialist - engaged during the first quarterly report period.
Mrs. Jean C. Brannan	Middle School Career Resource Specialist - began work June 19, 1972. Assigned to work with Eanes and Hall Middle Schools.
Mrs. Mary D. Edwards	Middle School Career Resource Specialist - began work June 19, 1972. Assigned to work with Phillips and Washington Middle Schools.

Both Mrs. Brannan and Mrs. Edwards were assigned to work as a faculty career education resource person and as a career counselor.

Mrs. Claire Cunningham	High School Career Resource Specialist - Assigned to work with Toulminville and Rain High Schools as a career counselor and as a faculty resource person in career education.
Mr. Alton Harvey	High School Career Resource Specialist - Assigned to work with Toulminville and Rain High Schools as a faculty resource person and also to be in charge of student placement.

A project secretary, Mrs. Sylvia Rainwater was employed during the first reporting period. Mrs. Sharon English became the project secretary on November 8, 1972, when Mrs. Rainwater transferred to another position.

The personnel requirements, including the qualifications and assigned duties for each of the above positions are detailed on pages 41-45 of the Career Education project proposal. Each of the individuals employed met the specified qualifications. An examination by the evaluator of a sample of activity reports of the Career Resource Specialists plus the project activities

outlined in the Quarterly Reports reveals a good fit between assigned and performed duties. However, it is recommended by the evaluator that the project activity reports of the Career Resource Specialists be somewhat more structured so as to reduce the time required by the Career Resource Specialists in reporting their activities and so as to facilitate the review process by the project director and the evaluator.

(3) Elementary liaison teachers: Two elementary liaison teachers from each project elementary school were appointed to assist the elementary school career specialist with faculty in-service activities and serve as in-school and on-the-job career resource persons for faculties.

The elementary liaison teachers and their school assignments are as follows:

Name	Grade	School Assignment
Mrs. Laura Bounds	Special Ed.	Crichton
Mrs. Virgie Buskey	First	South Brookley
Mrs. Charlotte Davis	Fifth	South Brookley
Mrs. Mary Foxx	Third	Stanton Road
Mrs. Diana Edwards	Fourth	Adelia Williams
Mrs. Adele Peters	Kindergarten	Stanton Road
Mrs. Mary Sanders	Second	Adelia Williams
Mrs. Mary Turner	First	Crichton

Each of the liaison teachers met the qualifications specified on page 45 of the project proposal.

(4) Project school faculties: All teachers, counselors, and principals assigned to the ten project schools had responsibilities in project planning, development, implementation, and evaluation.

(5) Curriculum and instruction personnel: The Assistant Superintendent in charge of Curriculum and Instruction, the Coordinators of Secondary and Vocational Education, Supervisors of Vocational Education, and the Director of Research and Evaluation and other central office personnel provided input to the project.

(6) Community Advisory Committee: The progress toward establishing a sound career education program in Mobile during the past eighteen months has impressed this evaluator.

The emphasis placed by the project director upon involving the community in the program and his dramatic success in so doing is probably a major contributing factor to the success of the program. An eight-member community advisory committee was formed to lend assistance in dealing with the following areas:

a. Obtaining endorsements of career education by key community persons and/or groups.

b. Identification of:

   1. Job sources.
   2. Job-training opportunities.
   3. Potential hands-on experiences.
   4. Potential observational experiences.
   5. Potential constraints on items 1-4.
   6. Strategy for resolving constraints.

c. Identifying and obtaining cooperation of community resource persons for each occupational area.

d. Procurement of occupational information and material from the community.

e. Community input pertaining to program design.

In accomplishing the above objectives, three-member sub-committees (cluster-committees) were identified for each of the 15 occupational clusters. The sub-committees function to identify resources and resource persons within their respective clusters.

Members of the advisory committee are:

Mr. Lloyd Black, Principal, Davidson High School.

Mr. William Estes, Vice-President, Morrison's Food Service, Incorporated.

Mr. A. L. Green, Director, Carver State Technical School.

Mr. Conrad Hauser, Branch Manager, Bodine, Bryson and Rolling.

Mr. Sam Jenkins, Coordinator of Management and Development, International Paper Company, Southern Kraft Division.

Mr. Louis Scott, Personnel Director, Morrison's Food Service, Incorporated.

Dr. Carl E. Todd, Assistant Dean, College of Education, University of South Alabama.

Mr. Walter Underwood, Manager Human Resource Department, Mobile Area Chamber of Commerce.

(6) Consultants: Several consultants and other interested persons visited the Mobile Career Education project. Such persons included:

Dr. James Bishop - Alabama State Department of Education
Dr. David Sawyer - Alabama State Department of Education
Mr. Herve Charest - Alabama State Department of Education
Dr. Ralph M. Roberts - University of Alabama
Dr. Leeman Joslin - University of Alabama
Dr. Harry Barker - University of Alabama
Dr. M. Ray Loree - University of Alabama
Dr. Hobdy Perkins - Evaluator for the Florida Career Education Program.
Mr. E. R. Cimino - University of South Alabama
Miss Debera Sharpe - Georgia State Department of Education

To a limited extent, attendance at national and regional meetings on career education by project leadership personnel constituted an additional source of ideas by project leadership personnel.

Excellent use was made of consultant resources within the Mobile area. Industrial, business, professional and civic leaders were called upon in moulding and implementing the program. A conference was arranged for the purpose of beginning a dialogue with the four institutions of higher learning: University of South Alabama; Mobile College; Bishop State Junior College; and Springhill College.

Staff Development

It was necessary to plan and implement a staff development

program in order to achieve the primary objectives of a program of career education in the Mobile County Public Schools. Needed were:

1. Teachers: skilled in fusing career education into the existing curriculum.

2. Liaison teachers: capable of establishing rapport with faculty members in the project schools and capable of serving as in-school and on-the-job career resource persons.

3. Counselors: able to relate their counseling responsibilities to the objectives of the program.

4. Principals and other administrative personnel: who understand the program and who will take administrative actions that facilitate the achievement of the program's objectives.

5. Career resource specialists: who are:

   a. knowledgeable about career education programs throughout the country.

   b. capable of selecting or constructing career education instructional materials.

   c. facilitators who establish good rapport with faculty members and help them plan and implement a program of career education.

A variety of approaches were required to develop the varied competencies of personnel in or related to the career education program. These approaches included:

1. A staff orientation: A week program, June 19-23, 1972 for leadership personnel (See Appendix X).

2. Inservice trips: One or more of the leadership personnel visited career education programs in nearby locations and attended important career education regional or national conferences. From these meetings the career resource specialists who attended obtained ideas which they later shared with

the remaining leadership personnel.

3.

a. Elementary Career Education workshop: A four week workshop was held for the eight liaison teachers - July 24, through August 18, 1972 (See Appendix XI).

b. Secondary workshops: A half-day career education pre-school orientation session was held for 24 middle school teachers on August 23, 1972, and for 16 high school teachers and all school system vocational counselors on August 24, 1972 (See Appendix XII).

c. Vocational education personnel: A half-day career education orientation session was held in August for all school system vocational education personnel. Topics discussed were:

Career education as perceived by the school system.

Dual role of the project in research and development and implementation.

Objectives.

Processes.

Implications for vocational education.

d. First week orientation sessions: All teachers were involved in Career Education inservice sessions during the first week of reporting for work and prior to the beginning of work with students.

4. Inservice activities:

a. Monthly inservice meetings; Half-day inservice sessions have been conducted monthly by project leadership personnel (see Appendix XIII). An examination of Appendix XIV shows the high degree of school-community interaction

that characterizes the Mobile Career Education program. Teachers and children are visiting industries. Visits are well planned so that children know what to look for. (See"Worker Observation Questionnaire" for the January 10, 1973 Toulminville Inservice meeting.) (Appendix VII)

Noteworthy also is the effort to fuse career education concepts to the curriculum (see example of the December 13, 1972 Inservice Program for Elementary Schools in which the focus is on the use of the "Triple I" Guidance Series as related to the reading program of the school). (Appendix VIII)

b. Released time: Teachers are released from teaching duties on a need basis to work with project leadership personnel on research and development and/or implementation. Teacher aides and parents are being utilized in accomplishing this.

c. Teacher planning periods: Project leadership personnel work with teachers during their daily planning periods on a need basis.

d. Faculty meetings: Principals allot portions of regularly scheduled faculty meetings for career education interaction among teachers and project leadership personnel. As the year progressed, some principals assumed more of an active leadership role in career education with their faculties as evidenced by devoting faculty meetings to career education without the participation of project leadership personnel.

e. Departmental meetings: Department heads and project leadership personnel work with teachers in departmental meetings.

f. Classroom visitations: Project leadership personnel work with teachers by visiting and observing in their classrooms.

g. Counselor sessions: Inservice sessions were held with the regular counselors of the project schools during the year. Problems in relating counseling

activities to career education objectives were discussed at these meetings.

h. Principals' sessions: Inservice sessions were held with all project school principals.

i. Vocational Education personnel: A sharing session with the Vocational Education supervisors was held in which reactions to the project were obtained.

j. Weekly sessions: Weekly sessions of the project leadership personnel were held on Friday afternoons. In these sessions successes were shared and problems reviewed. As previously noted, additional meetings with consultants were held during the year.

Program Objectives (See Appendix XV)

The first set of objectives listed in Appendix XV constitutes the objectives for the eighteen-month funding period. The second set of objectives represent the long-term objectives for the Mobile School System.

These objectives were developed by the formulators of the proposal and are stated on pages 22-23 of the proposal. Central office administrators and personnel were responsible for an initial statement of objectives, with Career Education leadership personnel responsible for the final product.

The objectives fall into five components:

1. Instructional component - target: students.

   a. Elementary school.
   b. Middle school.
   c. High school.

2. Leadership training component - target: project leadership personnel.

3. Teacher training component - target: teachers.

4. Counseling component - target: students.

5. Placement component - target: students.

Program Implementation

The implementation of the Mobile Career Education project is well documented in Section I - Major Activities and Accomplishments of the five quarterly reports:

1. January 13, 1972 - April 13, 1972

2. April 14, 1972 - July 13, 1972

3. July 14, 1972 - October 13, 1972

4. October 14, 1972 - January 13, 1973

5. January 15, 1973 - April 16, 1973

An examination of trends within these quarterly reports is informative. The first reports are short, concerned largely with planning and talk, centered primarily with central office staff and organizational matters. The third Quarterly Report period included the pre-school workshop periods and the beginning of a school year. Planning activities continue to predominate the period, but one gains a sense of urgency in the planning from the repeated reference to "stop-gap" efforts. This was also the period in which interaction of project leadership personnel was stepped up. It also was a period in which continuation of the organization of community resources occurred.

It seemed to the evaluator that it was in the fourth and fifth Quarterly Report periods that the program changed from essentially a "talk" program to an "action" program. It was during these periods that the evaluator and certain consultants with whom the evaluator interacts began to be greatly impressed with the quality of the program that was emerging. All components of the program were in "high" gear. Note some of the entries during this period.

(First, from the October 14, 1972 - January 13, 1972 Report)

9. Field trips: (p. 2) Fifty-eight (58) field trips have been taken during the current reporting period in an effort to familiarize the students with career opportunities, conditions, and requirements represented in the sites visited as related to their classroom work. Examples are as follows:

Classes	Field Trip Sites
Social Studies	County Courthouse
Communication Skills	WALA TV
Home Economics	Morrison's Cafeteria
Special Education	Barber's Dairy
Science	Mobile Water Works
Journalism	Mobile Press-Register
Elementary grades	Seafood industry
Elementary grades	Municipal airport

10. Resource persons: (p.3) One-hundred-thirteen (113) community resource persons have been utilized during the current reporting period...

11. Health Careers Day: (pp. 3-4) ...a Health Careers Day was organized at Rain High School with the co-operation of the Women's Auxiliary to the Mobile Medical Society. Approximately forty (40) resource persons were paired with faculty members in working with students for an entire school day in the course of which all of the eleven-hundred (1100) students in the school were exposed to at least five (5) different presentations each. Examples are as follows:

Teachers	Resource Persons
Home Economics	Dietician
Art	Plastic Surgeon
Physical Science	Dental Hygienist
Math	Neuro-surgeon

12. Materials Collection: (p.5) Letters have been mailed to approximately eleven-hundred (1100) firms nation-wide...requesting printed matter which would be useful in establishing career education libraries in schools. To date, more than five-thousand (5,000) pieces of printed matter have been received from approximately two-hundred (200) firms without charge...

B. Accomplishments (pp. 6-7)

1. Implementation of counseling component: The counsel-

ing component was implemented in project middle and high schools in November as follows:

a. The two middle school staff members are each counseling four days per week or two days per week in each of the four project middle schools. They are counseling approximately fifteen (15) students per session in five (5) group counseling sessions per day for a total of three hundred (300) students per week each...

b. The one project high school counselor is working two days per week with ninth and tenth grade students at Rain High School and two days per week at Toulminville High School with eleventh and twelfth grade students. She is also counseling fifteen (15) students per session, five (5) sessions per day, four (4) days per week with the fifth day being reserved for working with teachers and material development...

2. Implementation of placement component: The placement component was activated in November and has been engaged in the following:

   a. Students from both project high schools participated in a survey of potential employers, in seven different areas of the city. The survey was designed to:

      1. Identify employers who are willing to accept students for observation and/or work experience.

      2. Identify employers who are willing and in need of employing high school students or graduates full-time, part-time or in the summer...

   b. To date, approximately one-hundred (100) students have been placed as follows:

Observation	Work Experience	Part-time Employment
41	50	9

(Second, from the January 15, 1972 - April 16, 1973 Report)

8. Field trips: (p. 2) Ninety-one (91) field trips have been taken during the current reporting period...

9. Resource persons: (p. 2) Two-hundred-eleven (211) community resource persons have been utilized during the current reporting period...

10. Legal Careers Day: (p. 2) ...a Legal Careers Day was organized at Rain High School with the cooperation of the Women's Auxiliary of the Mobile Bar Association. Approximately sixty (60) resource persons were paired with faculty members in working with students for the entire day...

11. African-American Week activities: (p. 3) ...sixty (60) black resource persons were utilized at Washington Middle School and Toulminville High School...Examples of pairings of resource persons and classes are as follows:

Classes	Resource Persons
English	Newspaper Editor
Math	Accountant
Social Studies	Attorney
Industrial Arts	Carpenter
Music	Violinist
Communication Skills	Radio Announcer

12. Materials collection: (p. 4) Responses from the 1100 firms in answer to a request for printed matter... continued into the reporting period...students at Rain and Toulminville are cataloging and filing the material.

13. Youth Program Planning Committee: (p. 4) The project director has continued his involvement in the community-wide effort by major community agencies as follows:

(eleven (11) agencies named, e.g., United Fund, Neighborhood Youth Corps, Plaza Merchants Association, etc.)

14. Presentation by engineers: (p. 4) In conjunction with National Engineers' Week...approximately twenty-five (25) local engineers participated in fourteen (14) career presentations in project schools and six (6) presentations in non-project schools.

B. Accomplishments (pp. 6-7)

1. Placement: Project high school students placed during the reporting period were:

Full-time employment	3
Part-time employment	3
Work experience	9
Job Observation	86

4. "Stop-gap" implementation: To date, approximately three hundred (300) teachers have been identified as being actively involved in "stop-gap" implementation within their own classrooms. This is an increase of forty (40) since the last reporting period...

(Third, from the April 17, 1973 - July 1[illegible] 1973 Report)

1. Field trips: Approximately thirty (30) field trips have been taken during the current reporting period.

2. Resource persons: Approximately one hundred (100) resource persons were utilized during the current reporting period...

3. Evaluation: The elementary instrument was administered to fifth and sixth grades in experimental and control schools and the Career Development Inventory was administered to eighth and eleventh grades in experimental and control schools...information was assembled for formative evaluation.

4. "Stop-gap" implementation: To date, approximately three hundred twenty-five (325) teachers have been identified as being actively involved in "stop-gap"

implementation within their own classrooms. This is an increase of twenty-five (25) since the last reporting period.

5. Career education curriculum adaptations: Approximately three hundred (300) career education curriculum adaptations have been prepared by project personnel during this reporting period.

6. Career education model: Work has continued on the Career Education model.

Evaluation

We return now to the questions facing the evaluator. Has the program been implemented as planned? If deviations from the planned program did occur, were these deviations defensible?

With respect to the assembling of leadership personnel, we find a very close correspondence between planned procedures and the procedures actually implemented. Positions were filled with qualified persons. Some changes were necessitated as the importance of the production of instructional materials became evident. This was justifiable.

The program objectives went through a rather long revision period. In retrospect this was probably desirable. The project leadership personnel learned to understand each other's points of view as subtle priority values began to emerge. Possibly, there is some need to consolidate some of the objectives and re-organize them in a fashion that will aid the evaluation process. However, this should not be done at the expense of communicating the objective to those responsible for implementing the program.

In the program implementation, we find an exceptionally fine job of production and selection of learning activities, particularly at the elementary school level. The successful effort to get community involvement in the project is indeed impressive. A good start was made in the development of the counseling and the placement components of the program. The effort to fuse career education concepts to the existing curriculum is deserving of high praise. Repeated references are made in the Teacher Prepared Anecdotal Record form to the value of the Career Resource Specialists in arranging field trips for

classes. These trips were well-planned. Adequate pre-trip planning and orientation of pupils was provided as well as excellent follow-up, particularly in the elementary school trips.

In summary, we find very good correspondence between the planned program and the implemented program with several areas of exceptionally fine execution of plans. The management component hence must be given a very high rating. When a program turns out well, some program director is doing something right.

Evaluation of Product Objectives

Elementary School

Cognitive Product Objectives #4, 5, 6, 7, 8, and 11: (See Appendix XV) An instrument for assessing the cognitive product objectives was developed and administered this year. For complete details, see #8 Development of Evaluation Instruments for the Instructional Objectives in the Process Evaluation section of this report.

Affective Product Objectives #1, 2, and 3: (See Appendix XV) A self-report attitude scale has been developed and administered. See again, #8 Development of Evaluation Instruments for the Instructional Objectives in the Process Evaluation section of this report.

Action Pattern Product Objectives #9 and 10: (see Appendix XV) Plans are underway to identify the most appropriate instruments and/or methods of assessing the action pattern product objectives for next year.

Middle School

Cognitive Product Objectives #4 and 8: (See Appendix XV) The results of testing concerning the cognitive product objectives will be found in the next section (A Summary and Interpretation of Testing Results on the Career Development Inventory), Part A Subpart 3.

Affective Product Objectives #1, 2, 3, 5, 6, 7, 9, and 10: (See Appendix XV) The results of testing concerning the affective product objectives will be found in the next section, Part A Subparts 1 & 2).

Action Pattern Product Objective #11: (See Appendix XV) Plans are underway to identify the most appropriate instruments and/or methods of assessing the action pattern product objectives for next year.

High School

Cognitive Product Objective #9: (See Appendix XV) Evaluation of the Cognitive project will be found in the next section, (A Summary and Interpretation of Testing Results on the Career Development Inventory), Part B Subpart 3.

Affective Product Objectives #1, 2, 3, 5, 6, 7, 8, and 10: (See Appendix XV) Evaluation of the affective product objectives will be found in the next section, Part B Subparts 1 & 2.

Action Pattern Objectives #5 and 11: (See Appendix XV) Since the introduction of career education, student requests for occupational counseling at B. C. Rain High School have increased approximately 40-50 percent to date and although definite figures are not available, significant increases have been noted by counselors at Toulminville High School.

To date, all indications are that student reactions to career counseling in group sessions are positive in both middle and high school. All counseling efforts are being directed toward accomplishment of the career education product objectives.

A Summary and Interpretation of Testing Results on the Career Development Inventory

The Career Development Inventory was administered in May, 1973 to a sample of Grade 8 and Grade 11 students in the Mobile County School System. About one-half of the students tested were in the Career Education program and one-half (control group) were in schools that were not in the program. Approximately half of the students were in attendance in schools located in low socio-economic neighborhoods. These students were designated as "Low Press" students, (i.e., students working in a school environment where the press to achieve academically is customarily low.) About half of the students were designated as "High Press" students. Thus eight groups were formed as follows:

Grade 8	Experimental:	High Press	N = 20
	Experimental:	Low Press	N = 20
	Control:	High Press	N = 20
	Control:	Low Press	N = 20
Grade 11	Experimental:	High Press	N = 15
	Experimental:	Low Press	N = 15
	Control:	High Press	N = 15
	Control:	Low Press	N = 15

The Career Development Inventory is divided into three parts:

a. Planning Orientation
b. Resources for Exploration
c. Information and Decision Making

Parts A and B are attitudinal measures, (i.e., measures of how the student feels or motivates toward career development), whereas part C deals with factual knowledge such as requirements for specific occupations.

Following is a summary with an interpretation of the results of testing:

A. Grade 8

1. Planning Orientation (an attitudinal measure):

Summary of Group Means			
Group	High Press	Low Press	Total
Experimental	96.6	103.6	100.1
Control	92.1	94.7	93.4
Total	94.3	99.2	

The measured difference between the experimental and control groups in attendance at the high environmental press schools was 4.5 whereas the measured difference in the low press schools was 8.9. As will be noted later, this pattern of differences between experimental and control groups being different from low and high

press students is consistent throughout most of the test results.

Summary of Statistics

Experimental vs. Control	F = 2.15	P = .14
Low Press vs High Press	F = 1.13	P = .29
Interaction	F = .23	P = .64

2. Resources of Exploration (an attitudinal measure):

Summary of Group Means

Group	High Press	Low Press	Total
Experimental	241.3	259.6	250.4
Control	220.7	245.7	233.1
Total	231.0	252.6	

On Resources for Exploration, the measured mean for the experimental - Low Press group was higher than any of the other three groups. This was also the case for planning orientation which is, like Resources for Exploration, a measure of attitude.

Summary of Statistics

Experimental vs Control	F = 1.65	P = .20
High Press vs Low Press	F = 2.59	P = .12
Interaction	F = .06	P = .80

3. Information and Decision Making (a cognitive measure):

Summary of Group Means			
Group	High Press	Low Press	Total
Experimental	11.8	8.5	10.1
Control	10.7	8.3	9.5
Total	11.2	8.4	9.5

It will be noted that there is a significant difference between the high and low environmental press groups on Information and Decision Making. Why does the high press group outperform the low press group on this section of the test when no significant difference was found on the others? One possible explanation is that although the career education concept is apparently changing the attitude toward work of the low press student to a more positive one, the eighth grader who has been operating in the low press environment probably has a greater deficiency in the area of knowledge than one who has learned within an environment emphasizing a high press to achieve academically. Therefore, whereas the career education program is apparently effecting a positive change of attitude, it will take longer for a significant change to take place in the cognitive realm. It is anticipated that a continued involvement in the career education program will show significant improvement in information and decision making.

Summary of Statistics		
Experimental vs Control	F = .45	P = .51
High Press vs Low Press	F = 9.03	P = .004
Interaction	F = .22	P = .65

B. Grade 11

1. Planning Orientation (an attitudinal measure):

Summary of Group Means			
Group	High Press	Low Press	Total
Experimental	105.1	122.5	113.8
Control	103.3	93.3	98.3
Total	104.2	107.9	

On Planning and Orientation, the experimental group performed significantly better than the control group ($P < .01$). Comparing the means for the high press group to the low press group, it is found that in the experimental classes, the low press students held more positive attitudes than did the high press students. This is not the case with the control group.

Looking at the experimental group performance for eighth graders on planning and orientation reveals a consistency of "experimental-highs" scoring higher than experimental-lows.

Summary of Statistics		
Experimental vs Control	F = 9.38	P = .004
High Press vs Low Press	F = .53	P = .52
Interaction	F = 7.26	P = .01

2. Resources for Exploration (an attitudinal measure):

Summary of Group Means			
Group	High Press	Low Press	Total
Experimental	237.1	280.0	258.5
Control	230.0	246.7	238.3
Total	233.5	263.3	

The measured mean for the experimental group is higher than that for the control group and the measured mean for low press students, is higher than the mean for the high press ones. These results are consistent with the results on Resources for Exploration for eighth graders. It appears that there are two trends operating with respect to attitudes:

1. Experimental students tend to have higher measured scores than control students (4 out of 4 cases).

2. Low press students tend to have developed more positive attitudes toward careers than have high press students (3 out of 4 cases).

Summary of Statistics		
Experimental vs Control	F = 2.34	P = .13
High Press vs Low Press	F = 5.09	P = .08
Interaction	F = .97	P = .67

3. Information and Decision Making (a cognitive measure):

Summary of Group Means			
Group	High Press	Low Press	Total
Experimental	13.4	16.3	14.8
Control	12.9	10.9	11.9
Total	13.1	13.6	

The first impression one has when looking at the results on Information and Decision Making is that the eighth and eleventh grade results are inconsistent. However, if the characteristics of the two groups (eighth graders and 11th graders) are compared, it is evident that many of the "low-achieving" eighth graders have left or dropped out of school and those who remain probably have the motivation to minimize any deficiency which might come about as a result of learning within a low-press environment (at school or at home). It is therefore, not illogical to expect a smaller difference or even a reversal when these students are motivated by a good career education program. The eleventh grade experimental low-press group scored somewhat higher on Information and Decision Making than did the experimental high-press group. Overall, there was practically no difference between the high and low press students.

Summary of Statistics		
Experimental vs Control	F = 5.55	P = .02
High Press vs Low Press	F = .12	P = .73
Interaction	F = 3.73	P = .05

C. Summary

In analyzing trends found in the results of the Career Development Inventory, it appears as though the career education

concept may work better with students who are learning in a school located in a low-income neighborhood. It also appears that attitudes toward career development can be improved rapidly within a school located in a low income area with an increase in the cognitive realm following after initial deficiencies in knowledge have been rectified.

The evaluation for next year will need to include a career education instrument for lower grades (4 through 6). Such an instrument has been constructed and administered this year. It is being item-analyzed and a revision will be ready for use in September, 1973.

Evaluation of Process Objectives

A. Instructional Component

The research and development teachers in the project have been busy since the middle of the summer with developing and actually constructing career education materials for use in their classrooms. These teachers along with many others in the project schools have been working toward the accomplishment of the instructional product objectives since the opening of school last year. Some of the activities engaged in up to April 16, 1973, are described below:

1. Field trips: Ninety-one (91) field trips have been taken in an effort to familiarize students with career opportunities, conditions, and requirements represented in the sites visited as related to their classroom work. Examples are as follows:

Classes	Field Trip Sites
Social Studies	County Courthouse
Communications Skills	WALA TV
Music and Art	WKRG TV
Home Economics	Morrison's Cafeteria
Special Education	Barber's Dairy
Science	Weather Bureau
Industrial Arts	Southwest Technical Inst.
English	Public Library
Special Education	Trade School
Music Appreciation	Symphony Concert
Math	Merchants National Bank

Classes	Field Trip Sites
Science	Mobile Water Works
Business Education	Merchants National Bank
Journalism	Mobile Press-Register
Elementary grades	Seafood Industry
Elementary grades	Municipal Airport
Elementary grades	State Docks
Elementary grades	Shopping Centers
Elementary grades	Food Chain Warehouse
Elementary grades	Service Station
Science	Marine Biology Laboratory
Science	Seafood Industry

2. Resource persons: Two hundred-eleven (211) community resource persons have been utilized. Resource persons are asked to provide pertinent information about their jobs.

3. Legal Careers Day: In an effort to provide as much information as possible for students as a part of the "stop-gap" remedial program, a Legal Careers Day was organized at Rain High School with the cooperation of the Women's Auxiliary of the Mobile Bar Association. Approximately sixty (60) resource persons were paired with faculty members in working with students for the entire day in the course of which the entire student body attended at least four (4) different presentations each. Examples are as follows:

Classes	Resource Persons
Business & Office Occup.	Legal Secretary
R.O.T.C.	Judge Advocate
Government	Legislator
American History	Mayor
Psychology	Attorney
Civics	Title Insurance Specialist
Foreign Language	Federal Court Reporter
Physical Science	FBI Representative
English	Attorney
Speech and Dramatics	Attorney
Typing	Legal Secretary

4. African-American Week activities: In an effort to provide successful role models with whom black students could identify, sixty (60) black resource persons were utilized at Washington Middle School and Toulminville High School during African-American Week as a further effort in the "stop-gap" remedial program. Examples of pairings of resource persons and classes are as follows:

Classes	Resource Persons
English	Newspaper Editor
Math	Accountant
Math	Architect
Social Studies	Attorney
Science	Pediatrician
Industrial Arts	Carpenter
Music	Violinist
R.O.T.C.	Army Officer
Science	Pharmacist
Communication Skills	Electrician
Industrial Arts	Tile-setter
Industrial Arts	Welder
Communication Skills	Radio Announcer

5. Presentations by engineers: In conjunction with National Engineers' Week (two weeks), approximately twenty-five (25) local engineers participated in fourteen (14) career presentations in project schools and six (6) presentations in non-project schools.

6. Materials production: The following materials have been locally produced:

   a. Seven elementary units were fused with career education concepts.

   b. An eleventh grade English unit with career education concepts.

   c. Three hundred career education curriculum adaptations.

   d. A high school poetry unit with fused career education concepts.

   e. A career education implementation model.

7. "Stop-gap" implementation: To date, approximately three hundred (300) teachers have been identified as being actively involved in "stop-gap" implementation within their own classrooms. This is an increase of forty (40) since the last reporting period. A further indication of "stop-gap" implementation is exemplified by tallies of objective implementation by middle school faculties. This estimate was made during the last reporting period; however, compilations were not made until the current reporting period. It appears that a majority of stated objectives are being significantly treated by teachers.

8. Development of Evaluation Instruments for the Instructional Objectives: During the 1972-73 school term, the evaluation associate and the elementary school career resource specialist worked together to develop a knowledge based career education assessment instrument and a career oriented attitude scale. The approach to the development of these instruments include:

   a. Development of an item pool for the knowledge test and one for the attitude scale.

   b. Constant review of the items, deletion of poor items, addition of new items and improvement of other items.

   c. Selection of unique items plus a number of "cross-over" items in sufficient quantity to produce two 30 item forms of the attitude scale.

   d. Typing, reproducing and assembling of the instruments.

   e. Administration of both the knowledge test and the attitude scale to over 1300 students in the Mobile area selected randomly and stratified according to certain variables (see Data Collection Procedures, Evaluation Design Instructional Component, Elementary School Product Objectives in this report).

   f. Analysis of the items on both the knowledge test and the attitude scale, (currently underway at the University of Alabama).

The instruments described above will be used i a revised form for the product evaluation of the instructional component next year.

The activities and accomplishments above indicate completion of instructional component process objectives.

B. Leadership Training Component

The project director and his immediate staff engaged in many activities designed to develop and increase competence in the realm of Career Education. Some examples follow:

1. Staff development: Leadership personnel had one week of intensive orientation and inservice work.

2. Administrative orientation: The following items were discussed:

   a. Line, staff and personnel relationships between staff and division; staff and schools; staff and director; and staff and staff.

   b. Work attendance questions such as hours, breaks, absences, vacation, time cards, sign in/out, etc.

   c. Job descriptions and role comparisons for all staff members.

   d. Budgeting, expenditures, requisitions, and purchasing procedures.

   e. Office procedures such as secretarial work-load, materials reproduction, office supplies, use of telephone, travel reports, correspondence, etc.

   f. Individual accountability.

   g. Questions and answers.

3. Inservice trips:

   a. In May, the project director attended the Career Education Conference in Washington, D. C., which was sponsored by Educational Testing Service.

b. Mrs. Mason visited the Jones County Career Education Project in Laurel, Mississippi in May.

c. Mr. Harvey visited the Orange County Career Education Project in Orlando, Florida in July.

d. Mrs. Brannan and Mrs. Mason consulted with Career Education specialists in the Georgia State Department of Education in Atlanta and with persons in the Atlanta City School System in July.

e. The entire staff consulted with Dr. Hobdy Perkins, Evaluator for the Florida Career Education Program, at the University of West Florida in Pensacola, Florida, in July.

f. Project leadership personnel attended significant sessions of the State Vocational Education Conference held in Mobile August 16-18, 1972.

g. Project leadership personnel had a half-day tour of Southwest State Technical Institute which was their first exposure to formal technical training and requirements.

h. Project leadership personnel and eight elementary teachers had a day's tour of Alabama Dry Docks and Ship Building Company as a world-of-work orientation. Additionally, each elementary teacher spent a day observing a community worker on the job: (radio dispatcher, reporter, secretary, reducing salon worker, dog catcher, bus driver, cafeteria worker, file clerk, dental hygienist, and a switchboard operator).

i. On August 21 and 22, 1972, Mrs. Claire Cunningham, High School Career Resource Specialist, and Mrs. Mary Edwards, Middle School Career Resource Specialist, attended a Career Education workshop sponsored by the Phenix City Career Education Project in Phenix City, Alabama.

j. The project director and the project evaluator attended the Career Education Conference in Warrenton, Virginia, December 17-19, 1972.

k. Mr. Alton Harvey attended the Career Education Conference in Washington, D. C., sponsored by the Chamber of Commerce in February. On the same trip, Mr. Harvey visited the Placement Office of the Baltimore City Schools to obtain operational ideas for the project placement service.

l. Mrs. Glenys Mason attended the CEC-AVA Conference on Career Education for Exceptional Children in New Orleans in February.

m. Mr. Alton Harvey attended the Economics World-of-Work Conference in Atlanta in April.

n. The entire project staff attended the Career Education Conference sponsored by the University of West Florida in Pensacola in May.

o. Mrs. Glenys Mason and Mrs. Jean Brannan attended the Career Education Conference sponsored by International Paper Company at Auburn University.

The activities above indicate completion of the leadership training component process objectives.

C. Teacher Training Component

Teachers in the project schools have been taking part in regular and special programs designed to develop competency in all areas of Career Education. Examples of these activities follow:

1. Workshops

a. Elementary workshop: A four-week workshop was held July 24 - August 18, 1972, for the eight elementary liaison teachers.

1. K-5 supplements to social studies units were produced as a point of departure for "stop-gap" implementation.

2. Example outlines of career education games were produced by teachers, for which visual materials were developed.

2. Secondary workshops: A half-day career education pre-school orientation session was held for twenty-four middle school teachers on August 23, 1972, and for sixteen high school teachers and all school system vocational counselors on August 24, 1972.

3. First week orientation sessions: All teachers were involved in career education inservice sessions during the first week of reporting for work and prior to the beginning of work with students.

4. Monthly inservice meetings: Half-day inservice sessions with all project school faculties have been conducted monthly by project leadership personnel.

5. Released time: Teachers have continued to be released from teaching duties on a need basis to work with project leadership personnel on research and development and/or implementation.

6. Teacher planning periods: Project leadership personnel are continuing to work with teachers during their daily planning periods on a need basis.

7. Faculty meetings: Principals are continuing to allot portions of regularly scheduled faculty meetings for career education interaction among teachers and project leadership personnel.

8. Departmental meetings: Department heads and project leadership personnel are continuing to work with teachers in departmental meetings.

9. Classroom visitations: Project leadership personnel are continuing to work with teachers by visiting and observing in their classroom.

10. Vocational Education personnel: A sharing session with the Vocational Education supervisors was held.

The activities and accomplishments above indicate completion of the teacher training component process objectives.

D. Placement Component

Activities aimed at the attainment of the placement objectives follow:

1. Implementation of placement component: The placement component was activated in November, 1972 and has been in the following:

   Students from both project high schools participated in a survey of potential employers in seven (7) different areas of the city. The survey was designed to: (1) identify employers who are willing to accept students for observation and/or work experience; and (2) identify employers who are willing and in need of employing high school students or graduates full-time, part-time or in the summer. All survey teams reported excellent reactions from employers contacted with eighty-one percent (81%) indicating a willingness to accept students for observation and/or work experience.

2. Placement activities: Placement of project high school students in work experiences, observation experiences, and full-time and part-time jobs has continued. A career interest survey was administered to all students in grades 9-12 in project high schools and to all students in grades 9-11 in all other high schools in the school system. The information obtained from project school students will be used in counseling and in placement and the information obtained from non-project school students will be used as baseline data for possible expansion of the career education program to include the entire school system. Assistance with the survey has been rendered by the Explorers and information will be shared with them in developing Explorer Posts in conjunction with career interests.

   To date, approximately two hundred one (201) students have been placed as follows:

Observation	Work Experience	Part-time Employment	Full-time Employment
127	59	12	3

The activities and accomplishments above indicate completion of the placement component process objectives.

E. Counseling Component

Activities focused on the accomplishment of the counseling component objective, include the following:

1. Implementation of counseling component: The counseling component was implemented in project middle and high schools in November, 1972 as follows:

   a. The two middle school staff members are each counseling four days per week or two days per week in each of the four project middle schools. They are each counseling approximately fifteen (15) students per session in five (5) group counseling sessions per day for a total of three hundred (300) students per week each. Since students are being drawn from their classes for these sessions, staff counselors are working with teachers in an attempt to coordinate counseling and classroom career education efforts. Because of the large enrollments, only the sixth grade is being counseled by staff counselors. Some assistance is being received from in-school counselors in working with the seventh and eighth grades bearing in mind that there is a 1-1000 counselor-student ratio. Staff counselors are using the fifth day of each week for continued work with teachers and materials development.

   b. The one project high school counselor is working two days per week with ninth and tenth grade students at Rain High School and two days per week at Toulminville High School with eleventh and twelfth grade students. She is also counseling fifteen (15) students per session, five (5) sessions per day, four (4) days per week with the fifth day being reserved for working with teachers and materials development.

      Assistance is being given by in-school and vocational counselors in working with the eleventh and twelfth

grades at Rain and ninth and tenth grades at Toulminville. Every effort is also being made at the high school level to coordinate counseling and classroom work.

The activities and accomplishments above indicate completion of the counseling component process objectives.

F. Management Component

The project director and his staff have been directly responsible for developing and guiding the Mobile Career Education Project. Some of the activities in which they have been engaged are described below:

1. General Administrative Activities

a. Career education objective: A long-range career education objective has been developed.

"...to help students develop the knowledge, skills and attitudes necessary for the development of a career plan so that upon leaving school they will have made tentative career choices, with awareness of available and continuing career options, and are sufficiently prepared to: (a) enter a job; (b) enter an other-than-baccalaureate job training program; or (c) enter a program of higher education."

b. Schools: The selection of schools to be involved in the project has been finalized.

c. Planning personnel: The appropriate persons to be involved in the planning and development have been identified.

d. Procedures: General procedures have been developed for accomplishing instructional objectives.

e. Scope and sequence: Project scope and sequence has been determined for kindergarten through high school.

f. Project proposal: The comprehensive project proposal has been completed.

g. Bibliography: A bibliography of available career education materials has been completed.

h. Program objectives: Broad objectives have been finalized in the following areas:

1. Instructional objectives for elementary, middle and high school.

2. Leadership training objectives.

3. Teacher training objectives.

4. Counseling objectives.

5. Placement objectives.

i. Budgeting: Budget accounts have been finalized.

j. Management information system: A management system has been developed which will guide the project and is outlined as follows:

1. Planning processes.

2. Planning schedule.

3. Proposal development sequence.

4. Line and staff organization.

5. Data collection.

6. Manpower allocations.

7. Staff development.

8. Implementation.

9. Evaluation.

10. Budgeting.

k. Materials collection: Letters have been mailed to approximately eleven hundred (1100) firms nation-wide informing them about career education and requesting printed matter which would be

useful in establishing Career Education libraries in the schools. The entire posting process was completed by students enrolled in business and office occupations classes. To date, more than five-thousand (5,000) pieces of printed matter have been received from approximately two hundred (200) firms without charge. Additional material is currently being delivered and prepared for distribution daily.

The continual updating of Career Education material will be facilitated through the cycling of key punch cards which have been prepared for each firm. Twenty-five percent (25%) of the eleven hundred (1100) firms will be contacted on a quarterly basis in an effort to obtain new material.

This procedure has been established with the school system's Data Processing Center.

l. Student body career education programs: The project director addressed the entire student body of Eanes Middle School in three assembly programs on career education and completed a series of sessions which encompassed the entire student body of Rain High School.

m. Physical plant: The project staff was moved to facilities located in the Mobile Aerospace and Industrial Complex. The move has greatly facilitated access to project schools as well as access to various industries with which the project will be working.

n. Model development: Work on the formal career education model by project leadership personnel and teachers has continued.

2. Staff Employment and Utilization

By July 19, 1972 a complete staff had been assembled. The staff consists of:

a. Project Director.

b. Elementary School Resource Specialist.

c. Two Middle School Resource Specialists.

d. Two High School Resource Specialists.

e. Eight Elementary Liaison Teachers.

f. Project Secretary.

g. Two D.O. Students who provide clerical assistance.

3. Interaction with Project Consultants

a. Dr. Ralph Roberts, University of Alabama: Dr. Roberts assisted with assessment of teacher participation in the project in November and interacted with teachers concerning this in the monthly inservice meeting.

b. Miss Debera Sharpe, Georgia State Department of Education: Miss Sharpe conducted the October in-service meeting with six of the project school faculties.

c. Dr. M. Ray Loree, University of Alabama: Dr. Loree has made five visits to the project for evaluation purposes.

d. Dr. Harry R. Barker, University of Alabama: Dr. Barker is assisting Dr. Loree with the statistical treatment of the evaluation plan. Consequently, he visited the project for orientation.

e. Dr. Leeman Joslin, University of Alabama: Dr. Joslin has assisted in providing general direction for the project and in assessing teacher participation and the counseling component.

f. Mr. E. R. Cimino, Director of Placement, University of South Alabama: Mr. Cimino has provided assistance in developing the project placement program.

g. Dr. David Sawyer, Supervisor of Research and Evaluation, Alabama State Department of Education: Dr.

Sawyer has spoken to leadership personnel and project faculties about career education and its implementation. He has also visited project schools and shared his personal assessment of local career education efforts.

h. Dr. James Bishop, Director of the Support Data Branch, Alabama State Department of Education: Dr. Bishop has provided assistance to the project director in gaining direction.

4. Community Involvement Activities

a. Community resources: Seven of the fifteen cluster committees made up of community leaders have been completed as follows:

1. Health.

2. Fine Arts and Humanities.

3. Public Service.

4. Marketing and Distribution.

5. Agribusiness and Natural Resources.

6. Hospitality and Recreation.

7. Communication and Media.

They are presently working in the following task areas:

1. Identification of community resource persons for each occupation in their respective clusters.

2. Identification and provision of appropriate material.

3. Identification of observational and hands-on experiences in the community.

b. Dissemination of information using a multi-media approach: (See next topic.)

5. Dissemination Activities

a. Project brochure: A brochure was developed, and printed by school system printing facilities, which depicts the components, goals, and objectives of the project. The brochure was disseminated: (1) throughout the community; and (2) outside the community as information about the project was requested.

b. AEA exhibit: The project was invited to exhibit information at the annual meeting of the Alabama Education Association in Birmingham in March and at the Career Education Conference sponsored by the University of West Florida in May. A booth was arranged which exhibited a pictorial display of the project and its components.

c. Parent-Teacher Association meetings: The project director made career education presentations at PTA meetings in the following schools:

Adelia Williams Elementary
Tanner Williams Elementary
Wilmer Elementary
Shepard Elementary
Westlawn Elementary
Eanes Middle School
Phillips Middle School
Hall Middle School
Rain High School
Davidson High School

d. Professional and civic organization presentations: The project director made career education presentations to the Mobile Claims Adjustors Association, the Monday Club, the Tennis Club, and three Lions Club presentations.

e. Dissemination to non-project schools: The project director disseminated career education information to non-project schools as follows:

1. Conducted monthly faculty inservice meetings at Clark Middle School on February 14, 1973, and at Austin Elementary School on April 11, 1973.

2. Prepared career education faculty inservice for Davidson High School's April 11, 1973 meeting.

f. Presentation to elementary principals: The project director made a career education presentation to the District 1 Elementary Principals' meeting in April.

g. Project visitations: The project was visited by the following out-of-town persons:

Dr. David Sawyer, State Department of Education
Dr. Jerry Beavers, State Department of Education
Mr. Fuller, State Department of Education
Dr. Hobdy Perkins, University of West Florida
Ms. Rose Patterson, Escambia County, Florida Public Schools
Mr. Joe Shell, Escambia County, Florida Public Schools
Mrs. Frank Doolittle, Huntsville Public Schools
Miss Mary Lovell, United States Office of Education
Miss Ellen Lyles, United States Office of Education
Dr. Eugene Lewis, Pensacola Junior College
Mr. Wiley Clement, Pensacola Junior College
Miss Elsie Parker, Escambia County Public Schools

h. Newspaper and magazine articles: Articles featuring and/or including career education were published as follows:

1. Mobile Press-Register:

a. "Speakers Talk on Law Fields at B.C. Rain's Career Day"

b. "At AEA Meeting"

c. "Chit-Chat"

d. "Students in the News"

e. "Vocational Post Filled by Collins"

f. "Career Education Program Giving Aid to Students"

g. "High School Problems Aired"

h. "Career Education Project Held"

i. "Chief U.S. School Official Stresses Career Education"

j. "Education Official Arrives"

k. "Career Education Program Begins Here"

l. "Back-to-School"

2. Teleprompter Magazine:

"There's Someone in Our Town"

3. Chamber of Commerce newsletter:

"Career Education"

i. Requests from other institutions: A number of requests for project information by other schools and institutions have been honored.

j. Television programs: As a public service, two thirty minute television programs were taped by WKRG, a local station, for showing on July 30, and August 2, 6, and 13, 1972. Content of the program was:

Program A - A panel discussion of project goals, processes and schedule by three members of the community advisory committee, the project director and moderated by a station newscaster.

Program B - A fourteen minute segment of the United States Office of Education's career education film with questions and answers about career education by a station newscaster and the project director.

The project received coverage in newscasts and public service programs on eight (8) other occasions.

6. Data Collection Activities

A career interest survey was conducted in all high schools in the school system. The survey form was designed by project leadership personnel. Verbal approval to use the form was given by the United States Office of Education. A copy is attached.

7. Evaluation Activities

a. Summative evaluation:

1. Two instruments of measurement were used: (a) the Career Development Inventory developed by Donald Super was administered in middle and high schools; and (b) an instrument developed by project leadership personnel, in cooperation with Dr. M. Ray Loree, was to be administered in elementary schools.

2. The instruments were administered to students in experimental and control situations in the fourth, fifth, eighth, and eleventh grades.

3. The control schools were selected by pairing with experimental schools on the basis of the following consideration: (a) socio-economic indices; (b) racial composition of the student bodies; (c) geographical area served; and (d) recommendations of the Division of Pupil Personnel based on their knowledge of other factors such as attendance, etc.

4. One teacher's class was randomly selected from each of the aforementioned in each of the elementary control schools for testing. The instruments were administered to all fourth and fifth grade classes in the experimental schools.

5. Sixty (60) students were randomly selected from each of the aforementioned grades in each of the middle and high school experimental and control schools for testing.

6. The elementary instrument was scored by hand

and the Career Development Inventory was machine scored.

7. The analysis of variance statistical technique was used to determine if there were significant differences between experimental and control scores.

Evaluation Design

Elementary School Instructional Objectives

Cognitive Product Objectives #4, 5, 6, 7, 8, and 11: (See Appendix XV) These objectives are focused upon the student acquiring an increasing awareness of various facets of the world of work. Student achievement on these objectives is to be measured by a project constructed achievement test.

Affective Product Objectives #1, 2, and 3: (See Appendix XV) These objectives are focused upon the student's attitude toward self, toward others, and toward the world of work. Student achievement on these objectives is to be measured by a self-report attitude scale, supplemented by teacher/counselor kept anecdotal records.

Action Pattern Product Objectives #9 and 10: (See Appendix XV) These objectives are focused upon the student's growing ability to work with others and the student's behavioral manifestation of an understanding and appreciation of the importance of a free enterprise system. Teacher/counselor-kept anecdotal records will constitute the data source to evaluate these objectives.

Process Objectives: The process through which teachers work toward the achievement of the product objectives of the elementary, middle, and high schools in the project is through the implementation of a comprehensive plan for fusing career education concepts with the existing curriculum. This is done in a variety of ways:

a. Through relating work done in the home, community, country, and world to school experiences.

b. Through experiences provided in a classroom environment in which each person and his contribution to daily living is appreciated and respected and through activities that illustrate the interdependence of man in procuring goods and services.

c. Through relating career choices to personal needs and satisfactions and through positive reinforcement of work tasks completed.

d. Through working independently and with others, so as to develop more productive work habits.

e. Through utilization of community and parent resources.

1.51 Field trips.
1.52 Parents and others visiting the classroom as resource persons for particular occupations.

f. Through utilization of varied communication media.

Evaluation Plan for Elementary Product Objectives

Evaluation Techniques and Instruments: A test designed to measure the Elementary Product Objectives was developed and is being item analyzed and revised for use next year. The test is composed of thirty (30) knowledge and thirty (30) attitude items.

Evaluation Data Collection Procedures: A stratified random sample of pupils in grade 5 will be drawn from both the experimental and control schools located in both low income and higher income neighborhoods. The students will also be stratified according to the socio-economic level of their immediate family.

Test administration procedures will be developed by Mobile leadership personnel working in cooperation with the evaluators. The Mobile leadership personnel will be responsible for the actual administration of the tests.

I.B.M. answer sheets will be used to record responses and will be subjected to machine scoring. Recovery of data from the answer sheets will be the responsibility of the evaluator.

Evaluation Data Analysis Technique: A 2 x 2 x 2 factorial design will be used to analyze the results of the pre-test. The three dimensions of the design will be composed of:

1. Experimental Group - Control Group
2. Low S.E.S. School - High S.E.S. School
3. Low S.E.S. Family - High S.E.S. Family

We are mainly interested in comparing the experimental and control groups on overall performance but we are also interested in investigating differences attributable to the socio-economic level of the school and of the family.

The post-test will also be analyzed using the 2 x 2 x 2 factorial design and the gains realized during the interval between pre and post-testing will be evaluated.

The evaluators will be responsible for the data analysis. The final data analysis will be completed by July 1, 1974 (or 30 days after receipt of the post-test answer sheets, if these are received late).

Evaluation Data Analysis Presentation: A first draft of the report presenting an analysis of the data will be completed by the evaluator by July 12, 1974 (or six weeks after receipt of the answer sheets if these are received late). The first draft will be forwarded to the project director for inclusion in the larger project report.

Evaluation of Elementary Process Objectives

Evaluation Techniques and Instruments: Evidence of activities and accomplishments will be documented with written records, photographs, samples of materials produced, etc.

Data Collection Procedures: Mobile supervisory personnel will be responsible for assembling, identifying and filing the process data.

Data Analysis Technique: The evaluator will make a visual inspection of the process data at the end of next year.

Data Analysis Presentation: Results of the inspection of process data will be included in the final evaluation report. Process data should be received six weeks before the final evaluation report is due.

Middle School Instructional Objectives

Cognitive Product Objectives #4 and 8: (See Appendix XV) These objectives are concerned with the student's acquisition of information about occupations that are of interest to him

and the development of an understanding of the need for flexibility of work preparation. A standardized objective achievement test will be used to assess student progress in these objectives.

Affective Product Objectives #1, 2, 3, 5, 6, 7, 9, and 10: (See Appendix XV) These objectives are directed toward the student's increased understanding of those aspects of self related to career choice, the student's appreciation of diversity of interests, attitudes and values in others and the development of favorable attitudes toward the free enterprise system and toward the personal characteristics that lead to success in the free enterprise system. A self-report attitude inventory will be used to assess student attainment of this objective.

Action Pattern Product Objective #11: (See Appendix XV) This objective is focused upon the behavioral manifestations of the student's effort to explore occupational clusters as a prelude to the development of a career plan. Teacher/counselor ratings will be used to assess student progress in this objective.

Process Objectives: (Same as in elementary schools plus group counseling experiences.)

Evaluation Plan for Middle School Product Objectives

Evaluation Techniques and Instruments: The Middle School Product Objectives will be measured using either the Career Development Inventory or the Career Maturity Inventory. Each of these tests consists of both knowledge and attitudinal items.

Evaluation Data Collection Procedures: A stratified random sample of pupils in grade 6 or 8 will be drawn from both experimental and control schools. The schools will be located in both low and high income neighborhoods and students will be further stratified according to the socio-economic status of their families.

Test administration procedures will be developed by Mobile leadership personnel working in cooperation with the evaluator. The Mobile leadership personnel will be responsible for the actual administration of the tests. For scoring procedures, see Elementary Evaluation Plan.

Evaluation Data Analysis Technique: (See Elementary Evaluation Plan.)

Evaluation Data Analysis Presentation: (See Elementary Evaluation Plan.)

Evaluation of Middle School Process Objectives

(Same as Evaluation of Elementary School Process Objectives.)

High School Instructional Objectives

Cognitive Product Objective #9: (See Appendix XV) The student's increased understanding about the world of work will be assessed by a standardized objective test.

Affective Product Objectives #1, 2, 3, 5, 6, 7, 8, and 10: (See Attachment) The development of students with respect to these attitudinal objectives will be assessed with a self-report attitude scale. These attitudes include an appreciation for the diverse contributions made by citizens in different occupations and for those personal characteristics that lead to productive citizenry in a free society.

Action Pattern Objectives #5 and 11: (See Appendix XV) These objectives are focused upon the student's development of a career plan. A rating scale will be used to assess student progress in these objectives.

Process Objectives: (Same as Middle School)

Evaluation Plan for High School Product Objectives

Evaluation Techniques and Instruments: (See Middle School Evaluation Plan)

Evaluation Data Collection Procedures: A stratified random sample of pupils in grade 11 will be used. See Elementary Evaluation Plan, Part B for details concerning stratification of the sample, etc.

Evaluation Data Analysis Technique: (See Elementary Evaluation Plan)

Evaluation Data Analysis Presentation: (See Elementary Evaluation Plan)

Evaluation of High School Process Objectives

(Same as Evaluation of Elementary School Process Objectives.)

Formative Evaluation

The evaluation design provided for formative evaluation of the following areas: (1) management component; (2) teacher training; (3) placement objectives; (4) counseling component; (5) leadership training; and (6) elementary, middle and high school process objectives.

Examples of the formative processes used are:

1. Teacher prepared anecdotal records.
2. On-site observation.
3. Periodic conferences with project leadership personnel, teachers, principals and students.
4. Examination of documented evidence of management accomplishments.
5. Examination of all project records and reports.
6. Examination of evidence of materials produced by project leadership personnel, teachers and students.
7. Documentation of project findings and events.

The activities above indicate completion of the management component objectives.

Leadership Training Objectives

Product Objectives #1, 2, 3, 6, and 7: (See Appendix XV) These objectives are focused upon the leadership personnel acquiring the skills and knowledge required for providing teachers and other project personnel with direction and guidance and for implementing various aspects of the total program.

Process Objectives - Leadership Training Procedures #1, 2, 3, and 5: (See Appendix XV) These objectives are focused mainly on developing and broadening the leadership's knowledge about career education. In this way, it is felt that the leadership personnel can be more effective in their work with teachers, project personnel and community leaders.

Evaluation Plan for Leadership Training Product Objectives

Evaluation Techniques and Instruments: Leadership Training Product Objectives will be assessed on the basis of documentary evidence such as proof that inservice meetings were held, lists of topics covered at such meetings, number of persons in attendance, etc. Copies of materials produced (e.g., career education bibliography), and documentary evidence of finished plans for student placement and career counseling will also be included.

Evaluation Data Collection Procedures: Leadership personnel will be responsible for collecting, filing and keeping appropriate documents, and other materials.

Evaluation Data Analysis Techniques: Data collected in evidence of the objectives will be inspected by the evaluator.

Evaluation Data Analysis Presentation: A first draft of the report presenting an analysis of the data will be completed by the evaluator by July 12, 1974 (or six weeks after receipt of the data if the data is received late). The first draft will be forwarded to the project director for inclusion in the larger project report.

Evaluation Plan for Leadership Training Process Objectives

Evaluation Techniques and Instruments: Leadership Training Process Objectives will be assessed using documentary evidence of activities engaged in by leadership personnel when the purpose of these activities was the attainment of Leadership Training Product Objectives.

Evaluation Data Collection Procedures: (See same for product objectives.)

Evaluation Data Analysis Techniques: (See same for product objectives.)

Evaluation Data Analysis Presentation: (See same for product objectives.)

Teacher Training Objectives

Product Objectives #1, 2, 3, and 4: (See Appendix XV) Teacher Training Product Objectives are focused upon the attitudes, knowledge and skills possessed by teachers which are related to career education and it's implementation in his (her) classroom.

Process Objectives Teacher Training Procedures #1, 2, 3, 4, 5, and 6: (See Appendix XV) Teacher Training process Objectives revolve around the participation of teachers in experiences provided by the project leadership personnel which are designed to make the teacher more knowledgeable and effective within the realm of Career Education.

Evaluation Plan for Teacher Training Product Objectives: The best evidence to support the attainment of the teacher training objectives will be pupils' gains on career education achievement tests and pupil attitude changes.

Evaluation Plan for Teacher Training Process Objectives

Evaluation Techniques and Instruments: Teacher training process objectives will be evaluated using documentary evidence indicating the extent to which teachers participated in the inservice training program. Attendance figures, lists of topics covered and copies of teachers' evaluations of workshops are examples of the types of data needed.

Evaluation Data Collection Procedures: (See same for Leadership Training Product Objectives.)

Evaluation Data Analysis Techniques: (See same for Leadership Training Product Objectives.)

Evaluation Data Analysis Presentation: (See same for Leadership Training Product Objectives.)

Placement Objectives

Product Objectives #1, 2, 3, 4, 5, and 6: See Appendix XV) These objectives are focused upon the establishment and operation of placement services within project schools.

Process Objectives (Not listed): The process necessary for the accomplishment of the product objectives above includes meetings with community and industry leaders, development of surveys and questionnaires, etc.

Evaluation Plan for Placement Product Objectives

Evaluation Techniques and Instruments: The placement product objectives will be evaluated using documentary evidence of the operating at placement services in project schools as well as figures reflecting the number of students being placed in jobs, job training or higher education through these services.

Evaluation Data Collection Procedures: Placement personnel will be responsible for keeping records concerning the students using the placement service numbers of students placed, etc. Leadership personnel will be responsible for collecting and filing the records above as well as for compiling a master list of figures concerning students using and being placed by the placement service.

Evaluation Data Analysis Techniques: (See same for Leadership Training Product Objectives.)

Evaluation Data Analysis Presentation: (See same for Leadership Training Product Objectives.)

Evaluation Plan for Placement Process Objectives

Evaluation Techniques and Instruments: Placement process objectives will be evaluated using documents such as correspondence with business leaders, etc.

Evaluation Data Collection Procedures: Leadership personnel will be responsible for collecting and filing all documents pertinent to the setting up and operation of the placement service.

Evaluation Data Analysis Techniques: (See same for Leadership Training Product Objectives.)

Evaluation Data Analysis Presentation: (See same for Leadership Training Product Objectives.)

Counseling Objectives

Product Objective (Not listed): Product objectives for the counseling component would necessarily include exploration of career areas by students and the seeking out of additional information on career possibilities, etc.

Process Objectives #1, 2, 3, and 4: (See Appendix XV) These objectives are focused on providing experiences which will assist students in (1) assessing their interests and abilities; (2) identifying appropriate career areas; and (3) developing a career plan.

Evaluation Plan for Counseling Product Objectives

The best evidence to support the attainment of counseling product objectives will be pupils' use of the placement service as well as increased numbers of students requesting information and help from their school counselors. (This information will be reported in the appropriate sections of the final report.)

Evaluation Plan for Counseling Process Objectives

Evaluation Techniques and Instruments: Progress Reports and other evidence of activities engaged in by the project counseling staff shall be used to assess the attainment of the counseling process objectives.

Evaluation Data Collection Procedures: (See same for Leadership Training Product Objectives.)

Evaluation Data Analysis Techniques: (See same for Leadership Training Product Objectives.)

Evaluation Data Analysis Presentation: (See same for Leadership Training Product Objectives.)

Management Objectives

Performance Objective (Not listed): The management compo-

nent objectives include the installation and operation of major project components and documentation of all accomplishments with regard to the above. Modification of and deviation from the project as set forth in the proposal will be documented and the project director will provide for communications between project personnel as well as dissemination of information about the project to project personnel and to the community in general.

Evaluation Plan for Management Performance Objectives

Evaluation Techniques and Instruments: The management objectives will be evaluated on the basis of documentary evidence.

Evaluation Data Collection Procedures: (See same for Leadership Training Product Objectives.)

Evaluation Data Analysis Techniques: (See same for Leadership Training Product Objectives.)

Evaluation Data Analysis Presentation: (See same for Leadership Training Product Objectives.)

Project Evaluator

This entire evaluation report was written and prepared by Dr. M. Ray Loree, University of Alabama.

2. Phenix City

Program Evaluation

This is the final evaluation report on the activities of the Career Education program of the Phenix City School System, Phenix City, Alabama.

Total Funds Allocated:	$77,115.00
Duration of Project:	January 13, 1972 through July 12, 1973
Project Director:	Clifford S. Smith Assistant Superintendent for Instruction

Central Objective

The central objective of this project was to implement a program of career awareness integrated into the basic subject areas for Grade levels 1-6 and career exploration for Grade levels 7 and 8. The objective for the high school component was to establish a placement service to provide work experience while in school and to insure that every student is placed in post secondary educational programs or in a job after graduation. Effective practices from other programs were to be incorporated into this project and adapted to the local situation.

Basic Components of Program

A. Elementary School (levels 1-5)

An integrated and inter-disciplinary approach was to be utilized to refocus appropriate segments of the curriculum around a career awareness theme. Units were to be developed on a systematic basis which would expose students in Grade levels 1-5 to the 15 career clusters suggested by the U. S. Office of Education. Each unit contained occupational information including a variety of jobs in each cluster, the life style of each job, the preparation required for the job, and personal characteristics which help one to be successful in the job. A variety of teaching methods such as films, film strips, resource persons, field trips, hands-on-activities, unit projects, video tapes, role playing, and research were used to make the occupational information interesting and relevant.

Efforts of teachers were to be centered around student acquisition and development of positive attitudes toward work, enthusiasm, personal satisfaction, pride in accomplishment, life aspirations, value of cooperation, development of varied interests, self-worth, occupational information, and occupational awareness.

B. Middle School (level 6-8)

The Middle School program was aimed at refocusing and integrating the basic subject matter around a Career Education theme. Selected leaders in each of the basic subject areas were a part of the career education development task force team (c.e.d.t.). These selected leaders worked with the professional staff in developing units which were to be employed

in the various subject matter areas. These subject relating units included a system of behavioral objectives which reflected Career Education concepts and other related learning activities.

In addition to the subject-related effort, a second effort of the Middle School program was the development of a series of 15 exploratory mini-courses. This effort involved the development of a curriculum centered around the 15 career clusters identified by the U. S. Office of Education.

Prior to the current academic year, a number of enrichment-exploratory courses were already in existence in the Middle School curriculum. The substance of the original exploratory courses were maintained where possible while integrating them into the Career Education theme.

The experiences in the mini-courses are structured so as to allow the students to explore various occupations in each cluster and obtain that occupational information which will allow them to develop a background for future career decisions. Efforts of teachers are to be centered around student acquisition and development of responsibility, appropriate occupational information self evaluation, information concerning educational training requirements, work characteristics, dignity of work, dependability, and specific job information.

C. Varsity School (levels 11-12)

Due to the financial limitations of this project, the subject relating effort was limited to the encouragement of teachers through inservice meetings. The current preparatory programs and cooperative programs were to be supplemented by a placement service which was established in the high school. The placement service was to be a cooperative effort with the guidance counselors, the vocational teachers, and the Alabama Employment Service.

In addition to the cooperative programs, the placement component of the Varsity School program was to offer additional opportunities for students not in the cooperative program to gain exploratory experiences and work experience. This component placed and supervised students in the following types of programs:

1. A work experience program in the business community (remunerative) for students who needed to work after school and on weekends.

2. A work study program (remunerative) for disadvantaged students who needed to work and earn money to stay in school.

3. An in-school (non-remunerative) work experience program for students who wanted to gain experiences in such fields as office work, maintenance, printing, library and teaching. Job descriptions and work experience programs were constructed in cooperation with the school administration. The placement component was primarily for the Varsity School but was to be made available to the Junior Varsity on a needs basis.

Objectives of the Program

A. Elementary School Level (Grades 1-5)

The general objectives of this project are to provide an occupational orientation program at the Elementary level which will broaden the occupationally related experiences of the students through an integrated approach and to provide a Career Education program that will develop attitudes toward work, school, and self.

1. At least 75 percent of the students in Grades 1-5 will develop a more positive attitude toward self as measured by pre and post attitude scales.

2. At least 75 percent of the students in Grades 1-5 will develop a more positive attitude toward school as measured by pre and post attitude scales.

3. At least 75 percent of the students in Grades 1-5 will develop a more positive attitude toward work as measured by pre and post attitude scales.

4. At least 75 percent of the students in Grade 1 will match ten picture groups of workers studied to picture groups of items used by the workers with a minimum of 70 percent accuracy.

5. At least 75 percent of the students in Grade 2 will match a list of ten workers with a list of

items used by the workers with 70 percent accuracy.

6. At least 75 percent of the students in Grades 3-5 will name a minimum of eight jobs in each of the occupational clusters exposed at each grade level and give at least two duties for each job.

B. Middle School Level (Grades 6-8)

The general objectives of the middle school level are to provide a Career Education program that will develop positive attitudes toward self, school, and work and to provide an exploratory program which will further broaden the occupationally related experiences of students through an integrated and unit curriculum approach.

1. At least 75 percent of the students in Grades 6-8 will develop a more positive attitude toward self as measured by pre and post attitude scales.

2. At least 75 percent of the students in Grades 6-8 will develop a more positive attitude toward school as measured by pre and post attitude scales.

3. At least 75 percent of the students in Grades 6-8 will develop a more positive attitude toward work as measured by pre and post attitude scales.

4. At least 80 percent of the students in Grades 6-8 will name a minimum of ten occupations for each occupational cluster to which exposed, give at least two duties for each occupation and indicate what level of education or training is required for each occupation with 70 percent accuracy.

5. At least 80 percent of the students in Grades 6-8 will name a minimum of five jobs for which each of his basic subjects (language arts, mathematics, social studies, and science) are needed with 70 percent accuracy.

C. Varsity School Level (Grades 11-12)

The general objectives of this component of the project are to provide a placement service for work study, work experience, and work exploratory programs for students in Grade levels 11

and 12 and on a restricted basis for Grade levels 9 and 10 and to provide a placement service for graduating seniors in either post secondary education or a job.

1. At least 95 percent of the students in Grades 11 and 12 will indicate a knowledge of a placement service in the school as determined by a questionnaire.

2. At least 90 percent of the students in Grades 11 and 12 who apply for placement service will be referred to interviews for part-time jobs, for work experience, or work exploration.

3. Ninety percent of the students in Grades 11 and 12 who terminate their school experience through proper channels before graduation and desire placement will be referred to interviews for job placement.

4. At least 90 percent of the students who graduate in the school year 1973 and desire placement will be placed in either post secondary education or referred to an interview for job placement.

Evaluation Design

A. Elementary Component Objectives (General)

1. Development of a positive attitude toward the worth of each individual and his occupational contribution in society.

	Data Required	Data Management
a.	Response of students to occupational questionnaire.	Instrument to be developed. Administered in October and May, 1972 and 1973.
b.	Scores attained on scale measuring cognitive growth in occupational awareness.	Teacher developed instruments based upon cognitive objectives. To be administered periodically as units are completed.

c.	Student developed projects relating to unit topics.	Subjective data to be reviewed by evaluator periodically.
d.	Teacher prepared units of instruction.	Log maintained by teachers of units covered, time spent per unit, subjective evaluation of success of unit. Catalog of units utilized in system.

2. Developing an understanding of the value of work in making one a contributing member of society as well as for self fulfillment.

	Data Required	Data Management
a.	a-d of Objective 1	Same
b.	Terminal project by student reflecting alternative choices he sees for himself.	Restricted to upper level elementary students. Nature of project, written, oral, dramatic, etc. left to discretion of teacher.

3. Developing an awareness of and respect for occupations in all fields and levels.

	Data Required	Data Management
a. b. c.	of Objective 1	Same

4. Developing a foundation for self understanding to the effect of aptitudes, attitudes, abilities, and skills as they relate to the world of work.

	Data Required	Data Management
a.	Extension of 2b to include self evaluation in areas specified by objective.	Same

B. Elementary School level Objectives (Specific)

1. At least 75 percent of the students in the class grade levels 1-5 will develop a more positive attitude toward self as measured by pre and post attitude scales.

Data Required	Data Management
Scores from standardized self concept scale. (To be selected for appropriateness of age level)	Administration: Early October-late May by system counselors. Population: Random sample of 25 from Grades 1-3 and 25 from Grades 4-5. Scoring: Outside Evaluator.

2. At least 75 percent of the students in class Grade 1-5 will develop a more positive attitude toward school as measured by pre and post attitude scales.

Data Required	Data Management
Semantic differential scores (evaluative) from students in Grades 4-6. (Instrument to be developed)	Administration: Late Sept. and early May. (By faculty) Population: All project children Grades 3-5. Scoring: Outside Evaluator.

3. At least 75 percent of the students in class Grade levels 1-5 will develop a more positive attitude toward work as measured by pre and post attitude scales.

Data Required	Data Management
Adjunct section of Objective 2.	Same as 2.

4. At least 75 percent of the students in the class Grade levels 1 will match 10 picture groups of workers studied to picture groups of items used by the workers with a minimum of 70 percent accuracy.

Data Required	Data Management
Scores from picture matching test.	Same as 2 and 3

5. At least 75 percent of the students in class Grade level 2 will match a list of 10 workers with a list of items used by the workers with 70 percent accuracy.

Data Required	Data Management
Scores from picture matching test and word matching test.	Same as 2 and 3.

6. At least 75 percent of the students in class Grade levels 3-5 will name a minimum of eight jobs in each of four occupational clusters and give at least two duties for each job.

Data Required	Data Management
Teacher made tests. Scores for all children in program on such tests.	Teacher administered at appropriate times. Review by evaluator. Terminal experience.

C. Middle School Component Objectives (General)

1. An opportunity for the student to evaluate their experiences as they relate to and contribute to his eventual career choices.

Data Required	Data Management
Brief attitudinal questionnaire (To be developed).	Administered at the end of each experience provided. Administration by teacher.

2. Simulated experiences in the career decision making process, opportunities to make decisions and an awareness of personal responsibility for decisions.

Data Required	Data Management
Observational analysis of experiences provided.	Random observations of experiences by evaluator. Subjective analysis of all such experiences by

	teacher. Evaluator-teacher interviews analyzing such experiences.

3. An opportunity to explore occupations in the 15 career clusters.

Data Required	Data Management
a. Evaluation of cognitive development in understanding of clusters and occupations.	Teacher developed tests to be administered as terminal exercise.
b. Units of experience provided in occupations and clusters.	To be maintained by teacher for review by evaluator and director.

D. Middle School Objectives (Specific)

(Objectives 1-3 same as Section B)

4. At least 80 percent of the students in Grade levels 6-8 will name a minimum of ten occupations for each occupational cluster to which exposed, give at least two duties of each occupation and indicate what level of education or training which is required for each occupation with 70 percent accuracy.

Data Required	Data Management
Teacher made test results	Teacher administration and scoring.

5. At least 80 percent of the students in Grade levels 6-8 will name a minimum of five jobs for which each of his basic subjects (language arts, mathematics, social studies and science) are needed with 70 percent accuracy.

Data Required	Data Management
Teacher evaluations.	Teacher administration and scoring.

E. Senior High School Component Objectives (General).

1. Major emphasis will be upon occupational placement of students.

	Data Required	Data Management
a.	Records of placement contacts achieved by school.	To be maintained by project coordinator
b.	Record of placement efforts and their success.	To be maintained by project coordinator.
c.	Records of terminal student placement and dropout student placement.	To be maintained by project coordinator.
d.	Records of co-op student placement and success of student vocationally and academically.	To be maintained by project coordinator.

F. Varsity School Objectives (Specific)

1. At least 96 percent of the students in Grades 11 and 12 will indicate a knowledge of a placement service in the school as determined by a questionnaire.

Data Required	Data Management
Questionnaire responses	Instrumentation: To be developed. Administration: Project Coordinator - Oct. and May. Analysis: T test for difference of pre-scores.

2. At least 90 percent of the students in Grades 11 and 12 who apply for placement service will be referred to interviews for part time jobs for work experience or work exploration.

Data Required	Data Management
Logs of referrals and applicants.	Maintained by project coordinator.

3. At least 90 percent of the students on levels 11 and 12 who terminate their school experience before graduation through proper channels and desire placement will be referred to interviews for job placement.

Data Required	Data Management
Logs of applicants and placement.	Maintained by project coordinator.

4. At least 90 percent of the students who graduate in the school year 1973 and desire placement will be placed in either post secondary education or referred to an interview for job placement.

Data Required	Data Management
Follow up records of graduates.	Maintained by project coordinator.

Presentation and Analysis of Data

The evaluative data in this report was derived from a variety of sources. These include: (1) comparisons of pre and post test scores from a number of objective instruments, (2) assessment of results obtained from various teacher made tests designed to measure cognitive gains, (3) questionnaires assessing pupil understanding and awareness of relevant aspects of the Career Education program, (4) assessment by the evaluator of student projects, logs maintained by teacher, and records kept by the project coordinator, and (5) subjective analysis by the evaluator based on teacher interviews, observations of the experiences made available to students, and other relevant information gathered during on-site visitations.

The data will be presented and analyzed separately for each of the three major program components: (1) Elementary, (2) Middle School, and (3) Varsity. Since there are both general and specific objectives for each of these major com-

ponents, each will be evaluated on the basis of both types of objectives before proceeding to the next component.

A. Elementary Component Objective (General)

1. Development of a positive attitude toward worth of each individual and his occupational contribution to society.

   a. See Specific Objective 1a for Elementary below.

   b. See Specific Objective 4-6 for Elementary below.

   c. Projects developed by students on the various units of study were observed and reviewed by the evaluator during on-site visits. Students were found to be engaged in a variety of tasks (scissors-and-paste work, drawings, etc.) for the lower Elementary grades ranging to more cognitively-oriented tasks for upper Grades 4-5 (such as writing personal stories and themes). A positive attitude toward and understanding of the relationship between the individual, his choice of occupation, and his society were reflected in the randomly selected projects reviewed.

   d. Logs and records maintained by the Elementary teachers were evaluated and found to be complete with respect to content, number of units covered, and time spent per unit. During random on-site visits the evaluator found the classroom activities to be structured around the appropriate units of study. Based upon examination of the units of study and their objectives and upon student response to examinations, the teacher prepared units of instruction were rated and found by the evaluator to be successful.

2. Developing an understanding of the value of work in making one a contributing member of society as well as for self fulfillment.

a. The Occupational Questionnaire developed by the evaluator consisted of ten statements to which the student answered true or false. It was developed for purposes of assessing the student's understanding of the value of work as a means of societal contribution and personal fulfillment. (See Appendix IX)

The instrument was administered at the beginning and end of the academic year to 20 randomly selected pupils in Grades 4-5. Results indicated that 45 percent of the sample demonstrated an increase in their understanding of the value of work; 25 percent indicated no change in attitude, and another 30 percent exhibited a slight decrease. A more complete analysis of the 25 percent who exhibited no change on the pre and post test comparisons revealed that 90-100 percent of their responses on the pre test already indicated a positive understanding of the value of work. As a result of these findings it was concluded that the program had met the criteria for the above objective.

b. Student understanding of the value of work was also assessed through various types of terminal projects (completed at the end of the academic year upon termination of the formal Career Education program). Nature of the projects varied according to grade level and interests of the pupil. For the Elementary component these were restricted to the 4-5 Grade students due to the complexity of the task. All students completed a terminal project whether written, oral, dramatic, etc. Review of randomly selected projects by the evaluator led to the conclusion that they were expressive of an appreciation of the value of work.

3. Developing an awareness of and respect for occupations in all fields and levels.

See specific objective for Elementary below and General Objective 1c above.

4. Developing a foundation for self understanding of the effect of aptitudes, attitudes, abilities, and skills as they relate to the world of work.

   The student terminal projects discussed above in General Objective 2. b. were analyzed for the criteria of self understanding. It was the conclusion of the evaluator that in those projects where it was possible to assess this dimension, the criterion of self understanding as stated in the above objective was reached.

B. Elementary Component Objectives (Specific)

1. At least 75 percent of the students in Grades 1-5 will develop a more positive attitude toward self as measured by pre and post attitude scales.

   a. Grades 1-3. A standardized self-concept scale "I Feel-Me Feel" (Yeatts & Bentley, 1970) constructed for purposes of assessing younger children's attitude toward self was administered to a random sample of 25 pupils in Grades 1-3. The scale was administered at the beginning and end of the academic year to the same pupils in order that changes in self-concept could be measured.

      Results indicated that 64 percent of the pupils sampled showed an increase in self concept. While this did not meet the criterion of 75 percent stated in the above objective, it nevertheless represents a substantial increase. When scores for the 9 pupils indicating a decrease in concept of self were more closely scrutinized, it was found that all but one pupil had scored above 75 percent of the highest possible score on the post test. Thus, even with respect to those pupils exhibiting a decrease in self concept, it is warranted to conclude that they retained a significantly high positive attitude toward self.

   b. Grades 4-5. A standardized self-concept scale constructed by Coopersmith, the "Self Esteem

Inventory" was administered pre and post to a random sample of 20 pupils in Grades 4-5. The instrument consists of 25 statements to which the student responds by indicating "like me" or "not like me".

Comparisons between pre and post test results indicated that 50 percent of the students made a positive gain in self concept during the academic year. Decreases in self concept were found to occur in 25 percent of the sample. Further analysis of the data revealed that positive gains were of a sufficiently greater magnitude than were negative shifts. Out of 25 forced-choice items (like me-unlike me) the average gain for individuals making positive shifts in concept of self was 6.26 while the average loss for those making negative shifts was 3.46. The fact that the 75 percent criterion stated in the objective was not reached is mitigated by these later findings.

2. At least 75 percent of the students in Grades 1-5 will develop a more positive attitude toward school as measured by pre and post attitude scales.

   a. Grades 1-3. For Grades 1-3 the attitude toward school was assessed by selecting items which pertained directly to school from the "I Feel-Me Feel" inventory discussed in Specific Objective 1 above. Of the 25 students sampled in Grades 1-3, 68 percent exhibited a more positive attitude toward school. These results fall short of the 75 percent criterion specified in the above objective, but nevertheless represent a substantial development in attitude toward school.

   b. Grades 4-5. The attitude toward school for Grades 4-5 was assessed by means of a semantic differential. The semantic differential is a method of assessing attitudes toward various concepts, ideas, or events. The instrument developed for the purposes of the present

evaluation consists of eight scales, each of which is a bi-polar adjective pair, (e.g., good-bad, happy-sad, clean-dirty, etc.). A variety of ten specific school components (lunchroom, principal, teacher, science, etc.) were rated on each of the opposite adjective pairs along a five-point scale.

The instrument was administered pre and post to a randomly selected group of 20 pupils in Grades 4-5. The results are summarized in Table II along with the results obtained from the Middle School sample.

Although the results indicate a wide range of differences with respect to changes in attitudes toward various aspects of school (55 percent developed a more positive attitude toward the principal while only 13 percent developed a more positive attitude toward the library) none of the gains reached the 75 percent criterion.

3. At least 75 percent of the students in Grades 1-5 will develop a more positive attitude toward work as measured by pre and post attitude scales.

   a. Grades 1-3. No objective measure was available through which to obtain a pre and post measure of attitudes toward work for Grades 1-3. Pupils were not of sufficient intellectual maturity to respond to existing instruments, and attempts to administer existing tests orally proved unsuccessful.

   b. Grades 4-5. One of the measures employed to assess attitudes toward work for Grades 4-5 was the Semantic Differential (the nature of the instrument is discussed under Specific Objective 2b for the Elementary Component). The scale was administered pre and post to a randomly selected group of 20 pupils.

      The data for the semantic differential assessing

work attitudes is summarized in Table II along with the results for Grade Levels 6-8. The semantic differential was constructed so as to be an indication of attitudes toward specific occupations rather than an instrument from which to infer attitudes toward work in general. No clear results were obtained with respect to changes in attitudes toward specific occupations as a result of statistical analysis. In no case was there a 75 percent positive attitude gain as set out in the specific objective above.

For what is considered a more valid indicator of pupil changes in attitude toward work as a general category, the reader of this report is referred back to General Objective 2 in which the results of the questionnaire regarding the value of work are discussed.

4. At least 75 percent of the students in class Grade level 1 will match 10 picture groups of workers studied to picture groups of items used by the workers with a minimum of 75 percent accuracy.

   A picture-matching test was developed for purposes of testing the above objective. Results indicated that the objective was met. Eighteen randomly selected pupils at grade levels 1-2 were administered the picture-matching test and 82 percent of them attained the minimum 70 percent criterion.

5. At least 75 percent of the students in class Grade level 2 will match a list of ten workers with a list of items used by the workers.

   See Specific Objective 4 above. It was decided to employ the picture-matching test for Grades 1 and 2.

6. At least 75 percent of the students in class Grade levels 3-5 will name a minimum of eight jobs in each of four occupational clusters and give at least two duties for each job.

   Review by the evaluator of teacher-made tests indicated that this objective was met with 81 percent success.

TABLE III
ATTITUDE TOWARD SCHOOL
(Semantic Differential)

Subject	Grade	N	Number of Positive Gains	Number of Zero Gains	Number Negative	Percent of Positive Gain
Lunchroom	4-5	20	4	1	15	20
	6	30	9	4	17	30
	7	30	16	0	14	53
	8	30	9	0	21	30
TOTAL		110	38	5	67	34.5
Science	4-5	20	9	1	10	45
	6	30	16	4	10	53
	7	30	12	1	17	40
	8	30	15	3	12	50
TOTAL		110	52	9	49	47.3
Library	4-5	20	3	4	13	15
	6	30	13	6	11	43
	7	30	15	1	14	50
	8	30	12	3	15	40
TOTAL		110	43	14	53	39
Principal	4-5	20	11	1	8	55
	6	30	14	2	14	46
	7	30	12	3	15	40
	8	30	15	2	13	50
TOTAL		110	52	8	50	47.3

TABLE III(Continued)

Subject	Grade	N	Number of Positive Gains	Number of Zero Gains	Number Negative	Percent of Positive Gain
Physical Education	4-5	20	8	1	11	40
	6	30	15	0	15	50
	7	30	17	2	11	57
	8	30	11	2	17	37
TOTAL		110	51	5	54	46.4
School	4-5	20	9	2	9	45
	6	30	15	2	13	50
	7	30	14	0	16	46
	8	30	10	2	18	33
TOTAL		110	48	6	56	43.6
Classmates	4-5	20	6	3	11	30
	6	30	12	2	16	40
	7	30	12	2	16	40
	8	30	12	3	15	40
TOTAL		110	42	10	58	38.2
Career	4-5	20	6	1	13	30
	6	30	16	4	10	53
	7	30	15	2	13	50
	8	30	6	6	18	20
TOTAL		110	43	13	54	39.1

TABLE III(Continued)

Subject	Grade	N	Number of Positive Gains	Number of Zero Gains	Number Negative	Percent of Positive Gain
Teacher	4-5	20	5	3	12	25
	6	30	10	2	18	33
	7	30	9	1	20	30
	8	30	10	2	18	33
TOTAL		110	34	8	68	30.9
Social Studies	4-5	20	10	0	10	50
	6	30	13	3	14	43
	7	30	11	1	18	37
	8	30	10	2	18	33
TOTAL		110	44	6	60	40

TABLE IV
ATTITUDE TOWARD WORK
(Semantic Differential)

Occupation	Grade	N	Number of Positive Gains	Number of Zero Gains	Number Negative	Percent of Positive Gain
Auto Mechanic	4-5	20	6	0	14	30
	6	30	19	2	9	63
	7	30	11	2	17	37
	8	30	11	1	18	37
TOTAL		110	47	5	58	52
Sales Clerk	4-5	20	8	2	10	40
	6	30	15	4	11	50
	7	30	16	2	12	53
	8	30	15	1	14	50
TOTAL		110	54	9	47	60
Plumber	4-5	20	10	1	9	50
	6	30	20	3	7	67
	7	30	15	2	13	50
	8	30	14	3	13	46
TOTAL		110	59	9	42	53.6
Secretary	4-5	20	9	4	7	45
	6	30	15	3	12	50
	7	30	18	1	11	60
	8	30	15	3	12	50
TOTAL		110	57	11	42	51.8

TABLE IV (Continued)

Occupation	Grade	N	Number of Positive Gains	Number of Zero Gains	Number Negative	Percent of Positive Gain
Carpenter	4-5	20	7	0	13	35
	6	30	17	2	11	57
	7	30	10	4	16	33
	8	30	10	2	18	33
TOTAL		110	44	8	58	40
Lawyer	4-5	20	6	2	12	30
	6	30	19	4	7	63
	7	30	13	3	14	43
	8	30	15	5	10	50
TOTAL		110	53	14	43	48
Dentist	4-5	20	9	3	8	45
	6	30	17	2	11	57
	7	30	13	2	15	43
	8	30	18	0	12	60
TOTAL		110	57	7	46	51.8
Truck Driver	4-5	20	8	2	10	40
	6	30	15	2	13	50
	7	30	12	0	18	40
	8	30	14	2	14	46
TOTAL		110	49	6	55	44.5

TABLE IV (Continued)

Occupation	Grade	N	Number of Positive Gains	Number of Zero Gains	Number Negative	Percent of Positive Gain
Doctor	4-5	20	5	3	12	25
	6	30	16	2	12	53
	7	30	16	3	11	53
	8	30	16	7	7	53
TOTAL		110	53	15	42	48.2
Custodian	4-5	20	7	0	13	35
	6	30	18	2	10	60
	7	30	10	1	19	33
	8	30	11	1	18	37
TOTAL		110	46	4	60	41.8
Cook	4-5	20	6	2	12	30
	6	30	8	2	20	26
	7	30	14	1	15	46
	8	30	13	1	16	43
TOTAL		110	41	6	63	37.3
Nurse	4-5	20	8	1	11	45
	6	30	14	6	10	46
	7	30	14	2	14	46
	8	30	14	0	16	46
TOTAL		110	50	9	51	45.5

C. Middle School Component Objectives (General)

1. An opportunity for the student to evaluate their experiences as they relate to and contribute to his eventual career choices.

   a. Two instruments were developed for purposes of evaluating the above objective, (a) the Occupational Questionnaire, and (b) Pupil Evaluation of Teacher.

      The Occupational Questionnaire, developed by the evaluator, consisted of ten statements to which the student answered true or false. The purpose of the instrument was to assess the student's understanding of the value of work both as a means of societal contribution and personal fulfillment. The instrument was administered pre and post to 90 randomly selected pupils in Grades 6-8. Results indicated that 49 percent of the students sampled exhibited an increase in their understanding of the value of work. Another 27 percent indicated no change between pre and post measures. Further analysis of the data on the 27 percent no-change group revealed that their understanding of the value of work was sufficiently high on the pre test (between 85-100 percent items indicated positive response). In other words the 27 percent no-change group had such high positive scores on the pre test that the post test could not show change in a positive direction.

   b. The Pupil Evaluation of Teacher rating form was developed by the project coordinator for purposes of assessing the quality of instruction from the pupil's point of view. The rating form utilized a five-point scale which all pupils in Grades 6-8 used to rate their teachers on 14 critical dimensions. The dimensions were in the form of simple declarative sentences (statements about the teacher and the learning process) which pupils rated as occurring (1) never, (2) seldom, (3) occasionally, (4) often, and (5) always.

Results indicated highly positive student attitudes toward teachers involved in the Career Education program, an affirmation of their overall effectiveness. See Table IV for percent of responses rating items as occasionally, often, or always.

2. Simulated experiences in the career decision making process, opportunities to make decisions and an awareness of personal responsibility for decisions.

   During random on-site visits to the Middle School, pupil activities were observed and teachers interviewed by the evaluator. Students were observed to have been engaged in occupational role-playing exercises, career and self-exploration exercises, as well as in simulated occupational decision-making activities. It was found that teachers had designed and structured their classroom activities in a manner which allowed for pupil involvement in these various simulated exercises.

3. An opportunity to explore occupations in the 15 career clusters.

   a. See Specific Objective 4 for the Middle School Component below.

   b. Logs of the units prepared by teachers were examined by the evaluator and found to be complete with respect to number of units, time covered per unit, and content.

D. Middle School Component Objectives (Specific)

1. At least 75 percent of the students in class Grade levels 6-8 will develop a more positive attitude toward self as measured by pre and post attitude scales.

   A standardized self-concept scale, the "Self Esteem Inventory" (Coopersmith) was administered pre and post to 90 randomly selected pupils in Grades 6-8. The instrument consists of 25 state-

TABLE V

PERCENTAGE OF STUDENTS RESPONDING POSITIVELY TO ITEMS OF THE CAREER EDUCATION PUPIL EVALUATION OF TEACHER QUESTIONNAIRE

	Questionnaire item relating to student perception of teacher	% Positive Response
1.	Teacher knowledge of careers studied	98.0
2.	Helpfulness of career study	91.2
3.	Variety of teaching methods	95.0
4.	Field trips provided	49.0
5.	Resource persons provided	34.0
6.	Hands on activities provided	49.5
7.	Evidence of teacher planning	86.0
8.	Environment for class participation	88.9
9.	Teacher interest in subject taught	93.0
10.	Teacher attitude towards all levels of education	91.0
11.	Teacher attitude toward all levels of careers	92.8
12.	Teacher provides opportunities for all students to feel important	84.9
13.	Visible evidences in room of involvement in project	88.0
14.	Subject tie in to careers	91.0

ments to which the pupil responds by making "like me" or "not like me".

Results indicated that 54 percent of the Middle School pupils sampled exhibited positive gains in self concept. Another 17 percent indicated no gains in concept of self between pre and post test measures. All of the no-gain individuals were found upon a closer analysis of the data to have scored positively on 21 of the 25 items. In other words it was difficult (and in some instances impossible) for individuals in the 17 precent no-gain category to have exhibited gains in self concept on the pre and post measures. This means that 71 percent of the students sampled in Grades 6-8 either gained in self concept or had a significantly high self concept to begin with. These results fall just short of the 75 percent criterion specified in the above objective.

2. At least 75 percent of the students in class Grade levels 6-8 will develop a more positive attitude toward school as measured by pre and post attitude scales.

   The semantic differential (see Specific Objective 2b in Elementary Component above for description) was administered pre and post to 90 randomly selected pupils in Grade leves 6-8. The results, summarized above in Table III indicate that none of the attitudes toward specific school components (Principal, lunchroom, science, library, etc.) met the positive gain criterion of 75 percent specified in the above objective. The semantic differential tended to assess attitudes toward specific aspects of school rather than a more general attitude toward teachers and the school. The results of the "Pupil Evaluation of Teacher" rating form reported above in General Objective 1b for the Middle School are considered to be a more valid indicator of general attitudes toward school.

3. At least 75 percent of the students in class Grade levels 6-8 will develop a more positive attitude toward work as measured by pre and post attitude scales.

One of the measures employed to assess attitudes toward work was the semantic differential (see Specific Objective 2b in Elementary Component above for description). This instrument was administered at the beginning and end of the academic year to a random sample of 90 pupils in Grades 6-8. The results, summarized in Table above, indicate that in no specific occupational category was the criterion of 75 percent positive gain attained. Statistical analysis of the data did not yield results of further significance.

However, the semantic differential was constructed for purposes of assessing attitudes toward specific occupations rather than toward work in general. A measure of values and attitudes toward work as a broader more general category was obtained from the occupational questionnaire, the results of which are provided in General Objective 1 for the Middle School Component.

4. At least 80 percent of the students in Grade levels 6-8 will name a minimum of ten occupations for each occupational cluster to which exposed, give at least two duties of each occupation, and indicate what level of education or training which is required for each occupation with 70 percent accuracy.

   Analysis of data from teacher-made tests revealed that 86 percent of the students sampled in Grades 6-8 were able to list ten occupations in each occupational cluster, provide two duties, and indicate the level of training required for each occupation with a minimum of 70 percent accuracy.

5. At least 80 percent of the students in Grade levels 6-8 will name a minimum of five jobs for which each of his basic subjects (language arts, mathematics, social studies, and science) are needed with 70 percent accuracy.

   Analysis of data from teacher-made tests revealed that 93 percent of the students sampled in Grades 6-8 were able to name a minimum of five occupations for each of his basic subject matter areas.

E. Varsity Component Objectives (General)

1. Major emphasis will be upon occupational placement of students. The primary emphasis at the Varsity level was to supplement existing cooperative programs with a placement service. The Varsity School (Grades 11-12) had a student population of 800 for the 1972-73 school year. Of these, 269 were involved in some type of work experience. This figure includes 140 students involved in the Cooperative Education Program who were previously assigned to jobs relating to their special skill area. Another 60 students were employed through the Work-Study Program, and the remaining 60 were working through the Work Experience Program. The 120 students in the latter two categories were placed on jobs through the efforts of the school placement office. In addition, 30 students were employed through efforts of their own without assistance from the school placement services. The above data was obtained from (a) records of placement contacts achieved by the school, and (b) records of placement efforts and their success, both of which were maintained by the project coordinator.

   Due to the limited funds in the project and responsibilities on other levels (Middle School) the terminal placement program originally intended was not carried out as an official function of the project. The usual effort of the guidance office was extended to the students.

F. Varsity Component Objectives (Specific)

1. At least 96 percent of the students in Grades 11 and 12 will indicate a knowledge of a placement service in the school as determined by a questionnaire.

   Results of a questionnaire developed for purposes of ascertaining student awareness of existing placement services in the school showed that 99 percent of the 100 students sampled in Grades 11 and 12 indicated knowledge of the placement services.

2. At least 90 percent of the students in Grades 11 and 12 who apply for placement service will be referred to interviews for part-time jobs, for work experience, or work exploration.

Records reviewed by the evaluator show that of the students who sought job placement through the Varsity placement service, only 33 did not secure employment. Many of these were referred for interviews with outside employers but were unable to meet the criteria for employment. Examination of the records indicate that the 90 percent referral criterion was met.

3. At least 90 percent of the students on levels 11 and 12 who terminate their school experience before graduation through proper channels and desire placement will be referred to interviews for job placement. Due to limited funds for the project at the Varsity level, the terminal placement program was not carried out as an official function of the Career Education Program.

4. At least 90 percent of the students who graduate in the school year 1973 and desire placement will be placed in either post secondary education or referred to an interview for job placement.

   A follow up program will be implemented in the Fall of the coming academic year to attempt to locate all terminating students from the 1972-73 school year.

GENERAL INFORMATION

A. Staff Development

During the month of June, 1972, a 20-day workshop was held for 22 teachers participating in the Career Education Program. The Local Director, Project Coordinator, and Elementary Counselor/Curriculum Coordinator introduced the program, its aims and goals. Teachers were familiarized with the use of occupational information, counseling, and guidance techniques, and methods for adapting existing materials so that the program could be implemented for the 1972-73 school year. Considerable time was given to the development of career units and their related objectives. All participating teachers were required to

enroll in a course taught by Dr. Edwin Kurth at Auburn University to enhance their professional development in Career Education.

A total of 53 units were developed in the June workshop. To date, 23 of these have been field-tested, revised, and reproduced for use in future career education projects.

An inservice workshop was held on August 21, 1972 for all teachers in the school system. Group meetings were held for the mini-course teachers, subject-area teachers, and elementary teachers. Individual conferences were also held with the Project Coordinator to evaluate the progress up until that time and to plan for future activities.

B. Evaluation Procedures

The evaluation design was adhered to during all phases of the evaluation including (1) development and administration of instruments, (2) monthly on-site visits to the project by the evaluator, (3) review of appropriate teacher-made tests and instructional units and of logs maintained by teachers and the project coordinator, (4) presentation by the evaluator of a preliminary evaluation report on March 15, 1973, and (5) in the analysis of data presented in this final report.

The evaluator devoted one full day each month observing, interviewing teachers and evaluating those classes which were part of the Career Education Program. Visitations by the evaluator were made on the following specific dates:

September 20, 1972	February 15, 1973
October 4, 1972	March 19, 1973
November 17, 1972	April 27, 1973
December 14, 1972	May 11, 1973
January 26, 1973	

PROJECT EVALUATOR

This entire evaluation report was written and prepared by by Drs. Lloyd E. Robison, and James F. Gamble, Auburn University.

F. CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

1. M ile

The following conclusions and recommendations are made:

1. In September, it was found that only 15-20 percent of the senior class students enrolled in one of the project high schools had definite plans for furthering their education or pursuing an occupation after graduation from high school.

2. Steady increases in student requests for career counseling were noted by project school guidance counselors during the project period.

3. Student reactions to Career Education activities have been overwhelmingly positive.

4. Only about ten percent of the 10,000 youths, ages 16-21, who annually apply for work at the local Youth Opportunity Center can be placed. The main deterrent to placement is lack of job-entry skills.

5. There are unfilled jobs in the community and there are unemployed persons in the community who could fill them if they had the training.

6. Considerable amounts of career-related materials are already available in existing school libraries and in the Materials Center. Although many of the materials need updating and revising, this finding has implications for the implementation of Career Education in schools at minimal initial costs for materials.

7. Although the evaluation results indicated more gains by career education in schools located in lower socio-economic areas, it is believed that development of more sensitive instruments will better detect increases in schools in higher socio-economic areas.

2. Phenix City

Based upon experiences in the project, recommendations of visiting teams from state and national level, local project

personnel and student reactions, the following recommendations are made:

1. This project is worthwhile to the students involved to the point that it should be continued locally, extended to all parts of the local school system and disseminated to other school systems.
2. Units which were produced as a part of the project should be incorporated into existing subject area curriculum and into other curriculum as they are written. By this method, it would be available to all teachers throughout the school system.
3. Other school systems entertaining the idea of adopting the Career Education concept should build their individual program on a sound program of teacher preparation similar to our workshop and professional development program.
4. While our local school administrators were fully cooperative, more emphasis should have been placed upon training them in the concept along with their teachers. This should be corrected during the next school year.
5. More teachers should be involved during the ensuing years.
6. Teacher training institutions should place more emphasis upon training teachers for this concept.
7. Counselor training institutions should place more emphasis upon preparing their graduates to serve the career needs of students.
8. More emphasis should have been placed upon the subject relating effort rather than the exploratory mini-course effort. There was tendency for the subject area teachers to look upon the mini-course teachers as the "career specialist" and, therefore, more responsible for the program.
9. More hands-on-experiences should be integrated into the career study in the classes. Students reject the idea of their career related study being limited to research.
10. Better utilization of the community resources should be made by including senior citizens groups as resource persons and better utilization of an advisory committee.
11. Provisions need to be made for skill building in the senior high level.
12. More emphasis should be placed upon terminal placement in the high school.
13. The curriculum effort in Career Education should be expanded to encompass grades 9-12 in the basic subject areas.

A P P E N D I C E S

APPENDIX I

PHENIX CITY BIBLIOGRAPHY

1. ALLER, CURTIS C., "The Expanding Range of Occupational and Training Services for Rural Youth." Paper presented at National Outlook Conference on Rural Youth, Washington, D.C., October 23-26, 1967. (ERIC ED-015-062)

2. BEAM, H. D. and CLARY, J. R., Introduction to Vocations -- Teachers Guide, Chapel Hill: North Carolina State University.

3. BRIAN, JAMES G., "Using Project Talent to Improve Vocational Guidance," (Paper designed to present at the 62nd Annual American Vocational Association Convention, Dallas, Texas, December 10, 1968. This paper is based on a current project being conducted pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare, Contract No. OEG-0-8-070109-3530 (085), Research Project No. 7-0109).

4. DEBLASSIE, RICHARD B. and JONES, WILLIAM, Pre-Vocational Orientation in Vocational Education for Junior High School Students in New Mexico, Las Cruces: New Mexico State University.

5. Division of Vocational and Technical Education, Career Education: A Model for Implementation, Washington, D.C.: Division of Vocational and Technical Education, Bureau of Adult, Vocational and Technical Education, U.S. Office of Education, 1971, p. 1.

6. ELLISON, GENE, Project Director, Russellville Vocational Exemplary Project - Inter-disciplinary Approach to Career Development Through A High School Program of Occupational Education, Russellville: Russellville Vocational Exemplary Project, 1971.

7. ERTEL, KENNETH A., Identification of Major Tasks Performed By Merchandising Employees Working In Three Standard Industrial Classifications In Retail Establishments.

8. FRANK, N. H., The Summer Study of Occupational, Vocational, and Technical Education, Cambridge, Massachusetts, Massachusetts Institute of Technology, 1965.

9. GARMON, BEN, Project Director, Huntsville Vocational Exemplary Project - Comprehensive Occupational Education Program for the Elementary and Secondary School, Huntsville: Vocational, Technical, and Adult Education, Huntsville City Schools, 1971.

10. GRIESSMAN, EUGENE and DENSLEY, KENNETH G., Review and Synthesis of Research on Vocational Education in Rural Areas, Las Cruces: New Mexico State University, 1969.

11. HAVIGHURST, ROBERT J. and STILES, LINDLEY J., "National Policy for Alienated Youth", Phi Delta Kappan, April, 1961, p. 285.

12. HOERNER, HARRY JOHN, The Effects of On-The-Job Counseling on Employer's Ratings and Job Satisfaction of Persons Trained in Selected Oklahoma MDTA Classes During 1967-68.

13. HUDOCK, VIVIAN, M. and BUTLER, F. O., Development and Evaluation of an Experimental Curriculum for the New Quincy (Mass.) Vocational Technical School, Development and Tryout of a Junior High School Student Vocational Plan, Pittsburg: American Institute for Research, 1967.

14. HUNT, E. ELIZABETH, A Theoretical Base for the Technology for Children Project, Tulsa: AIAA Convention Proceedings, 1965.

15. ISAACSON, L. E., Career Information and Teaching, Boston: Allyn and Bacon, 1966.

16. KAPLAN, LEON L., Occupational Training Centers for 16-18 Year Old Youth: A Demonstration Program for Potential of Actual Dropouts, (Los Angeles: Los Angeles City School District, 1967.) HEW Project No. 6-2958, Grant No. OEG-4-7-062958, ED-010-620.

17. KIMBALL, GRADY and VINEYARD, BEN S., Succeeding in The World of Work, Bloomington: McKnight and McKnight, 1967.

18. LOCKWOOD, OZELMA, SMITH, DAVID B., and TREZISE, ROBERT, "Four Worlds: An Approach to Occupational Guidance," The Personnel and Guidance Journal, 1968, 46, 7, pp. 641-643.

19. MARKS, MARY V., "Improving Occupational Experiences Through Coordinated Classroom Experiences", Business Education Forum, XVII, April, 1963, p.5.

20. SAVITSKY, CHARLES, "Work Experience Program for Potential Dropouts", Washington, D.C., The National Association of Secondary School Principals, 1962, November, 1962, Volume 46, No. 277, p. 58.

21. SELLAND, LARRY, Project Director, A Statewide Program in Developmental Vocational Guidance K-12 and Occupational Preparation for the Changing World of Work, Bismarck: Bismarck Public Schools, 1971.

22. SELLAND, LARRY, Project Director, North Dakota's Exemplary World of Work Project - Career Development K-12, Bulletin of the Project, Bismarck: Bismarck Public Schools, 1971, p. 1.

23. SMITH, JOEL, Project Director, Cobb County Occupational and Career Development Program, Marietta: Cobb County Occupational and Career Development Program, 1971.

24. STUTZ, ROWAN C. and RUSSELL, G. MERRELL (eds.), Educating Rural Youth for Success in the World of Work -- Western States Small School Project, Salt Lake City-Western States Small School Project, 1967.

25. SULLIVAN, CLYDE E. and WALLACE, MANDELL, Staten Island Mental Health Society, Restoration of Youth Through Training, (Staten Island: Staten Island Mental Health Society, 1967) under contract with U.S. Department of Labor Manpower Administration, PB 175609.

26. SUPER, D., A Theory of Vocational Development, American Pshchologist, 1953, 8, pp. 185-190.

27. SUPER, D., CRYTES, J., HUMMEL, R., MOSER, H., OVERSTREET, P., and WARNATH, C., The Process of Vocational Development. In J. M. Seidman (Ed.) The Adolescent: A Book of Readings, New York: Holt, Rinehart, and Winston, 1960, pp. 443-465.

28. U.S. DEPARTMENT OF LABOR, Dictionary of Occupational Titles, Third Edition, Volume 1, Washington: Government Printing Office, 1965.

29. _____, A Design for Large Scale Training of Sub-Professionals, (New York: New Careers Development Center, 1967), ED-020-424.

30. _____, A Pilot Project to Develop a Program of Occupational Training for School Alienated Youth, Norwalk: Center for Vocational Arts, 1968, HEW Contract No. 5-85-055, ERIC Ed. 025-641.

31. _____, Career Development Activities, Grades 5, 6, 7, Abington School District, Pennsylvania, 1968, ERIC ED-022-219.

32. _____, Exemplary Project in Career Education in South Carolina, Lancaster: Region V Educational Services Center, 1972.

33. _____, Pilot Instructional Team of Paola High School, The Development and Demonstration of a Coordinated and Integrated Program of Occupational Information, Selection, and Preparation in a Secondary School, Manhattan: Kansas State University, 1965-67.

34. _____, Teacher's Guide to: Self-Understanding Through Occupational Exploration (SUTOE), Salem: Oregon, State Department of Education, 1968, ERIC Ed.-024-965.

35. _____, Work Instruction for the Food Services Industry, Kansas State University, 1963, Supported by a grant from U.S. Department of HEW, Office of Education Project No. 6-2159, ERIC No. Ed. 011-961.

36. O'HARA, ROBERT P. "A Theoretical Foundation For the Use of Occupational Information in Guidance", (mimeograph) Howard University, Graduate School of Education, Cambridge, Massachusetts, 1967. pp. 5-70.

APPENDIX II

PHENIX CITY, ALABAMA

CAREER EDUCATION UNITS

Produced in Workshop, June, 1972

GRADE	TITLE	CLUSTER/SUBJECT	TEACHER
1	"Welcome to School"	School Workers	Tant-Linton
1	"Self-Me, Myself & I"	Health Workers	Tant-Linton
1	"Community Helpers"	Multi-Cluster	Tant-Linton
2	"Community Workers"	Personal and Public Services	Reed
3	"Building Construction"	Construction	Benton
4	"Ways of Making a Living in Alabama"	Agri-Business and Natural Resources	Mitchell
4	"Parks--City, State & National"	Hospitality and Recreation	Jumper
5	"Newspapers"	Communication and Media	
5	"Business and Office Job"	Business and Office	Jumper
6	"Advertising in Marketing & Distribution"	Language Arts in M and D	Turner
6	"Salesmen"	Social Studies in M and D	Moffett
6	"Finance Careers"	Math in M and D	Coleman
6	General "Fine Arts & Humanities in L.A."	Language Arts	Turner
6	"Anthropologist"	Fine Arts and Humanities in Social Studies	Moffett
6	"Fractional Numbers in Music"	Fine Arts and Humanities in Math	Coleman

GRADE	TITLE	CLUSTER/SUBJECT	TEACHER
6	"Marine Science Occupations General"	Marine Science in Language Arts (Literature)	Turner
6	"Water & Environment"	Marine Science in Science	Coleman-Moffett
6	"Fish Culture Technician"	Marine Science in Social Studies	Moffett
6	"Personal Service" Residential Appliance Servicemen, Interior Decorator	Personal Service in Language Arts	Turner
6	"Counselors-School, Rehab. & Employment"	Personal Service in Social Studies	Moffett
6	"Measurement in Personal Service"	Personal Service in Math	Coleman
7	"Telephone Industry"	Communications in Social Studies	Provitt
7	"Agri-Business - Production Ag."	Agri-Business in Social Studies	Provitt
7	"Railroad Industry"	Transportation in Social Studies	Provitt
7	"Hospitality and Recreation"	Hospitality and Recreation in Social Studies	Bedford
7	"Public Service"	Public Service in Language	Provitt
7	"Telephone Industry"	Communication and Media in Language	Provitt
7	"Literature in Hospitality and Recreation"	Hospitality and Recreation in Language	Provitt
7	"Geometry and Public Service"	Public Service in Math	Carlisle
7	"Math & Transportation"	Transportation in Math	Carlisle

GRADE	TITLE	CLUSTER/SUBJECT	TEACHER
7	"Math & Hospitality and Recreation"	Hospitality and Recreation in Math	Carlisle
7	"Math & Communications"	Communications in Math	Carlisle
7	"Health Occupations"	Health Occupations in Science	Taff
8	"Introducing World of Work to Social Studies"	General Social Studies	Jordan
8	"Relating Manufacturing to Ind. Revolution"	Mfg./Social Studies	Jordan
8	"Occupations of Great Men	General/Social Studies	Jordan
8	"Problems of Big Cities in America"	Health, Public Service, Transportation & Const. in Social Studies	Jordan
8	"Consumer Homemaking Related to Language Arts"	Home Economic/ Language Arts	Ray
8	"Manufacturing in Language Arts"	Mfg./Language Arts	Ray
8	"Construction in Language Arts"	Const./Language Arts	Ray
8	"Marketing and Distribution in Language Arts"	M and D/Language Arts	Ray
8	"Ship Building, Oceanography and the Fish Industry"	Marine Science/ Science	Abron
8	"Jobs in Meterology"	Public Service, Env. Science	Abron
8	"Careers in Geology"	General Science	Abron

GRADE	TITLE	CLUSTER/SUBJECT	TEACHER
8	"Astronomy and Aerospace Jobs"	General Science	Abron
MIDDLE SCHOOL CLUSTER MINI-COURSE UNITS			
6	"Art, Music, Dance, Drama Careers"	Fine Arts and Humanities	Miller
7	"Art in Relation to Communications and Media"	Communications and Media	Martin
7	"Government Careers"	Public Service	Patrick
7	"Residential, Institutional and Commercial Careers in Personal Service"	Personal Service	Patrick
7	"Ornamental Horticulture"	Agri-Business & Natural Resources	Patrick
7	"Careers in Transportation"	Transportation	Mitchell
7	"Careers in Hospitality & Recreation"	Hospitality and Recreation	Mitchell
8	"Activity Unit"	Business & Office, Marketing & Dist., and Manufacturing	Parris and Bedford
8	"Careers in the Business Office"	Business & Office	Parris
8	"Careers in Marketing and Distribution"	Marketing and Distribution	Bedford
8	"Careers in Manufacturing"	Manufacturing	Bedford
8	"Careers in Construction"	Construction	Bedford
8	"Health Careers"	Health	Taff
8	"Food & Clothing Careers"	Consumer and Homemaking	Johnston

APPENDIX III

SUMMARY OF UNITS AND ACTIVITIES INVOLVED IN THE

CAREER AWARENESS PHASE (Grades 1-5)

GRADE 1

"Welcome To School"

a. Tour school, talk about who works where and what they do.

b. Visit principal, librarian, secretary, lunchroom manager, janitor, maid, P.E. teacher, see their work areas and have them talk about what they do in relation to the children.

c. Bake gingerbread in cafeteria.

d. Have safety guard (Policewoman) come in to talk to children about rules of safety in crossing street, etc.

e. Read stories from books such as, "I Want To Be A Librarian", "I Want To Be A Teacher", and "I Want To Be A Recreation Director".

f. Show filmstrips related to unit such as "What A Principal Does" and "Welcome To School".

"Me, Myself and I"

a. Made mural of self.

b. Role playing.

c. Play hospital.

d. Audio visual materials and books related to unit.

e. Nurse as resource person to weigh and measure children.

f. Doctor as resource person to show his instruments such as stethoscope, blood pressure apparatus, etc.

"Family and Home"

a. Made mural of family.

b. Pictures - study prints, films, books and songs related to unit.

c. Role playing family members.

d. Show and tell relating to family members' jobs.

e. Talk about children's jobs in the home.

"Store"

a. Study prints of super market.

b. Books, filmstrips relating to unit.

c. Made a store in the classroom.

1. Set up a cashier stand.
2. Made paper money in class.
3. Brought from home empty food containers for store.

d. Role playing of store personnel.

e. Study of dairy and milkman through books and filmstrips.

f. Visited local dairy, role played jobs observed.

"Community Workers"

a. Books and audio visual materials on fireman, policeman, and mailman.

b. Role playing using character models.

c. Address envelopes to mother with valentines.

d. Field trip to post office.

e. Field trip to fire station.

f. Resource person - policeman (a student's uncle).

"Ecology Unit"

a. Discuss garbageman and forest ranger.

b. Go on a nature hike.

c. Pick up trash around the school building.

d. Audio visual materials.

"Weather"

a. Related the weatherman to a study of the seasons.

b. Use of pictures to discuss the weatherman and weather station.

"Space"

a. Discussion of astronauts and his training.

b. Role playing of space trip.

c. Space mural.

d. Games - I Want To Be A _____ and "Guess Who I Am?"

"Animals"

a. Discussion of care of pets and other animals.

b. Discussion of jobs of pet store owner, veterinarian, zoo keeper, farmer, forest manager.

c. Field trip to the zoo.

d. Made animal puppets.

e. Books and a audio visual materials.

"Plants"

a. Discussion of food from plants.

b. Relating discussion of farmer and florist.

c. Books and audio visual materials relating to unit.

d. Hands on project of planting a seed in a milk carton and observing progress.

GRADE 2

"Community Helpers-The Barber and Beautician" (Personal Service)

a. Discussion.

b. Books and audio visual materials.

c. Set up beauty shop - demonstrated tools.

d. Girls manicured nails, rolled hair, etc.

e. Resource persons: Barber and Beautician.

"Community Workers - Farmer"

a. Mural on farm life.

b. Scrapbook.

c. Audio visual materials and books.

d. Visit to super market to see how food comes from farms.

e. Farmer as a resource person.

"Community Helpers -- Truck Driver"

a. Books and audio visual materials.

b. Drew truck pictures - transparancies of different trucks for discussion of purposes.

c. Truck driver as a resource person (Moving Van).

d. Math tie in - gas buying and mileage.

e. Simple map reading - road signs.

The following are short term activities not related to one specific unit: (books and audio visual materials were used when available.)

a. Textile workers: Made patterns and cut out doll clothes; made chart on types of fabrics made in local textile mills; textile worker as resource person.

b. Baker (food service). Mix and bake cookies; stories about baker (in reading class); field trip to bakery; measurements in math; health tie in basic food and groups.

c. Librarian: Resource person, made library card, simulated library; role playing; class discussion; wrote thank you notes.

d. Care of clothing; discussed dry cleaners and related jobs. Make a work tree on dry cleaners workers; collage of clothes to be cleaned.

e. Radio and T.V.: Made model of T.V.; slides on local T.V. station; field trip to radio station.

f. Sanitation workers: audio-visual materials, class discussion, clean up school grounds project, made a model trash collector; ecology bulletin board.

g. Carpenter: Resource person, measure objects using carpenters rule, handle and talk about other tools; pretend to buy tools using play money; songs about the carpenter.

h. Bank workers: Make play money, field trip to bank, role playing, simulated bank in classroom.

i. Train workers: Class discussion on different types of trains and workers.

GRADE 3

"Construction"

a. Charted street map for field trip.

b. Built city using milk cartons.

c. Took snapshots of construction workers, machinery and buildings.

d. Made a tool box and replica of telephone booth.

e. Audio visual materials on construction.

f. Resource person - carpenter - demonstrated tools and helped with construction of tool box.

g. Field trip to a construction site.

"Communications - Telephone"

a. Made tin can telephones.

b. Painted telephone booth.

c. Used teletraining kit from phone company.

d. Role playing of workers.

e. Audio visual materials and books.

f. Resource person - telephone installer - demonstrated tools, safety apparel, and work on pole.

g. Field trip to telephone office.

Health Cluster - "Health of People and Animals"
(Larger major unit in three phases; foods, dental health, animals.)

a. Audio visual materials, related reading materials.

b. Dental health program materials.

c. Dairy Council program materials.

d. Resource person - nurse, oriental cook.

e. Field trip - Grant's Park Zoo.

f. Class Discussion of jobs relating to dentistry.

g. Students helped prepare and serve an oriental meal - role playing the jobs.

h. Discussion and materials relating to care of pets expanded to jobs of people who work with animals.

Marketing and Distribution Cluster-"U.S. Cities and Products"

a. Audio visual materials and books.

b. Displays of products.

c. Resource person - business owner of Circle H. Western Store.

d. Field trip - grain elevator.

e. Individual student projects relating to products displayed.

GRADE 4

"Parks and Recreation" (related to unit on state and national parks.)

a. Audio visual materials and written materials.

b. Class discussions, role playing of related jobs.

c. Resource persons: Superintendent of Parks and Recreation for city supervisor and local recreation center.

d. Student planning sessions to decide what jobs they would take for later activities.

e. "Mock City Park", simulated recreation park was set up on the school grounds complete with concession stands, workers (students role playing).

f. Made paper money (math relating).

g. Made posters and booths (art activities).

h. Park layouts - bulletin boards.

i. Set up refreshment stands and worked in them (student activity).

j. The fourth grade class set up the park and worked in it during one afternoon and the P.E. classes for the entire school were given the paper money to spend at the park during their P.E. time.

k. Student followup activities included math exercises relating to ticket sales and booth sales.

l. Field trip - recreation center.

"Fire and the Fireman"

a. Books and audio visual materials.

b. Class discussion on fire (safety lessons).

c. Posters on fire and fire prevention.

d. Fire extinguishing experiments (science class).

e. Resource person - firemen relate unit to the job.

"Ways and Making a Living in Alabama"

a. Unit on water purification (science).

b. Hands-on-activity - set up water filter systems.

c. Audio visual materials on topics.

d. Visited water purification plant - discussed process and related occupations.

e. Collected soil samples - Agri-Business - farming discussion.

f. Made scrapbooks relating to resources in Alabama and related jobs.

g. Displays of products from Alabama.

h. Field trip to capital and state archives (related to Alabama History).

i. Discussed state government, duties of various offices.

"Man and Space" - The planets (science unit)

a. Audio visual materials - library books.

b. Drawings of solar system.

c. Class discussion of planets.

d. Field trip to planetarium (discussed jobs related).

e. Class discussion and simulation on man in space travel.

GRADE 5

"Business and Office Occupations"

a. audio visual materials - written materials.

b. Simulation PARCO - children set up assembly line, organized company, etc.

c. Used printed forms to write invoices, checks.

d. Change making and accounting for money (math tie in).

e. Researched job descriptions (Language Arts).

f. Role playing (personnel manager and applicant), (Store manager and angry customer).

g. Hands-on-experience-set up peanut butter sandwich company.

h. Resource person - district manager life insurance company.

i. Field trip - local business.

"Environment and Ecology"

a. Audio visual materials.

b. Research activities and class discussion of jobs related to subject.

c. Role playing of jobs researched.

d. Class planning for search of erosion and pollution.

e. Art activities - posters, collages, etc. on pollution.

f. School yard tour to search for signs of erosion and pollution.

g. Plans to implement an erosion correction project did not materialize.

"Newspaper" - Communications and media cluster.

a. Class discussion on paper making.

b. Student project - booklet on paper making.

c. Student reports on newspaper.

d. Bulletin boards.

e. Students collected recipes, jokes, news reports, etc. to go in a student newspaper.

f. Students brought in clippings of different kinds of articles.

g. Newspaper field trip.

h. Resource person from newspaper.

i. Organized school newspaper with students role playing various newspaper occupations.

j. For contrast - some students visited T.V. studio and reported to class.

k. Math tie in to classified section of newspaper, i.e., fractions, ad, cost, etc.

"Consumer and Homemaking"

a. Discussion on jobs relating to topic

b. Audio visual materials

c. Resource persons: school nurse (social-home aspects brought out).

d. Hands on activity - sewing - girls made stuffed animals.

e. Discussion and demonstration of labor saving devices.

f. Discussion on safe food handling.

g. Hands-on-activity - made pudding.

"Building Workers"

a. Audio visual materials - books.

b. Class discussions - relating to relatives construction occupations and students experiences.

c. Hands-on-activity - building a dog house.

d. Math unit on measurement - carpenters tools.

APPENDIX IV

MIDDLE SCHOOL SUBJECT RELATING UNITS

CAREER EDUCATION ACTIVITIES

GRADE 6

"Fish Culture Technicians" (Social Studies "Man a Course of Study") Marine Science Cluster

a. Audio-visual materials.
b. Student text.
c. Class discussion jobs related to fisheries.
d. Role playing.
e. Written and oral reports.

"Anthropologist" (Fine Arts and Humanities Cluster related to Social Studies)

a. Class discussion: work of anthropologists and anthropology. How study of past relates to present.
b. Research work.
c. Related reading assignments.
d. Audio visual materials.
e. Drawing charts.
f. Role playing.
g. Map study.
h. Study of tools of the trade.
i. Notebook project.
j. Oral reports.
k. Field trip to Bradley Museum.

"Salesman" (Marketing and Distribution cluster related to Social Studies)

a. Class discussion.
b. Research work on history of retaining.
c. Audio visual materials and library books.
d. Trading session - simulation.
e. Map and globe study related to traveling of salesman.
f. Graph reading related to sales chart.
g. Vocabulary study.
h. Role play the trains needed by a salesman.
i. Hands-on-projects to make simple sales displays.
j. Role play sales situations.
k. Individual projects to note sales activities in local stores.
l. Introduce students to idea of a service salesman.

m. Scrapbook on salesmen.
n. Posters and murals.

"Math in Marketing and Distribution"

a. Class discussions to relate math to the life work situations.

GRADE 7

"Language Arts in Hospitality and Recreation"

a. Read literature selections related to the topic and relate to occupations.
b. Have a fishing game and let student find about job he catches and report to group.
c. Audio visual materials.
d. Spelling lists related to topic.
e. Bulletin board displays.
f. Mural and collage project.
g. Wrote letters requesting materials on topic.
h. Set up travel agency using materials received from states.
i. Completed seek-a-word booklets on career activities.
j. Made booklets of activities (recreational).

"Language Arts in the Telephone Industry" Communications Cluster

a. Discussion of telephone industry.
b. Examination and use of telephone directory.
c. Alphabetizing list of 30 names for a class phone directory.
d. Vocabulary list relating to topic.
e. Written reports on a telephone industry job.
f. Use of the Tele-trainer to simulate operator, use of phone.
g. Resource person - operator - phone installer.
h. Phone manners unit.

"Math and Hospitality and Recreation Cluster"

a. Problems centered around telephone, long distance calls, newspaper ads, etc.
b. Job analysis of communications workers, i.e., lineman and how math is important in their jobs.
c. Individual projects showing math in communications.

"Geometry in Public Service"

a. Class discussion on urban development relating math to topic.
b. Discussion on city planning, traffic surveys, road signs, highway markets, and how geometry and math fit in.
c. Construction of geometric shapes and drawing into road signs.

GRADE 8

"Language Arts and Construction Occupations"

a. Vocabulary work related to topic.
b. Work problems related to cashiering in a grocery store.
c. Set up simulated grocery store, price mark items using math problems.
d. Role play various jobs in store; newspaper carrier, milkman.
e. Research on jobs.
f. Class discussion of individual contacts with sales people.

"Math in the Fine Arts Occupations"

a. Discussion of history of math related to present math.
b. Discussion of fractions and music.
c. Job reports in field.
d. Field trip to museum and opera house (joint with other teachers)
e. Audio visual materials.

"Marketing and Distribution and Language Arts" (advertising related to speaking skills).

a. Oral reports.
b. Interviews.
c. Dramatizations - charades showing emotions.
d. Use T.V. set with no sound to have students identify mood.
e. Bulletin board displays.
f. Sentence and paragraph writing (using information regarding advertising).
g. Spelling - occupational related word lists.
h. Research job requirements.
i. Radio commercial writing.
j. Hands-on-activity - make bean bags and egg carton trash cans to sell in carnival and make posters to advertise.

"Marine Science related to Language Arts"

a. Reading assignments related to field.
b. Vocabulary list related to field.
c. Expose students to scientific report to show tie in of Language Arts to Science and related jobs.
d. Have students select an occupation from a given list and research it. Use with introduction to research skills and library use.

"Fine Arts and Humanities and Language Arts"

a. Relate Greek and Roman mythology to field.

b. Audio visual materials.
c. Individual projects - cartooning using greek and roman figures and designs, model of trojan horse or architecture.
d. Discuss job opportunities in humanities field.
e. Relate job list to community.
f. Bulletin board displays.
g. Field trips - museum, opera house.
h. Resource persons - minister, representative of theater group.
i. Participate in a dramatic presentation (voluntary project for P.T.A.) cooperative effort with music teacher.

"Language Arts and Construction Occupations"

a. Vocabulary work related to topic.
b. Audio visual materials.
c. Literature using stories related to construction.
d. Research activities on jobs in construction tied in with written reports.
e. Field trip to construction site (taken in cooperation with another class).

"Language Arts - The Business Letter in Marketing"

a. Fundamentals of letter writing.
b. Letter in business discussion.
c. Students write business letters.
d. Students write letter of application for job.

"Consumer and Homemaking Occupations related to Language Arts"

a. Written composition was terminal project (based on occupational information).
b. Resource person - home economist (in cooperation with other class).
c. Vocabulary list related to topic.
d. Bulletin boards.
e. Student demonstrations - table setting, etc.

"Meterology and Related Careers" - Science

a. Class discussion of weather, meterology and related careers.
b. Read weather maps.
c. Observed and drew cloud formations.
d. Used simple weather instruments.
e. Attempted weather predictions.
f. Did occupational research on related jobs.

"Geology"

a. During study of rocks, minerals and soils class discussion was pointed to jobs related to topic.

b. Students selected 5 jobs of interest and researched jobs based on an outline provided.
c. Individual projects related to collections of articles and pictures of them.
d. Discussion of local job opportunities.
e. Audio visual materials.
f. Bulletin boards.

"Astronomy and Aerospace Science"

a. Research activities.
b. Bulletin boards.
c. Posters.
d. Charts constructed by students.
e. Class discussion of careers in field.

"Occupations of Great Men in History"

a. Continuing unit as long as interest holds for each unit in American History.
b. Class discussion.
c. Research activities.
d. Note book.
e. Students relate occupations of men studied in history to current occupations and make comparisons of changes in occupations.

"Introduction of the World of Work to the Social Studies"

a. Audio visual materials.
b. Student magazine
c. Socio-dramas.
d. Library research.
e. Lecture.
f. Class discussion.
g. Individual field trips for areas of student interest.
h. Student interest inventories.

"Manufacturing in relation to the Industrial Revolution"

a. Bulletin boards.
b. Socio-dramas - attitudes.
c. Library research.
d. Student projects, i.e., water power demonstration, man made fabrics.
e. Individualized field trips.
f. Group field trips manufacturing sites.
g. Student posters showing inventions then and now.
h. Discussion relating manufacturing careers to history unit.
i. Audio visual materials and textbook.

"Health and Public Services, Transportation and Construction in relation to the Growth and Problems of Big Cities in America".

a. Bulletin boards.
b. Socio-drama.
c. Library research.
d. Projects by students.
e. Resource persons - recreation worker, social worker.
f. Individualized field trips.
g. Audio visual materials.

EXPLORATORY CAREER EDUCATION ACTIVITIES

MIDDLE SCHOOL

Each of the following units were taught to three different groups of students during the year. The description of the activities are an average and varied from group to group. All students in each grade level shared exposure to the classes.

GRADE 6

Fine Arts and Humanities Cluster related to a Music exploratory class which was already a part of our 6th grade curriculum. This music class was introductory music - music appreciation. The teacher adjusted the curriculum for the class to accommodate an exploration of 4 areas of the Fine Arts and Humanities cluster: Music; Drama; Dance and Art.

a. Exposure to and instruction in basic musical instruments to allow students to explore and become familiar with musical instruments.

b. Class discussion on occupations in the 4 areas, including job requirements, jobs requiring various degrees of talent and training.

c. Audio visual materials.

d. Student activities related to student interest, i.e., singing, directing, instrument repairing.

e. Field trips: Music store; Columbus Symphony Orchestra, Springer Opera House, Bradley Museum.

f. Resource persons: dance instructor, harpist, orchestra leader, piano technician.

g. Student performances video-taped for replay to other classes.

h. Participation in skit for P.T.A. program for some students.

i. Bulletin boards.

j. Art handicraft.

GRADE 7

Communication and Media Cluster related to an exploratory art class. This 12 week course was a part of our 7th grade regular curriculum and dealt with beginning art for all 7th graders. The art teacher adapted her course to mesh the careers related to communication and media. The experiences designed for the students provide a variety of art work and experiences centered around occupations in the cluster.

a. Hands-on-activities including the following:

   Lettering, advertising, collage, cartooning, drafting, portrait painting, photography, printing, perspectives, and other handcraft activities.

b. Audio visual materials

c. Resource persons: Commercial artist, architect, cartoonist, t.v. personality, newspaper reporter/photographer.

d. Field trips: t.v. station, newspaper, printing company.

e. Lecture, class discussion and student reports.

f. Library research to find out about various jobs.

The following two clusters were added to a personal development course for 7th graders:

"Transportation Cluster Exploratory"

a. Oral reports.
b. Written reports.
c. Poster making.
d. Bulletin boards.
e. Career games.
f. Newspaper clipping activity.
g. Research activities.
h. Audio visual materials.
i. Role playing.
j. Occupational vocabulary.

k. Resource persons: stewardess, pilot, bus driver.
l. Field trips: State Docks, airport, bus terminal, moving van warehouse.

"Hospitality and Recreation Cluster Exploratory"

a. Oral reports.
b. Written reports.
c. Poster making.
d. Bulletin boards.
e. Career games.
f. Research activities.
g. Role playing.
h. Audio visual materials.
i. Occupational vocabulary.
j. Resource persons: restaurant worker, stewardess.
k. Field trips: recreation department, motel, restaurant.

The following four cluster areas were added to the existing exploratory curriculum to accomplish two purposes (1) provide experiences to round out cluster exploration for all areas and (2) balance the scheduling of students.

"Agri-business and Natural Resources and Environment"

a. Audio visual materials.
b. Research activities.
c. Posters, mobiles, collages, etc.
d. Field trips: veterinarian clinic, food processing company, dairy processing and distribution company.
e. Resource persons: veterinarian.
f. Occupational analysis.
g. Student scrapbooks and reports.
h. Forestry and environmentalist simulation.

"Public Service"

a. Audio visual materials.
b. Field trips: Police Department, City Hall, Public Works Department, Fort Benning Army Post, fire station.
c. Resource persons: Juvenile officer of Probate Court, policeman, city commissioner.
d. Utilized video-tape of city commission meeting in class.
e. Mock election (school wide).
f. Role playing.
g. Games - i.e. Who am I?
h. Wrote letters to public officials requesting information.

"Personal Service Cluster"

a. Audio visual materials.
b. Class discussion.
c. Bulletin Boards, posters, collages, mobiles, etc.

d. Resource persons: seamstress, ministers.
e. Field trips: funeral home, dry cleaning establishments.
f. Role playing.
g. Scrap books on cluster.
h. Research activities.

EIGHTH GRADE

"Consumer and Homemaking Cluster related to a Home Economics Course"

This mini-course was taught to all eighth grade girls. It was an existing part of our curriculum before the project was implemented. Students attended classes for 12 weeks.

a. Lesture - discussion.
b. Audio visual materials.
c. Posters and bulletin boards.
d. Demonstration; cooking, sewing, textile design.
e. Resource persons: hospital dietitian, home economist, textile designer consultant, charm and modeling school instructor.
f. Research activities.
g. Field trip: Day care nursery, motel and restaurant.
h. Hands-on-activities: prepare a four course meal, make a dress (or two), fashion show for entire school.

"Health Careers Cluster"

This exploratory course was developed by a personal development teacher who taught sex education, manners, etc. before the project was implemented. Her course was adapted to accommodate a 6 weeks exploratory of the health fields.

a. Hands on activities: taking temperature, checking pulse, checking respiration, using stethoscope, taking blood pressure, using inflatable splint and using a leg brace.

b. Resource persons: Nurse, hospital public relations director.

c. Field trips: Columbus Vocational Technical School, Hospital, Veterinarian Clinic, Morturary, Dental Lab., Optical Lab., Public Health Department, Nursing Home.

d. Research activities including occupational briefs and yellow pages of telephone directory.

e. Audio visual materials.

f. Bulletin board displays.

"Business and Office Cluster"

This experience was provided for all eighth graders and was included in the existant typing exploratory class. The cluster exploration was integrated into the exploratory typing class so that students could explore occupations in the cluster while learning basic typing.

a. Resource persons: stock broker, counselor, state employment agency (video taped for future use with other classes).

b. Field trips: Insurance company, Columbus Vocational Technical School.

c. Hands-on-activities: typing, letter writing.

d. Class discussion.

e. Research activities.

f. Typed student reports.

g. Role playing.

h. Lectures.

i. Participated in joint simulation project (below)

"Manufacturing, Marketing and Business Office Simulation"

Two teachers teamed to provide this simulation experience for their students. After study of the jobs related to the three clusters, the students listened to a stock broker explain how stock is bought and sold. They formed companies, sold stock, designed a product (tissue paper flowers and burlap flowers), set up a production line, purchased supplies, set up a bookkeeping system, implemented a marketing campaign, sold the product and liquidated the company. The experience was of tremendous value for its own sake but also for the motivational value.

This following three cluster exploration classes were designed to round out the cluster exploration for the middle school and were added to the existent curriculum. These clusters were considered of vital importance to the students since they reporsent the bulk of occupational opportunities in the local community, and our school system has occupational training opportunities in these areas. This served as an exploratory screening to allow the students an opportunity to decide if they were interested in pursueing these educational opportunities in high school.

"Manufacturing Cluster Exploratory Class"

a. Class discussion.
b. Research activities.
c. Occupational interest inventory.
d. Audio visual materials and written materials.
e. Resource persons: Chamber of Commerce representative.
f. Field trips: Textile Mill, Box Manufacturing Company, Furniture Manufacturing Company, Bakery, Dairy Processing Company, Brick Manufacturing plant.
g. Simulation experience (above).
h. Simulation of mass production and assembly line (PARCO).

"Construction Occupations Cluster Exploratory"

a. Research activities.
b. Hands-on-activities: Examination of tools.
c. Resource persons: roofer, interior decorator, electrician.
d. Student reports on personal experiences in field.
e. Field trip: local construction site.
f. Job application simulation.
g. Class discussion.
h. Audio visual materials.
i. Use of Dictionary of Occupational Titles and Occupational Outlook Handbook.

"Marketing and Distribution Cluster Exploratory"

a. Simulation activity (flower sales project).
b. Audio visual materials.
c. Role playing.
d. Use of want ads and telephone directory in sales and seeking a job.
e. Practice in filling our job applications.
f. Field trips: Dairy, candy company, bakery, department store.
g. Research activity.
h. Class discussion.
i. Bulletin boards, posters, advertising campaigning materials.

APPENDIX V

APPLICATION FOR WORK EXPERIENCE PROGRAM

Place a recent Photo of yourself here.

The Work Experience Program is for students to gain experience in the world of work and explore a job in which he is interested. Worker requirements and earnings vary. The student may earn 1 elective credit for a minimum of 15 hours of work experience per week. The student must take 3 required subjects and 1 elective in addition to the work experience elective. The job must be an approved job and the employer must agree to rate the student on a periodic basis.

Name _____ Date of Birth _____

Home Address _____ Telephone No. _____

Fathers Name _____ Fathers Occupation _____

Mothers Name _____ Mothers Occupation _____

Social Security No. _____ Grade Now Enrolled _____

Homeroom Number _____ Homeroom Teacher _____

Sex - Male _____ Female _____ Height _____ Weight _____

Subjects liked best _____

Subjects liked least _____

What are your future career plans? _____

Have you worked before _____ If so, where? _____

Type of Job _____

Hobbies _____

Offices held in organizations and clubs: _____

Types of Jobs you're interested in: _____

Do you have transportation? _____

What school are you now enrolled in? _____

I understand that I must report to my Work Experience assignment as scheduled and abide by the employee rules and regulations as established by the employer in addition to my school requirements.

_____
(Student)

I give my consent for my (son/daughter) to participate in the Work Experience Program.

_____
(Parent or Guardian)

*It is required that students participate in the school insurance program.

I JOB ATTITUDES	1ST	2ND	3RD	4TH	5TH	6TH
Cooperation						
Initiative						
Courtesy						
II JOB PERFORMANCE						
Knowledge of Job						
Accuracy of Work						
Work Habits						
III PERSONAL APPEARANCE						
IV ATTENDANCE AND PUNCTUALITY						
Absent						
Tardy						

STUDENT EVALUATION REPORT

_____ Coordinator

_____
Training Agency

VOCATIONAL EDUCATION
PHENIX CITY SCHOOLS
PHENIX CITY, ALABAMA

_____
Name of Student

_____
Training Supervisor

Please indicate your estimate of the Trainee's Performance in relation to his personal ability.

The Vocational Education Training Program is a cooperative effort between Business and the School. This evaluation report will furnish a means by which the Business and the School may cooperate in rating the performance of the student trainee.

E - Excellent
S - Satisfactory
U - Unsatisfactory

Dear Employer:

It will soon be report card time again, and we need to get you to rate our student on his work experience. If at all possible, please return these in the self-addressed envelope by Friday, November 17.

In marking the report card, please mark in the column for the 2nd six weeks. We found from last six weeks cards that our instructions were not clear enough regarding the ratings. Please note that we would like for you to rate the students in block I, II and III with an E for excellent, S for satisfactory or a U for unsatisfactory. In block IV, please list the number of days absent and tardy.

Thanks again for providing our students with the opportunity for this work experience.

Sincerely,

_____

Coordinator
Career Education

APPENDIX VI

TEACHER REACTIONS TO CAREER EDUCATION

Career Education is an asset to the curriculum of the Phenix City School System. The experiences of career awareness may provide a basic of relevancy to other aspects of the curriculum. By exposing children from the elementary level this will help develop their attitudes about life and the world of work. It will broaden their concepts as to the different job opportunities that are, or will, become available.

I feel that to continue Career Education is vital to the continuous progress of the children in our community.

6th - Social Studies
C. B. Moffett

I think that career awareness is very important to a child. At an early age the child will say, "I want to be a doctor or a teacher when I grow up". This is the time for teachers to guide and develop activities within the regular school curriculum.

I do think that this program has helped our children develop positive attitudes toward work.

6th - Math
C. S. Coleman

After my first year of incorporating Career Education into the regular program, I feel that the students and myself have had a most rewarding experience. Students today have a desire to learn more than what is stressed in academic study, and Career Education helped fulfill this need.

Field trips, resource persons, role playing and games proved to be excellent methods of motivating students and stimulating their interests.

At present, I see no special area that needs improvement in relation to my unit, due to the fact that some things were neglected during this first year - trial year - which will be better judged next year.

I am most appreciative of the fine cooperation displayed by all people involved and concerned with Career Education. This kind of organization is what makes this type of program enjoyable, and above all, successful.

6th-Music
Frank D. Miller, Jr.

I think Career Education in the middle school is the best thing that could have happened.

7th - Mini Course
Curtis Mitchell

My feelings about Career Education is that by emphasizing the career program throughout the elementary grades and adapting activities to fit the needs of the children you are working with, you will foster maturing attitudes toward life and give the child the experimental tools with which to test, change, and perfect their abilities.

7th - Math
Carlisle

I enjoyed planning and executing the career activities with my Language classes and what's more, the students enjoyed them, especially the average and lower phases.

The children were exposed to a lot of experiences they would not have received except for Career Education.

I don't know if the project as such needs improving but I can put a little more into my planning to utilize the material I've prepared for another year.

7th - Language Arts
Provitt

Career Education has been an asset to the students and possibly to the Phenix City School System as it has allowed many of the students a chance to identify with some type job or career.

The exploration of different jobs has been good also as the students have a good knowledge of the job offerings in the Columbus-Phenix City area. I feel they have a deeper appreciation for the world of work.

In my opinion, I f-el it would be good to allow for some hands-on-types of experiences for the students by providing some kind of equipment or recommending where some equipment may be borrowed or utilized.

7th - Mini Course
Patrick

In general, I feel the Career Education is wonderful. The possibilities of enrichment in the student's education are terrific. I feel sure we have all done far more than we, or the

students, are aware of. Gradually, much of the material they've been exposed to will "sink in" and affect their decision for the future.

Suggestions for improvement:

1. Less field trips that will take the student from other teachers classes; and with so many, it can be an imposition on the sense of business.

2. More films or filmstrips. (I have found few in my field.)

8th - Home Economics
Johnston

Fundamental goals of project are potentially good for the education of students. Expectation for the teachers are too vague. Teacher responsibilities should be more explicit. More audio-visual supplies in business cluster.

8th - Business
Parris

Good exposure for students, may be too concentrated at this level. More group interaction needed among teachers. The teachers' responsibilities as Career Education employees need to be much more explicit!

8th - Mini Course
Bedford

Generally, I consider Career Education very worthwhile and necessary in the school curriculum.

Our project in particular was carried on fairly successfully, considering this was the first year of introduction into the system.

Suggestions for improvement:

1. More concerted efforts on the behalf of the entire faculty to put Career Education in the curriculum.

2. More notice of Career Education meetings.

3. More group discussions of Career Education teachers concerning problems and ways of solving them.

4. More materials to work with concerning Career Education in relation to the subject area.

5. Actual "hands-on" courses for students to develop vocational interests - such as "The World of Construction".

8th - Social Studies
Sheilah Jordan

The Career Education program is, in my opinion, a good and worthwhile idea. However, I think that the program could be improved if we worked with fewer students rather than trying to reach all students, six periods a day. Working in this manner tends to cause students to lose interest in the whole program because they are, in many instances, repeating what they have already done in previous classes.

Also, the program could be improved if we had more materials. We need more research materials so that a student who is interested in a particular career will not have to wait until materials are available before he or she is able to do the required research. At such time, in most instances, you have moved to something entirely different.

We need more films that show people actually engaging in careers because we have so many students who are not able to do the required reading necessary to get the information about a career.

As a subject matter teacher, I found that in trying to teach regular subject matter and relate the subject matter to careers, I always seem to run out of time. As a consequence, I devote most of my time to teaching my subject matter and leaving off careers.

8th - Science
Abron

APPENDIX VII

MOBILE COUNTY PUBLIC SCHOOLS
DIVISION OF CURRICULUM AND INSTRUCTION

CAREER EDUCATION

Worker Observation Questionnaire
Toulminville In-service Meeting
January 10, 1973

Please answer the questions below and return them to the head of your department at the end of the tour.

NAME _____ SUBJECT _____

(1) Name of industry you visited _____

(2) Number of workers you observed at the industry _____

(3) Type of work performed:

_____ mechanical _____ literary _____ persuasive

_____ clerical _____ artistic _____ outdoor

_____ scientific

(4) Number of workers you saw who received on-the-job training:

_____ ¼ _____ ½ _____ all

(5) Number of workers you saw who felt that school could have better prepared them for a job:

_____ ¼ _____ ½ _____ all

(6) What did you like about the tour? _____

_____

(7) What did you dislike about the tour? _____

_____

(8) What did you find on the tour that could help you in your class:

_____

(9) What ways can you use the information obtained on the tour in your class discussions concerning Career Education? _____

_____

APPENDIX VIII

MOBILE COUNTY PUBLIC SCHOOLS
DIVISION OF CURRICULUM AND INSTRUCTION
CAREER EDUCATION

Levels I-VI.....TRIPLE "I" GUIDANCE SERIES

This series is concept-based rather than skill-based. However, vocabulary control and suggested reading skill material enable you to use the series in several ways:

as a supplement to any basal reading series,
as a totally independent program, or
in conjunction with a language arts
or social science program.

The Teacher's Guide has been designed to give you help in motivating the children to read and in aiding them to learn skills of summarizing and analyzing what they have read through well-planned activities. In addition, optional guide material is included for developing reading skills if you decide to use the series as an independent reading program. On the overprint, you will find questions and suggested answers to elicit interpretation and discussion. The reading level--designed by letter-- is approximately one grade level below that of a basal reader.

Physically, the books in this series have been planned for maximum appeal and ease of reading. Bright, attractive art and photographs reflect a wide range of racial and ethnic backgrounds, and make the stories pertinent and believeable. Easy-to-handle paperbound books--yellow, red, blue, brown, and green--identifies the units, and page numbers for both paper and hard cover editions make it much easier to use the books. "Give the kids a break--every bit of help you can," has been the underlying thought in the design of the TRIPLE "I" SERIES.

The five units at each level of this series constitute a structure of concepts through which the child will build three things--a new insight into who he is, a deeper understanding of what people and things are important in his life, and a knowledge of how to analyze and improve his relationships with his peer group. The treatment of these concepts increases in sophistication at each level, paralleling the child's own development. Preceding each unit is a picture and unit opener selection which highlight the unit concept.

12/4/72

LEVEL I-VI CONCERTS TRIPLE "I" GUIDANCE SERIES

Unit One - Self Image

- Individual Identification
- Racial and Ethnic Identification
- Family Identification
- Identification of Abilities
- Identification of Physical Attributes

Unit Two - Interpersonal Relationship

- Respecting the Rights of Others
- Sharing
- Honesty
- Anxiety
- Popularity
- Confidence

Unit Three - The World of Work

- Realistic Self-Evaluation
- Identification of Interests
- Positive Attitudes
- Awareness of Occupation and Job Families
- Awareness of Relationship Between School and the World of Work

Unit Four - Inter-social Relationships

- Affirmation of Differences in People
- Confirmation of Similarities and Common Needs of People
- Recognition of Basic Rights and Responsibilities of All People
- Understanding that Society Profits from Contributions of all Groups
- Realizing that All People are Influenced by Factors Beyond Their Control

Unit Five - Values

- Values in Relation to Individual Behavior
- Values in Relation to My Family
- Values in Relation to My Friends
- Values in Relation to Leisure Time Activities
- Values in Relation to Maturity
- Values in Relation to Occupation Aspirations

APPENDIX IX

OCCUPATIONAL QUESTIONNAIRE: THE VALUE OF WORK

Name _____ School _____

Date _____ Class _____

Directions: Check yes if you feel the statements below are true. Check no if you think the statements are false. This is not a test, and there are no right or wrong answers. Please answer the way you really feel.

		YES	NO
1.	The best job is always the one that pays the most money.	___	___
2.	All jobs help other people in some way.	___	___
3.	People who work are usually healthier and happier than people who don't work.	___	___
4.	A person will be happy with his work no matter what he does if he makes a lot of money.	___	___
5.	Nobody would work if they had all the money they needed.	___	___
6.	Some people would rather have a job helping others even if they might make more money at another job.	___	___
7.	People who go to college always get the best job.	___	___
8.	Some people like their job and would rather go to work than stay home.	___	___
9.	The only reason people work is to make money.	___	___
10.	I would be happy if I never had to work.	___	___

APPENDIX X

MOBILE COUNTY PUBLIC SCHOOLS

CAREER EDUCATION

Staff Orientation Schedule

Monday - June 19, 1972

8:00 a.m.	Introductions Briefing on Career Education Advisory Committee Staff Pre-test
9:30 a.m.	Meeting with Career Education Advisory Committee
11:00 a.m.	Continuation of Staff Pre-test
	LUNCH
1:30 p.m.	Career Education film (Materials Center)
2:00 p.m.	Session with Dr. Schneider (Room 302)
3:00 p.m.	BREAK
	Tour of Barton Academy

Tuesday & Wednesday - June 20 and 21, 1972

8:00-4:30	Administrative orientation Career Education overview Project Objectives discussion Materials presentation Staff Strength Assessment session Question and Answer sessions (Wed. 10:30 a.m.-Presentation by 3M Company)

Thursday & Friday - June 22 and 23, 1972

8:00-4:30	Materials review - Suggested reading (Room 302)

APPENDIX XI

MOBILE COUNTY PUBLIC SCHOOLS
Division of Curriculum and Instruction

CAREER EDUCATION ELEMENTARY WORKSHOP
July 24-August 18, 1972

S-C-H-E-D-U-L-E

July 24, 1972 - Monday

8:00 a.m.	Introductions
8:20	Pre-test
10:00	BREAK
10:30	"Career Education Overview" Mr.Henry H. Pope, Project Director
11:45	LUNCH
12:45 p.m.	Previewing film "Career Education" Courtesy of Ala. State Dept. of Ed.
1:45	"Career Education in the Elementary School" Miss Adele Mann, Coordinator of Elem. Education
3:00	BREAK
3:15	"Our Task This Summer and Beyond" Mrs. Glenys Mason, Elementary Career Resource Specialist
	Presentation of Objectives for Workshop Staff

July 25, 1972 - Tuesday

8:00 a.m.	Planning for the day's activities
8:15	Project Objectives The Overall Project Objectives(Mr.Pope) The Elementary Component (Mrs.Mason)

	The Middle School Component (Mrs.Edwards & Mrs.Brannan) The High School Component (Mrs.Cunningham & Mr.Harvey)
10:00	BREAK
10:20	Elementary Objectives - "A Look at What Has Been Done Elsewhere"(Cluster concept)
12:00	LUNCH
1:00 p.m.	Tour of Barton Academy (Career Observations) Mr. Pope
3:00	BREAK
3:30	Materials Review by Groups

July 26, 1972 - Wednesday

8:00 a.m.	Materials Review by Groups Questions/Discussion
10:00	BREAK
10:30	Evaluate Current Career Education now Taught in the Four Pilot Elementary Schools.
11:30	Evaluate Present Curriculum for Possibilities Textbooks Units Subjects Students (Is there a need for Career Education in our schools?)
12:00	LUNCH
1:00 p.m.	Continue Evaluation
2:00	Review Objectives to Determine Applicability to Existing Curriculum.
3:00	BREAK
3:30	Group Session Study objectives to recommend application.

July 27, 1972 - Thursday

8:00 a.m. thru 4:30 p.m.	A Day in the "World of Work" Each participant will be placed to observe one day on someone's job.

July 28, 1972 - Friday

8:00 a.m.	Oral Evaluation of Thursday's Activities in the "World of Work". Relate to Students.
9:30	Presentation of World of Work and Guidance Materials - Mr. Ed Robertson, Guidance Associates Representative
10:15	BREAK
10:45	Preview and Research Materials in Groups
12:00	LUNCH
1:00 p.m.	Share Materials in Group Presentation with Ideas for Use in the Classroom. (Give the purposes you would have in using. State the purpose for children's viewing. Suggest follow-up presentation.)
3:00	BREAK
3:30	Evaluation of Week's Activities - Feedback/Plan Ahead.

July 31, 1972 - Monday

8:00 a.m.	Plans for the day's activities
8:15	"Our Working World" materials Mr. Green, SRA Representative
10:00	BREAK
10:30	SRA Presentation
12:00	LUNCH
1:00 p.m.	SRA Presentation
3:00	BREAK

July 31, 1972 - Monday (Continued)

3:30	Special Education Presentation Mrs. Wilhelmina Champlin, Coordinator of Special Education Methods and Materials Related to Career Education

August 1, 1972 - Tuesday

8:00 a.m.	Plans for the day's activities
8:15	Preview of Singer/SVE Guidance and World of Work Materials in Groups Suggest Teacher's Purpose for Use Suggest Creative Ways for Using with Students Suggest Activities to Accompany Plans
10:00	BREAK
10:30	Continuation of Materials Preview
12:00	LUNCH
1:00 p.m.	Economics in Career Education Mr. Alton Harvey, High School Career Resource Specialist Follow-up Game on "Goods and Services"
3:00	BREAK
3:30	"Guidance: Preventive & Corrective, Individual and Group, & Career Implications Panel Discussion - Mrs. Cunningham, Mrs. Edwards & Mrs. Brannon Career Resource Specialist

August 2, 1972 - Wednesday

8:00 a.m.	Consultant Miss Deede Sharpe

August 2, 1972 - Wednesday (Continued)

10:00 a.m.	BREAK
10:30	Consultant
12:00	LUNCH
1:00 p.m.	Consultant - Preparation for Field Trip
3:00	BREAK
3:30	Discussion

August 3, 1972 - Thursday

8:00 a.m.	Plans for the day's activities
8:30	Field Trip Alabama Dry Docks & Ship Builders
12:00	LUNCH
1:00 p.m.	Follow-up study of the Values of the Field Trip. Apply to purposes set for taking field trip. Develop an outline of procedures to follow to increase the value of field trips. Apply to Career Awareness.
3:00	BREAK
3:30	Vicarious Field Trips-Uses & Values Films(Where on-sight trips are impossible.) Role Models Others: Tapes, TV, Pictures, Books, Interviews, etc.

August 4, 1972 - Friday

8:00 a.m.	Plans for the day's activities

August 4, 1972 - Friday (Continued)

8:15 a.m.	"What Business and Industry Can Do to Aid Teachers in Educating" Mr. Sam Jenkins, Coordinator of Management & Development, International Paper Company
10:00	BREAK
10:30	Cluster Study - Adapted to Mobile Use Dictionary of Occupational Terms Occupational Outlook Handbook American Vocational Journal Cluster Hand-out Sheet Mobile County Public School's Resource Catalog (See what is available for each cluster, applicable to each grade level. Suggest others.)
12:00	LUNCH
1:00 p.m.	Continuation of Cluster Study
3:00	BREAK
3:30	Feedback for the Week's Activities

August 7-11, 1972 (Third Week)

8:00 a.m.	Planning for the day's activities
8:30	"Use of Audio-Visuals in Improving Instruction" Mrs. Margaret Abbott, Supervisor of Materials Center
10:00	BREAK
10:30	Tour of Materials Center (Aug.7, only) Developing Materials Mrs. Margaret Abbott, assisted by Mrs. Valorie Stickney & Mrs. Sandy White

August 7-11, 1972 (Third Week)(Continued)

12:00	LUNCH
1:00 p.m.	Continuation of Materials Development
3:30	Group work in applying career emphasis to existing materials to be used in an experimental way in pilot schools in the Fall.

August 14-18, 1972 (Fourth Week)

8:00 a.m.	Finalizing materials development,
Thru 4:30 p.m.	In-service planning for schools,
	Evaluation of Workshop,
	Sharing of materials developed & collected.

APPENDIX XII

MOBILE COUNTY PUBLIC SCHOOL
Division of Curriculum and Instruction

CAREER EDUCATION SECONDARY WORKSHOP

Middle School August 23, 1972		High School August 24, 1972
8:30 a.m.	-	Career Education Overview Film
10:00	-	BREAK
10:15	-	Small Group Discussion
11:00	-	Project Objectives Project Staff's Functions Project Teachers' Functions
11:30	-	BREAK
11:45	-	Small Group Discussion

APPENDIX XII

MOBILE COUNTY PUBLIC SCHOOLS
DIVISION OF CURRICULUM AND INSTRUCTION
CAREER EDUCATION

Worker Observation Questionnaire
Toulminville In-service Meeting
January 10, 1973

Please answer the questions below and return them to the head of your department at the end of the tour.

NAME _____ SUBJECT _____

(1) Name of industry you visited _____

(2) Number of workers you observed at the industry _____

(3) Type of work performed:

_____ mechanical	_____ literary	_____ persuasive
_____ clerical	_____ artistic	_____ outdoor
	_____ scientific	

(4) Number of workers you saw who received on-the-job training:

_____¼ _____½ _____ all

(5) Number of workers you saw who felt that school could have better prepared them for a job:

_____¼ _____½ _____ all

(6) What did you like about the tour? _____

_____

(7) What did you dislike about the tour? _____

_____

(8) What did you find on the tour that could help you in your class:

_____

(9) What ways can you use the information obtained on the tour in your class discussions concerning Career Education? _____

_____

1/8/73

APPENDIX XII

MOBILE COUNTY PUBLIC SCHOOLS
DIVISION OF CURRICULUM AND INSTRUCTION
CAREER EDUCATION

Toulminville High School
In-Service Meeting
January 10, 1973

Teachers will tour the industries listed below. They will leave the school at 1:30 p.m. in groups. Material will be given to each group leader for dissemination. The leader of each group is the first name listed beside the industry that is to be toured.

The purpose of the tour is to help teachers in the project schools gain useful information concerning industries in Mobile, and to learn of the availability of various occupations in Mobile.

INDUSTRY		TEACHER
Mobile General Hospital	Sister Marilyn	A. Allen
	B. Ross	D. Cayton
	R. Graham	W. Jessie
	S. Tullis	W. Rice
	G. Horton	J. Sherwood
	C. York	M. Green
International Trade Center	G. Hall	P. Stiles
	C. Wallace	J. Isasi
	R. Etheredge	G. Freeman
	C. Jordan	J. Finley
	B. Straub	
Federal Building Court	A. King	W. Sigler
	P. Higginbotham	B. Ulmer
	W. Shipman	L. Edwards
	Mrs. Bell	
Mobile Pulley and Machine Works	H. Bell	McMullan
	Crane	S. Kane
	Kellogg	C. Cunningham
	J. Kaiser	J. Coleman
WALA TV	G. Wyatt	T. Eason
	M. Barrineau	N. DeGuire
	Kingsford	G. Jenkins
	Dubose	R. Davis
	J. Mitchell	M. McAboy
	L. Miller	G. Buskey

APPENDIX XIII

MOBILE COUNTY PUBLIC SCHOOLS
DIVISION OF CURRICULUM AND INSTRUCTION

CAREER EDUCATION

Toulminville High School
In-Service Meeting
January 10, 1973

Questions for Workers

Here are some questions you might like to ask the workers you'll see while on the tour. If you have other questions you would like to ask, please feel free to add them to this list:

--What are the duties of this job?
--Why did you select this job?
--Was this job your first choice?
--If you had a choice, would you change jobs?
--What job training/education was necessary?
--What are the chances of job advancement?
--How did you go about getting this job?
--What school subjects do you consider most helpful in your occupation?
--Could your school have done a better job in preparing you for your job?
--What are your future job plans?
--How much additional job training/education have you had since being employed by this industry?
--Would you suggest that others pursue this occupation? Why? Why not?

1/8/73

APPENDIX XIV

MOBILE COUNTY PUBLIC SCHOOLS
DIVISION OF CURRICULUM AND INSTRUCTION

CAREER EDUCATION

IN-SERVICE PROGRAM
ELEMENTARY SCHOOLS
December 13, 1972

Remarks by a teacher concerning Career Projects returns in her class.

Presentation of Triple "I" Guidance Books - (Profile Sheet) "How To Accomplish Career Education Objectives Numbers 1, 2, 3, 4, 6, 7, and 9, Through the Use of the Triple "I" Series." (Look at objectives, then American Book Company charts of correlation.)

Small Group Sessions-

(Each teacher use a Triple "I" book on her grade level. The grade level group will plan a lesson from the first unit identifying career objectives and any other objectives for selection planned.)

First Grade ----------
Second Grade ----------
Third Grade ----------
Fourth Grade ----------
Fifth Grade ----------

Total Group Reporting on Small Group Sessions.

Adjourn

12/11/72

APPENDIX AV

MOBILE COUNTY PUBLIC SCHOOLS
DIVISION OF CURRICULUM AND INSTRUCTION

CAREER EDUCATION
Elementary Objectives and Sub-Objectives
Tentative

1. Students will develop positive self-concepts.

   1.1 Students will learn that they can do some things well.
   1.2 Students will gain a feeling of worth about themselves.
      1.2.1 Students will learn that they are important and an integral part of the class group.
   1.3 Students will develop positive attitudes toward their own potential to function in a variety of ways.
   1.4 Students will learn of their potential for success.
      1.4.1 Students will be able to identify some of their strengths and limitations.
   1.5 Students will gain a feeling of personal dignity.

2. Students will recognize the dignity and worth of each individual.

   2.1 Students will increase their ability to get along with others.
   2.2 Students will recognize the efforts of others in the class.
   2.3 Students will recognize the achievements of others in the class.

3. Students will understand that not all work can be interesting or fun, but that there is satisfaction in work well done.

   3.1 Students will know satisfaction in doing classroom jobs well.
   3.2 Students will know that jobs they do are important to themselves and relatively important to others.
   3.3 Students will learn that there is personal satisfaction to be gained from anticipating problems and possible solutions in accomplishing work tasks.
   3.4 Students will learn why work is satisfying to many workers.
   3.5 Students will learn that there is individual satisfaction to be gained in functioning as a part of a team.
   3.6 Students will gain pride and satisfaction from group work resulting from team effort.

4. Students will become familiar with the kinds of work different people do in each of the 15 job clusters.

   4.1 Students will learn that all workers produce goods or provide services.
   4.2 Students will know that many workers are necessary to produce goods or provide services for them.
   4.3 Students will know how jobs are grouped into clusters.
   4.4 Students will know the use of many tools used by workers.
   4.5 Students will recognize many workers of many different kinds of work by their wearing apparel.
   4.6 Students will recognize many workers of many different kinds of work by tools of trade.
   4.7 Students will recognize many workers of many different kinds of work by job performance.

5. Students will know that work means different things to different people.

   5.1 Students will learn that different jobs require people to work in a variety of ways and work settings.
   5.2 Students will know some work activities that may be occupations and/or recreation for some people.
   5.3 Students will learn that people choose the kinds of work they do for many reasons.
   5.4 Students will learn of the different kinds of personal rewards to be gained from work.

6. Students will learn of the importance of work to each individual and of each individual's responsibility for contributing to the world of work.

   6.1 Students will learn that work helps them have a better way of life.
      6.1.1 Students will learn that the work they do is important to them in gaining the kinds of living style they desire.
   6.2 Students will learn that what a person has is the result of someone's working.

7. Students will learn that all socially useful work is important to society.
   7.1 Students will learn that work is necessary in a society.
   7.2 Students will learn that workers depend upon other workers to provide a wide variety of goods and services in a society.

8. Students will learn that the world of work has been and is in a continuous state of change.

   8.1 Students will learn that there are various methods of doing a task or a job.

8.1.1 Students will be able to compare changes in methods of doing work.

8.2 Students will know kinds of work which are no longer needed because of technological advances.

8.3 Students will be able to forecast some kinds of work which likely will change or be eliminated in the future.

9. Students will learn that habits and traits of dependability, honesty, punctuality, loyalty, and an ability to communicate and work with others are necessary attributes for an effective worker.

9.1 Students know why habits and traits of dependability, honesty, punctuality, loyalty, and an ability to communicate and work with others are essential to being a successful worker.

9.1.1 Students will recognize the traits and habits of dependability, honesty, punctuality, loyalty and an ability to communicate and work with others in workers they know.

9.1.2 Students will be able to assess their use of the habits and traits of dependability, honesty, punctuality, loyalty and an ability to communicate and work with others in being an effective worker in the classroom.

10. Students will understand and appreciate the importance of a free enterprise system to a democratic form of government.

10.1 Students will learn of the advantages of a free enterprise system over a command system.

10.1.1 Students will learn of the potentials for private ownerships of business and industry in a free enterprise system.

10.1.2 Students will learn that free enterprise allows persons to have a choice about the kind of work they do.

11. Students will learn of the total curriculum's interrelationship with the world of work.

1.1 Students will learn how the things they learn in school will aid them in the world of work.

11.1.1 Students will understand some relationships between what they study and the world of work.

APPENDIX XV

MOBILE COUNTY PUBLIC SCHOOLS
DIVISION OF CURRICULUM AND INSTRUCTION

CAREER EDUCATION
MIDDLE SCHOOL OBJECTIVES
Tentative

1. Students will know the effects of individual interests, abilities, attitudes and values on decision making.

   1.1 Students will explore individual areas of interest.
   1.2 Students will explore the potential of their individual abilities.
   1.3 Students will explore their individual attitudes.
   1.4 Students will explore their individual values.
   1.5 Students will learn that interests, abilities, attitudes and values directly affect their range of choices.

2. Students will learn to respect the rights of individuals to have a diversity of interests, abilities, attitudes and values.

   2.1 Students will learn the existence of diversity of individual interests, abilities, attitudes and values among their acquaintances.
   2.2 Students will learn the existence of diversity of interests, abilities, attitudes, and values among other significant persons.
   2.3 Students will recognize the inalienable rights of individuals to have differences.

3. Students will learn that personal satisfaction can be achieved from work experiences which are commensurate with individual abilities, interests, personality traits and values.

   3.1 Students will learn that some kinds of work are more interesting than others.
      3.1.1 Students will learn why some kinds of work are more interesting than others.
   3.2 Students will experience satisfaction from completion of some necessary tasks.

4. Students will be able to identify and describe occupational classifications, titles and requirements within their clusters of interest.

   4.1 Students will explore occupational classifications within their clusters of interest.

4.1.1 Students will learn that occupational classifications exist within their clusters of interest.

4.2 Students will explore some job titles within occupational classification of interest.

4.3 Students will describe some jobs within their clusters of interest.

4.4 Students will know sources of information for job descriptions within their clusters of interest.

5. Students will learn of the social and economic value of work.

5.1 Students will learn that work exists to satisfy societal needs.

5.1.1 Students will learn how societal needs can be satisfied through work activities.

5.2 Students will learn that economic needs can only be satisfied through work.

5.2.1 Students will learn how economic needs can be satisfied through work activities.

6. Students will learn that education, career and life styles are interrelated.

6.1 Students will know the components of life style.

6.2 Students will learn that there is a range of differing life styles which result from different occupations.

6.2.1 Students will learn how and why life styles result from different occupations.

6.3 Students will learn how careers are affected by education.

7. Students will learn that all socially useful work provides an inherent measure of dignity for the worker.

7.1 Students will learn why all socially useful work is important to:

7.1.1 Society

7.1.2 The individual

7.2 Students will know that the most elementary kinds of labor have worth as well as that of highly specialized and trained professions.

7.2.1 Students will know how and why the most elementary kinds of labor are important.

7.2.2 Students will know why and how specialized and highly trained professional kinds of work are important.

8. Students will learn that there is a need for flexibility of work preparation in a technological society.

8.1 Students will learn examples of changes in the world of work.

8.1.1 Students will identify changes in their community which reflect the need for flexibility in work preparation.

8.2 Students will internalize the need for flexibility of work preparation in their own activities.

9. Students will learn that punctuality, dependability, loyalty, communicative ability, and the ability to positively relate to others are necessary traits for productive acitvity and occupational improvement.

9.1 Students will learn why employers and employees need to possess such traits as punctuality, dependability, loyalty, communicative ability and the ability to relate to others.

9.2 Students will become familiar with examples of workers who possess such traits.

9.3 Students will learn that there is a relationship between possessing such traits and success in specific occupations.

9.4 Students will learn reasons how such traits contribute to productivity.

9.5 Students will learn to relate such traits to their own activities.

10. Students will prefer the free enterprise economic system to that of all other economic systems.

10.1 Students will learn of the advantages of being a part of a free enterprise system.

10.1.1 Students will learn that opportunities for job mobility exist in a free enterprise system.

10.1.2 Students will learn that opportunities for job flexibility exist and are necessary in a free enterprise system.

10.1.3 Students will know that an individual has the right to choose his own occupation in a free enterprise system.

11. Students will have indepth information about one or more clusters of interest as a prelude for developing a career plan.

11.1 Students will relate their interests, attitudes and abilities to their clusters of interest.

11.2 Students will know specific steps to follow in designing a career development plan.

11.2.1 Students will have an awareness of available career opportunities within their clusters of interest.

11.2.2 Students will know how to use all available sources of information for the exploration of their clusters of interest.

11.2.3 Students will know the value of "real" experiences in their clusters of interest.

11.2.4 Students will reassess their interests, attitudes and abilities as a result of these "real" experiences.

11.2.5 Students will develop a course of study plan related to their identified clusters of interest.

11.3 Students will know the entry level skills needed for some jobs in their clusters of interest.

APPENDIX XV

MOBILE COUNTY PUBLIC SCHOOLS
DIVISION OF CURRICULUM AND INSTRUCTION

CAREER EDUCATION
HIGH SCHOOL OBJECTIVES
Tentative

1. Students will become aware of their individual strengths, limitations and interests.

   1.1 Students will be able to assess their inherent abilities.
   1.2 Students will assess their interests and acquired strengths and limitations.
      1.2.1 Students will show relationship between interests, acquired strengths and limitations and occupations of interest.
   1.3 Students will assess their range of personality components, such as: friendliness, independence, patience, thoughtfulness and stability.
      1.3.1 Students will explore the value of these characteristics to several occupations of interest.
      1.3.2 Students will show relationship between these characteristics and several occupations of interest.

2. Students will learn that personal dignity and worth in the work setting are products of productive activities.

   2.1 Students will understand that an individual can achieve dignity by doing his job well.
   2.2 Students will learn components of productive activities.
   2.3 Students will understand that personal dignity and worth are related to the relative need for an occupation by segments of society.

3. Students will learn that not all work can be interesting, but that personal satisfaction can be achieved from work experience which are commensurate with individual abilities, interests, personality traits and values.

   3.1 Students will understand that people work for different reasons and receive different rewards.
   3.2 Students will understand that work experiences commensurate with their abilities and interests have intrinsic values such as:
      3.2.1 Satisfaction from achievement.
      3.2.2 Personal recognition.

4. Students will learn that a free enterprise system provides opportunities for each individual to prepare for adequate performance in a variety of occupations.

   4.1 Students will learn the difference between career selection in free enterprise and command systems.
   4.2 Students will be familiar with a variety of opportunities for job preparation that exist in:
      4.2.1 Immediate area.
      4.2.2 Other areas.
   4.3 Students will understand how to locate opportunities for job preparation in:
      4.3.1 Immediate area.
      4.3.2 Other areas.

5. (To be added.)

6. Students will identify the need for increased productivity as the main resource for dealing with the problem of scarcity.

   6.1 Students will understand the concept of productivity and how it relates to supply and demand.
      6.1.1 Students will understand the relationship between increased productivity and the availability of more goods and services.
      6.1.2 Students will learn that increased productivity can result in increased employee benefits.
      6.1.3 Students will recognize the relationship between mass production and decreased prices.
   6.2 Students will understand the concept of scarcity.
      6.2.1 Students will learn that all economic systems must deal with the basic economic problem of scarcity.
      6.2.2 Students will know how the free enterprise system is organized to deal with the problem of scarcity.

7. Students will learn that preparation and career selection are related.
   7.1 Students will understand that comprehensive information is needed concerning the requirements of a specific occupation such as:
      7.1.1 Job title.
      7.1.2 Educational and training requirements.
      7.1.3 Availability of resources for the securing of educational and training requirements.
      7.1.4 Expense, time and effort in job preparation.
   7.2 Students will relate specific courses in the existing curriculum to preparation for careers of interest.

8. Students will learn that job specialization creates interdependency.

8.1 Students will understand that as a result of specialization, interdependence exists among clusters, among occupations, and among employees and their employers.

9. Students will learn that punctuality, dependability, loyalty, communicative ability, and the ability to positively relate to others are necessary traits for productive activity and occupational improvement.

9.1 Students will learn that successful employees and employers possess such traits as punctuality, dependability, loyalty, communicative ability, and the ability to positively relate to others.

9.1.1 Students will know successful employees and employers and will recognize that they possess such traits as punctuality, dependability, loyalty, communicative ability, and the ability to positively relate to others.

9.2 Students will learn that possessing traits such as communicative ability, punctuality, dependability, loyalty, and the ability to positively relate to others can contribute to increased productivity and higher standards of living.

9.3 Students will develop such traits as punctuality, dependability, loyalty, communicative ability, and the ability to positively relate to others.

10. Students will realize the importance of work experience in developing a career plan.

10.1 Students will learn that work experience assists them in identifying personal adjustments which are necessary in pursuing occupations of special interest.

10.2 Students will understand that work experience can assist in the identification of pertinent information about the occupation.

11. Students will develop and implement a career development plan.

11.1 Students will identify sources of information, guidance, and counseling, which can be supportive in the development and implementation of a career plan.

11.2 Students will understand that present and future needs for a specific occupation should be considered in the process of developing a career plan.

11.2.1 Students will understand that supply and demand in the labor market will affect job opportunities.

11.2.2 Students will know the sources for information concerning:

a. Current employment outlook for specific occupations.

b. Long-range trends in employment for specific occupations.
c. Local employment opportunities in specific occupations.

11.3 Students will understand that the career development process should include comprehensive information such as:
11.3.1 Description of the occupation.
11.3.2 Employment outlook and trends.
11.3.3 Qualifications for the occupation.
11.3.4 Preparation for the occupation.
11.3.5 Entrance into the occupation.
11.3.6 Advancement in the occupation.
11.3.7 Working conditions.
11.3.8 Salary and fringe benefits
11.3.9 Availability of job opportunities in desired geographical areas.
11.3.10 Expense, time, and effort in job preparation.

11.4 Students will develop a career development plan consistent with their personal interests, capabilities, limitations, values and aspirations.
11.4.1 Each student will choose an occupation consistent with his personal interests, capabilities, limitations, values and aspirations.

11.5 Students will pursue programs of study which are relevant to their career plans.
11.5.1 Each student will learn how each course pursued is relevant to his chosen career.

3/13/73