DOCUMENT RESUME

ED 136 033 CE 010 179

AUTHOR Stead, Floyd L.; Hartnett, Richard A.
TITLE A Third Party Evaluation of the Region V, Regional Education Service Agency, Career Oriented Education Program: 1975-76.
INSTITUTION West Virginia Univ., Morgantown. Office of Educational Research and Field Services.
SPONS AGENCY Regional Education Service Agency, Region 5, Parkersburg, W. Va.; West Virginia State Dept. of Education, Charleston. Bureau of Vocational, Technical, and Adult Education.
BUREAU NO V361161
PUB DATE 6 Sep 76
GRANT OEG-0-73-5295
NOTE 265p.; Parts of the appendix will not reproduce well due to faint type or photographs

EDRS PRICE MF-$0.83 HC-$14.05 Plus Postage.
DESCRIPTORS *Academic Achievement; Administrator Attitudes; *Career Education; Comprehensive Programs; Demonstration Programs; Educational Assessment; Educational Objectives; Elementary Secondary Education; *Program Administration; Program Descriptions; *Program Development; *Program Effectiveness; Program Evaluation; Regional Programs; Student Attitudes; Teacher Participation
IDENTIFIERS West Virginia

ABSTRACT

A comprehensive third-party evaluation of a regional career education project covering an eight-county area in West Virginia focused on the project's most recent year of operation (1975-76). The evaluation attempted to measure the degree of attainment of stated goals and objectives and was designed to develop a guide and lend direction to local schools in designing comprehensive career education programs. A process/product evaluation model focused on three developmental stages within the career education program: Career awareness (grades 3 and 6), career exploration (grade 9), and career preparation (grade 12). The process component, featuring specific operational and procedural (e.g., organization, materials, inservices) aspects of the program, was assessed by means of analysis of all available project records; interviews with selected personnel: county superintendents, principals, and teachers; and unobtrusive measures. The product component, incorporating expected changes in the behavior of selected students (in grades 3, 6, 9, and 12) and changes in attitude and knowledge of representative administrators and teachers, was studied through specialized tests. It was found that the process dimension attained creditable success in both implementation and support and that career education awareness by teachers saturates the region. Since it was not possible statistically to attribute student career development gains directly to teacher participation, the establishment of behavioral objectives that relate learning activities (process) and learning outcomes (product) is recommended. (Appendixes, one-third of the report, contain demographic description, evaluation instruments, project publicity, and data tables.) (TA)

A THIRD PARTY EVALUATION OF THE REGION V, REGIONAL EDUCATION SERVICE AGENCY, CAREER ORIENTED EDUCATIONAL PROGRAM: 1975-76

Submitted to

Harry M. Laing, Executive Director
Region V, Regional Education Service Agency

Louis H. Loudermilk
Bureau of Vocational Technical & Adult Education

by

Floyd L. Stead, Project Coordinator
Richard A. Hartnett, Assistant Coordinator

Educational Research and Field Services
College of Human Resources and Education
West Virginia University

September 6, 1976

ACKNOWLEDGMENTS

The evaluators could not have completed their report without the cooperation and direct assistance of the project staff of the Regional Education Service Agency V in Parkersburg. Mr. Harry Laing, RESA Director and Mr. Ray Miller, Project Director were especially helpful throughout critical stages of the study. A special note of thanks is also expressed to the three Field Coordinators: Ms. Adeline Cooper; Mr. John Lorentz, and Mr. Charles Keller.

Moreover, the West Virginia State Bureau of Vocational, Technical, and Adult Education provided indispensable assistance in the design and methodology sections of the evaluation. ERFS appreciates the cooperation of Mr. Louis Loudermilk, Dr. Joseph Freund, and Dr. Roy Thomas (Marshall University).

Central Office personnel, principals, teachers, staff, and students in the representative school systems of the region were extremely cooperative during the data collection phases.

Most especially, the authors extend their appreciation to Mr. Jay Boulter, Research Assistant, ERFS, who devoted many hours to coordinating and tabularizing the data for this report. Other office personnel, Dr. Richard Meckley, Dr. Joseph Prentiss, Mr. Joseph Mace, Mr. Mark Souther, Mr. Mahfoozul Haque, and Mr. Steven Scherer, provided all data collection processes. Mrs. Patricia Dadich supplied all secretarial assistance, including the typing of the final document, and her contributions are greatly appreciated.

FLS
RAH
September, 1976

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF TABLES (CON'T)

ABSTRACT

The Office of Educational Research and Field Services, West Virginia University, conducted a comprehensive evaluation of the "Career-Oriented Educational Program Through a Regional Service Agency." The Career Education project was administered and developed by RESA V, centered in Parkersburg, West Virginia, covering an eight-county area. Funds for the project were established through Title III ESEA and state managed Part C, Research and Part D, Exemplary program funds available under the Vocational Education Act. The evaluators focused their assessment on the most recent year of operation (1975-76) and attempted to measure the degree of attainment of stated goals and objectives. A Process/Product evaluation model was developed which focused on three developmental stages within the career education program: career awareness (grade 3 and 6), career exploration (grade 9), and career preparation (grade 12). The Process component, featuring specific operational and procedural (eg.organization, materials, in-services) aspects of the program, was assessed by means of analysis of all available project records; interviews with selected personnel: county superintendents, principals, and teachers; and unobtrusive measures. The Product component, incorporating expected changes in the behavior of selected students (in grades 3, 6, 9, and 12) and changes in attitude and knowledge of representative administrators and teachers, was probed through specialized tests.

In order to obtain a valid sample to measure both dimensions of the program, ERFS developed a multiple criteria method for determining high and low involvement of teachers participating in career education. Their

status was estimated in terms of participation in career education graduate programs on in-services, contact with project field coordinators, classroom incorporation of resource materials, and support by the local administration. High participating teachers become identified as those satisfying at least 3 of the 4 criteria. Low partici[illegible]s were those with 2 or less. Furthermore, the criteria were [illegible]ck against each selected partici[illegible]'s replies to a Teacher Practices Survey. Consequently, a four-part questionnaire/ survey instrument was administered to 406 teachers in the region, 203 high participating and 203 low participating.

To obtain an equally valid and random sample of students, ERFS analyzed the number of students for high and low teacher groups and randomly generated a total N of 400 elementary students, i.e., 100 third grade students of high participating teachers, 100 third-graders of low participating teachers, 100 sixth-graders of high participating teachers, and 100 sixth-graders of low participating teachers. To obtain a sufficient sample size of 9th and 12th graders, ERFS made use of a "modified cluster sampling" so that all 9th and 12th grades in the region had equal opportunity for inclusion. Proportional to the size of the school they inhabited, a representative selection of secondary students was generated with 753 ninth-graders and 548 twelfth-graders.

The CEQ (Career Education Questionnaire), cognitive and affective parts,was administered to the 3rd and 6th graders, and the CDI (Career Development Inventory) was administered to the secondary students.

As a result of the assessments, ERFS concluded that the Process dimension of the project during its most recent year of operation both in implementation and support had attained creditable success. However, the stated goals and objectives required considerable modification to make

them more specific and measureable. In terms of input effectiveness, ERFS observed a visible retardation of implementation in the form of institutional distractions and competition for teacher/administration participation by other educational programs. Also, pre-arranged strategies for garnering local administrative support for teacher participation were visibly lacking, causing the program to rely too heavily on past endeavors and accidental or serendipitous circumstances to stimulate greater teacher involvement and development.

In another context of the Process dimension, it was determined that career education "awareness" by teachers saturates the region. A "ripple effect" seems to have been operative in which even low participating teachers are more than marginally involved in the program. Even more significantly, ERFS concluded that the greater the contact between the field coordinator and the teacher-implementer, the higher the amount of teacher participation. Therefore, direct contact with teachers is as equally critical as the mobilization of administrative support. It was detected also that of all the groups surveyed, principals as a group are least in agreement about the project's accomplishments and general purposes.

Most positively of all, the program succeeded unusually well in introducing realistic career views and proper work attitudes to target students and in integrating career education with basic academic subjects.

In the Product dimension, it was concluded that there were no significant cognitive gains for 3rd and 6th grade students. In the affective arena, the high student groups did not achieve more than their low counterparts. However, both groups did attain relatively high mean CEQ scores suggesting at least partial success from a region-wide perspective.

The 9th and 12th grade stages (exploration and preparation) demonstrate somewhat similar conclusions. Apparently, there is no consistent statistical

difference between high and low student CDI scores. No consistent pattern unfolds on the basis of number of high participating teachers whom students have studied under for the time period in question. Thus it would seem that students having had low participating teachers fared generally as well as those who had high participating teachers. Simply stated, it not possible, statistically, to attribute student CDI gains directly to teacher participation.

On the basis of these observations, the evaluators strongly recommended that the project administrators and the State of Department of Education consider the necessity of constructing behavioral objectives and establishing a relationship between learning activities (process) and learning outcomes (product). Also, baseline data must be maintained for all students in such a program to make possible necessary assessment measures.

Project administration and future adoptors should likewise recognize the significance of the ripple or "apostolic" effect in which high participating teacher influence their less involved counterparts within the school. An "elite" cadre of early adoptors should be developed and given maximum support so as to encourage others participate in such a program and in the process magnify its accomplishments.

To those concerned with making decisions about the most appropriate organizational structure for implementing a career education program, ERFS suggested that a Regional Educational Service Agency such as RESA V represents the most feasible and efficient locus for directing this endeavor. An intermediate service agency offers pre-established links and avenues of coordination for successfully implementing and monitoring a multi-county career education program.

CHAPTER I

INTRODUCTION AND BACKGROUND TO THE EVALUATION

INTRODUCTION

Career Education has attracted the attention of every major sector of public education in America. Judging from the attention it has received from national, state, and local authorities, career education is a major force in American public education. Moreover, its direction and impact on the educational system are areas requiring immediate and thorough examination.

The Office of Educational Research and Field Services (ERFS) has a genuine interest in all the educational programs and projects which take place in the state of West Virginia. The Office has maintained a particular distinction for its professional involvement in innovative and experimental programs and its assistance to local agencies and school systems in planning and evaluating their programs. The Office is committed to the principle that education is a visible process whose achievements and efforts are capable of being quantified and measured.

Naturally, ERFS was receptive to the invitation extended jointly by the West Virginia State Department of Education and the Regional Education Service Agency, Region V, (RESA V), Parkersburg, West Virginia to perform a third-party process/product evaluation of RESA V's Career Education Project. In response the Request for Proposal (REP) issued by RESA V, ERFS initiated a comprehensive assessment of that Project's

effectiveness during the 1975-76 fiscal year. Thus, the following report examines the major accomplishments and shortcomings of the Project in a systematic and extensive manner. The report contains five major sections which detail the central characteristics and significance of the Project.

1. An explanation of the general nature of Career Education and the more specific historical conditions of the RESA V Career Education Project.
2. A description of the evaluation format, including its purpose, scope, design, procedures, and statistical treatments.
3. A presentation of the data and major findings.
4. A detailed analysis and list of conclusions based on the major findings.
5. And a set of recommendations for future improvement and replication of the Project.

BACKGROUND TO THE EVALUATION

What is Career Education?

The most striking feature of Career Education is its status as an alternative concept to current educational approaches and orientations. Its originator is Sidney P. Marland, Jr., who introduced the concept in January, 1971, in an address to the National Association of Secondary School Principals. In his capacity as United States Commissioner of Education, Marland stressed the urgency of finding a viable alternative to what he termed the "irrelevant general education "pap" and the pre-occupation of contemporary public education with meeting college entrance requirements. Assailing the schools for their failure to provide American youth with occupational training, he imagined career education

as a "new educational unity" which would introduce a "true and complete reform of the high school."

This entirely new curriculum would, Marland believed, represent a blending of vocational, college preparatory, and general education. Moreover, all grade levels and subject areas would be affected.

> Speaking just in terms of the schools, career education -- as I see it -- would embrace vocational education but would go a good deal further. I suppose all of us are familiar with the situation of a young person finishing high school or even college with no idea of what kind of work he would like to follow. This is a depressing proposition for the student and in my view a failure on the part of the schools. So what I would hope for is a new orientation of education -- starting with the earliest grades and continuing through high school -- that would expose the student to the range of career opportunities, help him narrow down the choices in terms of his own aptitudes and interests, and provide him with education and training appropriate to his ambition. In many cases his training would certainly involve the 'manipulative' skills commonly associated with vocational education. It would be strongly and relevantly undergirded by education in the traditional academic subjects.*

For all his enthusiasm in proselytizing this new concept, Marland entertained several reservations about defining the operational elements of career education, particularly the specific conditions of its implementation and structure in school and communities. Its organization, he insisted, "must be left to the decision of local school boards, teachers, students, the business community, labor, and others directly involved. Much will depend upon State and local administrative leadership."

*"Marland on Career Education," American Education (November, 1971), p.1.

Pressed further for some concrete illustration of the inner workings of this innovative program, Marland identified two tentative forms which career education might assume in a hypothetical school district. The first model might be called a progressive curriculum approach; progressive in the sense that at various grade intervals or developmental stages the child would become acquainted with work attitudes and skills appropriate to his age and educational level at the time. This "building block" effect would, for example, concentrate on familiarizing [illegible] during grades 1-6 with the general categories (or "clusters" as Marland preferred to call them) into which various jobs may be arranged. Based on his interests, during the next two years, the student would learn more about specific occupational categories, perhaps, Business and Office Occupations of Fine Arts and Humanities Occupations. The ninth and tenth grades would encourage the student to explore one job cluster in depth by visiting local settings in which it is operative and gaining "hands-on" experience and practical acquaintance with some of its prerequisite skills. In the last two years of high school, each young boy and girl would become intensely involved in a job area which might result in immediate employment in that area upon graduation or prepare him for subsequent education in a post-secondary institution.

Reinforcing the developmental curriculum approach would be a revision in the teaching of the basic or core subject areas -- math, social studies, language arts, and science -- to include more of a focus on each student's career interests. "The student would not be learning just for learning's sake or because someone ordered him to, but because the subjects he was studying would bear directly and specifically

on his planned career." Under this model, career education is envisaged as a motivational approach to increase the student's interest in his basic course work.

Evolution of Career Education

It is clear from Marland's tone that he was discussing career education as an idea, not a concept. Furthermore, he would be the first to admit that it is not a particularly new idea. As Kenneth B. Hoyt* points out, the idea of career education as a goal of American education was enunciated explicitly in the Morrill Act of 1865. Moreover, there were several forerunners to Marland who focused on the idea of career education: Grant Venn (1964), Rupert Evans et al. (1968), James A. Rhodes (1970), and Roman Pucinski (1971).

However, Marland seemed to have chosen the right time to advance career education as a national priority. Circumstances were especially fortuitous in accelerating its adoption. During the early 70's, considerable concern was expressed for educational accountability, for making education more practical and significant. Career education represented, for many, a sensible and natural approach to these concerns. Concomitantly, high unemployment and double-digit inflation propelled many political and educational leaders to seek fresh approaches to prepare high school graduates for selecting and maintaing jobs while at the same time linking more closely the concept of work with that of

*Kenneth B. Hoyt in Career Education; Contributions to an Evolving Concept (Salt Lake City, Utah; Olympus Publishing Company, 1975), p. 385.

education. The fact that career education became the number one priority of the U. S. Office of Education and allocated several million dollars for demonstration projects did not halt its advance.

Given these conditions, career education obtained impressive support by all major sectors of our society. By the end of 1973, virtually every state department of education in the country had conducted a statewide conference on career education, and several states, such as California, Florida, Maryland, Texas, and New Jersey had initiated formal career education programs in large school districts.

As a recent dissertation* details, direct federal assistance to school districts for career education projects has been enormous. For example, USOE funded six model programs as of 1973 (Atlanta, Georgia; Hackensack, New Jersey; Pontiac, Michigan; Jefferson County, Colorado; Mesa, Arizona; and Los Angeles, California). In addition, many school districts have initiated their own career education programs, ranging from mini-models to full-scale implementations (as in Dallas, Texas).

The current posture of the USOE (as advanced in its most recent report on the subject) is to transfer its support from a demonstration to a limited developmental context, as a result possibly of its satisfaction with the success of many projects to date.

> We have reaffirmed the tradition of placing primary responsibility for educational development in the states, with the Commissioner of Education

*Stephen S. Feit, "Career Education and Its Impact on Academic Achievement and Career Development" (unpublished Doctor's dissertation, West Virginia University, 1973), p. 5.

authorized to fund and monitor the developmental resources cited herein. We have attempted to elevate the essential place of career counselor in the [illegible] of the concept. [illegible]ave removed the [illegible] authorities for program support from reliance [illegible] ional education and other authorities, thereby hoping to diminish the still prevalent confusion between career education and vocational education. We have endorsed the present organizational structure of the Office of Career Education, reporting directly to the Commissioner of Education, asking that the existing authorities of that office, dealing with demonstration models with substantial increases in staff. We have endorsed the very essential work of the National Institute of Education in its research, analytic and dissemination responsibilities relating to career education and agree with the high priority given to career education in that agency, both in the statutes and in the agency's performance.*

Thus, in the few short years of its existence, the idea of career education has attracted widespread and consistent support in both a vertical and horizontal direction: from the top of the national educational hierarchy (USOE) down to local school administrators and across the educational spectrum from one end of the continent to the other, in both large (Los Angeles) and small (Mesa, Arizona) educational settings.

Career Education as a Concept

Definitions of career education are so numerous that almost every State has offered its special understanding of the concept. As Alfred North Whitehead remarked, all modes of definition are "a sort of searchlight elucidating some of the facts, and retreating the remainder

*"Interim Report with Recommendations for Legislation" (National Advisory Council for Career Education, November, 1975), p. 2.

into an omitted background." Despite the plethora of position statements on career education, certain common elements or salient characteristics have been elucidated.

The general consensus about this concept assumes four dimensions. (1) Most exponents of career education would agree that it is more than a point of view or vague attitude; that it is in fact a "conscientious effort" to effect basic educational change. (2) The definitions also unaminously observe that it is at the very minimum a kindergarten through adult education approach (with several advocates applying the cliche "cradle through grave" to describe its scope). (3) The notion that career education is a program for all individuals rather than for a specific minority, receives equal endorsement. (4) And perhaps most emphatically, its proponents would single out career education as preparation for work.

The key areas of career education which represent the most divergence of opinion are its relationship to vocational education, the meaning of the term work, and the implications of the concept for the present state of the educational curriculum. Concerning the first of these, the most lucid and convincing explanation of the vocational aspects of career education are provided by Kenneth B. Hoyt. He considers vocational education to be a part of career education. Moreover, he defends career education from the criticism sometimes levelled that it is little more that subterfuge for vocational education, and by extension, a direct attack on the college preparatory tradition. Vocational education is an integral part of career education, but it is one of several parts. Hoyt sees vocational education's unique role to be one of providing a firm foundation and natural structure for its development.

> In a societal sense, the goals of career education are to help all individuals:
>
> (1) Want to work
> (2) Acquire the skills necessary for work in these times
> (3) Engage in work that is satisfying to the individual and meaningful to society
>
> Since, by definition, 'primary work roles' encompass most of the work carried out in the world, vocational education -- as defined here -- becomes a central ingredient for skill acquisition and thus a major part of the bedrock for the career education movement.*

An equally important aspect of career education is its focus on the meaning of work. Is it the case, for instance, that its proponents construe work to mean only that type of labor for which one receives remuneration? Or is work to be considered in its larger context to include all types of experiences, paid and unpaid, educational as well as occupational? The importance of this distinction lies in its ramifications for the status of career education in the educational system. If it is merely a program for the preparation of paid work, it turns out to be a rather narrow and perhaps transient concept. Occupations change so vastly that preparing students for specific jobs may be an ephemeral and short-term approach.

Insight into this issue is once again provided by Hoyt who bases his definition of work on stated guidelines of the USOE. Work is "conscious effort, other than that involved in activities whose primary purpose is either coping or relaxation, aimed at producing benefits for oneself and/or oneself and others."** Thus, work signifies both paid and unpaid

*Hoyt, p. 163.
**Hoyt, p. 153.

experiences and emphasizes the importance of productivity and the contributions of work to one's total value system. In this context, work becomes an integral facet of all learning and education. Career education emphasizes the importance of good work habits, particularly at the elementary school level, which lead to greater productivity, increased efficiency, and broader accomplishments for all citizens.

Another preplexing aspect of career education is its relationship to the total educational curriculum. The official posture of the USOE is to view career education as one of many important purposes of education. As such, career education is not all of education. Rather, it is a part of the total curriculum. It is not intended to replace existing aims of education, and can no more be said to represent all education than could health education, or citizenship education.

Goals and Objectives of Career Education

Having clarified the essential characteristics of career education and having discussed the relationship of this concept to the larger educational system, it is necessary to be more specific about its fundamental goals and objectives. As a means of elucidating these elements, Hoyt provides a succinct and comprehensive definition of career education:

> Career education is the total effort of public education and the community to help all individuals become familiar with the values of a work-oriented society, to integrate those values into their personal value systems, and to implement those values in their lives in such a way that work becomes possible, meaningful, and satisfying to each individual.*

*Hoyt, p. 156

With its goal of preparing all students, career education serves three significant objectives (1) To help all individuals to become familiar with the values of a work-oriented society; (2) To encourage individuals to integrate these work values into a personal value structure; (3) And to assist individuals in implementing work values in their lives.*

Programmatic Assumptions

As a means of explaining the more education - specific conditions of career education, several programmatic assumptions have been advanced, the most significant of which are listed below.

1. Student motivation increases in direct proportion to the clarification of a student's understanding of the relationships between education and work.

2. There is no one supreme learning strategy or approach. A variety of educational stimuli is advantageous.

3. Success in one's work is dependent on acquiring vocational skills. There is less and less demand for unskilled workers.

4. The maturational patterns of career education differ for each individual.

5. The elementary school years are the critical developmental stages for the formation of work values and personal values.

6. Full freedom of occupational choice is impeded by job stereotyping, especially for females and minority persons. Specific programmatic intervention strategies can reduce these obstacles.

7. The same general strategies used in reducing worker alienation in industry (see Herzberg and Maslow) are applicable in reducing worker alienation among students and teachers in the school.

8. Career decision-making skills can be learned to enhance career development.

*Hoyt, pp. 157-158.

9. Work can be satisfying and can stimulate self-understanding and self-importance through concrete accomplishments.*

General Effects of Career Education for Education

The leading proponents of this movement stress its overall beneficial effect on the American school curriculum. They point first of all to its potential for improving the quality, quantity, and variety of vocational education. Moreover, the general education curriculum will be enhanced through a wider variety of course options, accompanied by a de-emphasis on differentiated college preparatory, general education, and traditional vocational education offerings. Secondly, several modifications are necessary within the existing structure of educational instruction and curriculum to allow for greater use of educational technology; more participation by students, teachers, parents, and representatives of business, industry, and labor in setting educational policy; credit for student experiences outside the conventional curriculum; assessment of students on a performance basis to replace the Carnegie unit method; year-round school; greater flexibility in scheduling to encourage teachers to develop career strategies in their classrooms; and improved career guidance, counseling, placement, and follow-up functions in the schools. In addition, career educationists advocate a complete overhaul of teacher education to incorporate career education in the undergraduate and graduate training programs.**

Specific Learner Outcomes

The USOE has identified nine learner outcomes to be effected by career education.

*Hoyt, pp. 22-26.
**Hoyt, pp. 30-32.

Career education attempts to produce students who are:

(1) Competent in the basic academic skills required for adaptability in our rapidly changing society.

(2) Equipped with good work habits.

(3) Capable of choosing and who have chosen a personally meaningful set of work values that lead them to possess a desire to work.

(4) Equipped with career decision-making skills, job-hunting skills, and job-getting skills.

(5) Equipped with vocational personal skills at a level that will allow them to gain entry into and attain a degree of success in the occupational society.

(6) Equipped with career decisions they have made based on the widest possible set of data concerning themselves and their educational-vocational opportunities.

(7) Aware of means available to them for continuing and recurrent education once they have left the formal system of schooling.

(8) Successful in being placed in a paid occupation, in further education, or in a vocation that is consistent with their current career education.

(9) Successful in incorporating work values into their total personal value structure in such a way that they are able to choose what, for them, is a desirable life-style.*

Recapitualtion

In summary, career education is a developing educational movement directed at infusing practical work values and career preparation throughout all phases of the educational system. It is a comprehensive approach with decided pragmatic overtones; it is aimed at directing a larger portion of the K-12 curriculum toward the career needs of the majority of students who require an alternative to the pre-existing college preparatory and general education offerings. Its primary focus is on the significance of work as the key conceptual cornerstone of education.

*Hoyt, p. 29.

At this stage in its development, career education has initiated a distinguishable conceptual base on the basis of complementary assumptions. As a reaction movement, aimed at providing alternative educational opportunities to meet the challenges confronting American youth and young adults, career education has generated a formal array of intended effects and educational objectives which have the unique advantage of being concrete and eventually verifiable --particularly its provision for using longitudinal, base-line approaches for measuring students' career success as a result of the program's implementation. The less certain and controversial aspects of the movement -- particularly its alleged overemphasis on economic values to the possible neglect of intellectual preparation and its oversimplified version of education -- remain unanswered. Also, the specific abilities of the movement to succeed and achieve at least some of its objectives have received only marginal attention.

One of the specific purposes of this evaluation is to attend to an assessment of the major benefits and shortcomings of a representative career education program. It is hoped that the results of our assessment will shed light on the overall effectiveness of this movement.

THE RESA V APPROACH

According to a recent report on career education,* there are four extant models of career education. Each of the models is oriented to a different setting or learning environment.

. Model I (School-Based) or the "Comprehensive Career Education Model" (CCEM) concentrates on the K-12 public school setting.

*"Career Education: Current Trends in School Policies and Programs" (National School Public Relations Association, 1974), p. 28.

- Model II (Experience-Based) focuses more on adolescents (age 13-18) providing alternative business and industry settings for junior and senior high school students who have demonstrated above average success in the traditional school setting.

- Model III (Home/Community-Based) aims at the population of unemployed adults and introduces useful information about available continuing education opportunities into their homes by means of communications technology.

- Model IV (Rural-Residential) establishes a residential facility for disseminating social and education services to rural (disadvantaged families).

The RESA V Career Education Program is exemplative of Model I or the School-Based approach. Although it is not one of the specific school districts or regions chosen in 1971 by USOE for CCEM implementation, its general approach and methods of implementation are most consistent with this model. In keeping with the strategy of the CCEM model, RESA V has devoted its primary attention to integrating career education within the existing curriculum -- referred to by some as an "infusion strategy."

As a School-Based approach, the RESA V Career Education Program was initiated in the public schools (Grades 1-12) within seven of the eight counties in the region. It was introduced in 1973 in Jackson, Pleasants, Ritchie, Roane, Tyler, Wirt, and Wood counties on a developmental and gradual basis. At the outset of the project, Calhoun County was not a part of RESA V; therefore it was not part of the population of this evaluation. See Appendix A for a demographic profile of this region.

Grant Provisions

The U. S. Office of Education awarded a grant to the West Virginia Department of Education for the conduct of a Comprehensive Career Education project. The grant award, made under provisions of Part D of the 1968 Vocational Act Amendments (PL 90-576), was administered through the Department's Bureau of Vocational, Technical and Adult Education, under a subgrant with the Region V, Regional Education Service Agency (RESA) presently serving eight counties, in West-Central, West Virginia, with headquarters in Parkersburg.

The West Virginia Department of Education has been involved in funding and assisting with the development of a number of projects relating to career education. The funds utilized for this purpose include Title III ESEA and state managed Part C, Research and Part D, Exemplary program funds available under the Vocational Education Act. The Department of Education's leadership role in facilitating development of career education within local educational agencies has been reinforced through the receipt of Federal Vocational Education Part C and Part D project grants which have subsequently been used to make sub-grants to local educational agencies. This has resulted in the establishment of a federal-state-local relationship in career education program development, allowing for maximum involvement of state and local personnel in the development and dissemination of products and materials made available as a result of project activities.

This Project "A Design for Establishment of a Career Oriented Educational Program Through a Regional Service Agency," called for the involvement of approximately 29,000 students and a relative number of

teachers, counselors, and administrators within the counties encompassing RESA Region V. Principal Project components included the following:

1. Career awareness activities in grades K-6.
2. Career orientation activities in grades 7-8.
3. Career exploration activities in grades 9-10.
4. Career preparation options in grades 11-14, utilizing existing regular and special programs of vocational education, new programs which will become available in new area vocational schools, postsecondary programs available through the community college and schools serving the area.
5. Intensive occupational guidance and placement services designed to place existing students in either a job, a postsecondary occupational program, or a baccalaureate program.

In order to assure that the project achieved the momentum essential to successful development, it was deemed essential that an effective evaluation be performed to provide appropriate feedback to personnel at local, state, and federal levels involved in various roles in regard to project support and implementation.

The U. S. Office of Education required an independent third-party evaluation for the grant award. Therefore, in response to the RFP issued by Region V, Regional Education Service Agency, the Office of Educational Research and Field Services, College of Human Resources and Education, West Virginia University, designed a comprehensive evaluation of the RESA V program.

Goals and Objectives of the RESA V Program

Preliminary to presenting the evaluation design, it is important to summarize the stated goals, objectives, and major operational phases of the RESA V Career Education program.

Project goals and objectives are of two types - those which are product oriented and those which are process oriented.

Product Goals and Objectives

Goals and objectives for career education programs in West Virginia are provided in "A Guide for the Development of Career Education" as developed in two workshops sponsored by the State Deaprtment of Education. As the result of these workshops, for the purpose of developing a guide and lending direction to local schools in designing comprehensive career education programs, a total of nine goals and supporting objectives were so identified:

GOAL 1

Producing individuals able to understand and relate themselves both cognitively and affectively to their work.

OBJECTIVES

1. To develop individuals who have knowledge of themselves i.e., abilities, skills, and limitations; and can relate their knowledge to work and their career or a future career/s.

2. To develop individuals who have an awareness of the value of work in a psychological sense as it relates to their needs.

3. To develop individuals who have an awareness and acceptance of self as an entity both physical and psychological that is unique and of value to himself and society.

4. To develop individuals who derive personal satisfaction from their work.

GOAL 2

Producing individuals motivated toward constructive work.

OBJECTIVES

1. To develop individuals who value constructive work.

2. To develop individuals who actively pursue a constructive work role.

GOAL 3

Producing individuals who have had exposure to the world of work vicariously, simulated and/or real, to the extent that they have some comprehension of the diversity and complexity of work alternatives both available and appropriate to them.

OBJECTIVES

1. To develop individuals who have a broad base of awareness of work roles that exist.

2. To develop individuals who have had an orientation -- vicarious, simulated and/or real, to several work role groupings which were selected by them.

3. To develop individuals who have explored in as real a manner as possible several work roles that they have decided might be particularly appropriate to them.

GOAL 4

Producing individuals able to function in the performance of decision-making and work adjustment processes.

OBJECTIVES

1. To develop individuals who have the needed decision-making skills that will enable them to decide wisely among alternatives as they move through work roles and developmental states of a career.

2. To develop individuals with the necessary flexibility both mentally and physically to make adjustments within a work role or change of work role.

GOAL 5

Producing individuals who have the background necessary to enter their chosen career and to progress within the career or to change the direction of their career if necessary or desirable.

OBJECTIVES

1. To develop individuals who have the skills, attitudes, and work habits necessary to select, prepare for, enter, and maintain a work role.

2. To develop individuals who have the motivation, knowledge and means of progressing within their work role in accordance with their abilities and aspirations.

3. To develop individuals who at such time as it might be necessary or desirable will be flexible to the extent that they can make major or minor changes in work role pattern (career).

4. To develop individuals who have and can apply knowledge of how and where they can receive assistance or training needed or desired for a change in work roles (career).

GOAL 6

Producing individuals able to find and participate in meaningful work.

OBJECTIVES

1. To develop individuals who have an awareness of labor and market demands both current and projected.

2. To develop individuals who can locate and accept meaningful work roles.

3. To develop individuals who participate in meaningful work roles.

GOAL 7

Producing individuals who see education as a continuing life process that is relevant to their life needs.

OBJECTIVES

1. To develop individuals who are aware that education is available to them throughout their lives.

2. To develop individuals who accept continuing education as something relevant to them.

3. To develop individuals who affirm their acceptance of continuing education through their participation in it.

GOAL 8

Producing individuals who contribute to and are rewarded by society.

OBJECTIVES

1. To develop individuals who through their work role are accepted as contributing to society.
2. To develop individuals whose worth as a worker is affirmed through some valued reward.
3. To develop individuals who can manage the economics of their career.

GOAL 9

Producing individuals who have had an exposure to the world [sic] education to the extent that they have some comprehension of the diversity and complexity of educational alternatives both available and appropriate to them.

OBJECTIVES

1. To develop individuals who have a broad awareness of the educational opportunities available.
2. To develop individuals who possess sufficient self knowledge to insure that educational alternatives selected are appropriate as related to his abilities.
3. To develop individuals who possess sufficient occupational knowledge to insure that educational alternatives selected are appropriate to the career pursued.

Process Goals and Objectives

Process goals are specified in order to provide continuity and consistency to project implementation efforts. Goals and objectives are identified by project component.

Project Administration

GOAL 1

Design and provide a system for career education program management to maximize the use of human, material and fiscal resources in the region that will include accountability, transportability and evaluation subsystems.

OBJECTIVES

1. To provide leadership in the planning and organizing of career education programs in the region which are reflective of project requirements and the needs of participants, schools, homes, and communities.

2. To coordinate, direct, and control career education programs and activities to assure attainment of project component objectives and meet project accountability and requirements.

Career Awareness (Grades 1-6)

GOAL 2

To provide an instructional system designed to present occupational information to children in Grades 1-6.

OBJECTIVES

1. To provide students with occupational information to make them aware of the meaning of work and its importance to them and society.

2. To provide experiences in which the world of work is presented in a manner that is realistic and appropriate to the student's state of development.

3. To inform students about the multitude of occupational opportunities.

4. To present to students a realistic view of the world of work and encourage them to consider their own abilities and limitations.

5. To provide students with basic information about major occupational fields.

6. To stress the dignity in work and the fact that every worker performs a useful function.

7. To visit local businesses and industries to get a first-hand view of the "world of work."

Career Orientation (Grades 7-8)

GOAL 3

To establish in grades 7-8 a curriculum which will assist the student to acquire such knowledge of the characteristics and functions, the duties and rewards of the occupational families within which his choice will probably lie.

OBJECTIVES

1. To give students an understanding of the knowledge and skills basic to the broad spectrum of the occupational families.

2. To provide the students with a guide to educational and occupational requirements of different jobs. (Occupational families).

3. To assist the student in acquiring a technique of analysis of occupational information and to analyze such information before making a tentative choice.

4. To stress habits and attitudes which are needed for successful and continued employment.

5. To provide students with experiences designed to develop an awareness and self-realization that leads to the selection of the appropriate career with realistic aspiration levels.

Career Exploration (Grades 9-10)

GOAL 4

To provide students in grades 9-10 experiences that will enable them to make realistic occupational choices, experiences in working with others, and understanding of the psychological aspects of work as it relates to their own temperaments, personalities, and values.

OBJECTIVES

1. To inform students about occupational and educational opportunities at all levels.

2. To provide students not finishing high school with information related to the opportunity to enter an occupational training program and/or employment.

3. To provide students with knowledge in broad fields of work which will assist the individual in making long-range vocational plans.

4. To provide "hands on" experience in various occupational fields offered at area vocational-technical education centers serving the counties involved in the project.

5. To make the student aware of the continuous changes occurring in the world of work which necessitates continuing education or training in the various career areas.

6. To provide the student with information concerning other educational opportunities. (Community College, college, university, and other post-secondary career preparation programs).

Career Preparation (Grades 11-14)

GOAL 5

To expand present vocational program offerings to include (a) additional program offerings and work experience programs to assist in removing the artificial barriers between education and work, and (b) work-study programs designed to assist those in need of earnings from such programs to commence or continue their enrollment in vocational education programs.

OBJECTIVES

1. To provide students with the background necessary to further their career preparation in post-secondary occupational programs and/or baccalaureate degree programs.

2. To provide students with skills, attitudes, and work habits needed for employment in a cluster of closely related occupations.

3. To increase student participation in programs due to broadened curriculum offerings made available through additional vocational education and work experience programs.

4. To provide economic assistance to those students in need of such assistance in order to remain in school and to continue their enrollment in vocational education programs.

5. To provide opportunities for learning by doing in actual work situations.

6. To provide intensified guidance and counseling services to meet the needs of students.

7. To provide placement services for exiting students who desire to avail themselves of such services. The design of such services are [sic] to place students in either a job, a post-secondary occupational program or a post-secondary baccalaureate program.*

Program Administration

The Career Education has been administered by a Project Director who reports directly to the RESA V Executive Director. As a skilled professional with considerable experience in project management and coordination, the Career Education Director was expected to establish communication linkages between the RESA Program and the seven initial participating counties. More specifically, his areas of responsibility included the following:

Position: Project Director

Qualifications:

The individual selected for this position must be qualified on the basis of education and experience, both in the area of project administration activities and in the design of a career oriented

*The process/product goals and objectives are in Proposal for Exemplary Project in Vocational Education: A Design for Establishment of a Career Oriented Educational Program Through a Regional Education Service Agency. Submitted to the U.S. Commissioner of Education, December 15, 1972, pp. 18-24. Hereinafter referred to as Grant Proposal.

educational program such as is described in this proposal. The director will function under the RESA executive director and must have demonstrated competence in the area of project management to include coordination with other ongoing RESA projects, knowledge of manpower agencies in the area and ability to establish communication and coordinating linkages between the RESA program and counties being serviced by the project. Masters Degree required.

Project Duties:

(1) To be responsible to the Executive Director of the Regional Education Service Agency and RESA Board of Directors in conduct of the project.

(2) To make policy recommendations to the Board in regard to the project.

(3) To be responsible for preparation of all quarterly technical activity reports and final reports required in the project.

(4) To work with fiscal personnel in the Wood County Board of Education office to maintain appropriate fiscal records and make fiscal reports required in the project.

(5) To supervise project staff operating out of the regional office.

(6) To provide for fiscal accountability by component for cost transportability purposes.

(7) To provide centralized planning and coordination of project activities and program to achieve maximum use of human material.

(8) To supervise the decentralized execution of project activities through field coordinators who serve under operational control of counties.

(9) To provide overall project management in relation to the planning and implementation of program activities on a regional basis.

(10) To coordinate program efforts with those of similar projects.

Position: Field Coordinators

In order to implement the program systematically at the local level, the Project Director was assisted by three Field Coordinators whose prime mission was to serve as sub-project managers within their counties of assignment. One Coordinator served the counties of Tyler, Pleasants, and Ritchie; a second served the counties of Wood and Wirt; and a third the counties of Jackson and Roane. Weekly reporting sessions between the Director and Field Coordinators were designed to promote effective monitoring and direction of the program. A liaison in each county central office was appointed to assist the Coordinators in local implementation. The specific qualifications and duties of the Field Coordinators are enumerated below.

Qualifications:

Masters Degree with public school teaching experience. Qualified in Guidance, Curriculum and Supervision, Vocational Education or appropriate combinations of the above. Ability to function as an agent of the RESA office in working between the project director and counties served, to implement project activities.

Project Duties:

(1) To serve as a consultant to county personnel and teachers in integrating occupational information into existing subject matter areas, such as social studies.

(2) To obtain and present existing materials (films, slides, tapes, etc) to staff and teachers involved in the project.

(3) To aid in establishing and maintaining a career information and materials center.

(4) To conduct workshops for the purpose of identifying and making available curricular materials that may be utilized and the methods and teaching techniques to be used in implementing the project.

(5) Coordinate efforts of teachers and other personnel involved in the project in relation to the development of curriculum materials.

(6) To assist in scheduling, maintaining, and distributing materials to be used by teachers in classroom instruction.

(7) To serve as a consultant to teachers in integrating occupational information into existing subject matter areas.

(8) To assist with project evaluation and the preparation of technical progress and final reports.

Position: Secretary

Qualifications:

High school graduate with at least two years of paid employment in secretarial or stenographic work or successfully completed training in an accredited college, university, or business school. Typing speed of at least 50 words a minute and dictation rate of 80-100 words a minute.

Project Duties:

To take dictation, answer phone, and perform other necessary duties of a secretarial or clerical nature as assigned by the director.

In addition to a Director and three Coordinators, the project was organized to include a local project task force in each county, composed of administrators, teachers, parents, students, and representatives of business, industry, and labor. The purpose of the task forces was to provide advice and assistance in developing local strategies for community support, and development of the enterprise.

A line and staff chart of the administrative structure is presented below, depicting major organizational relationships.

ADMINISTRATIVE STRUCTURE

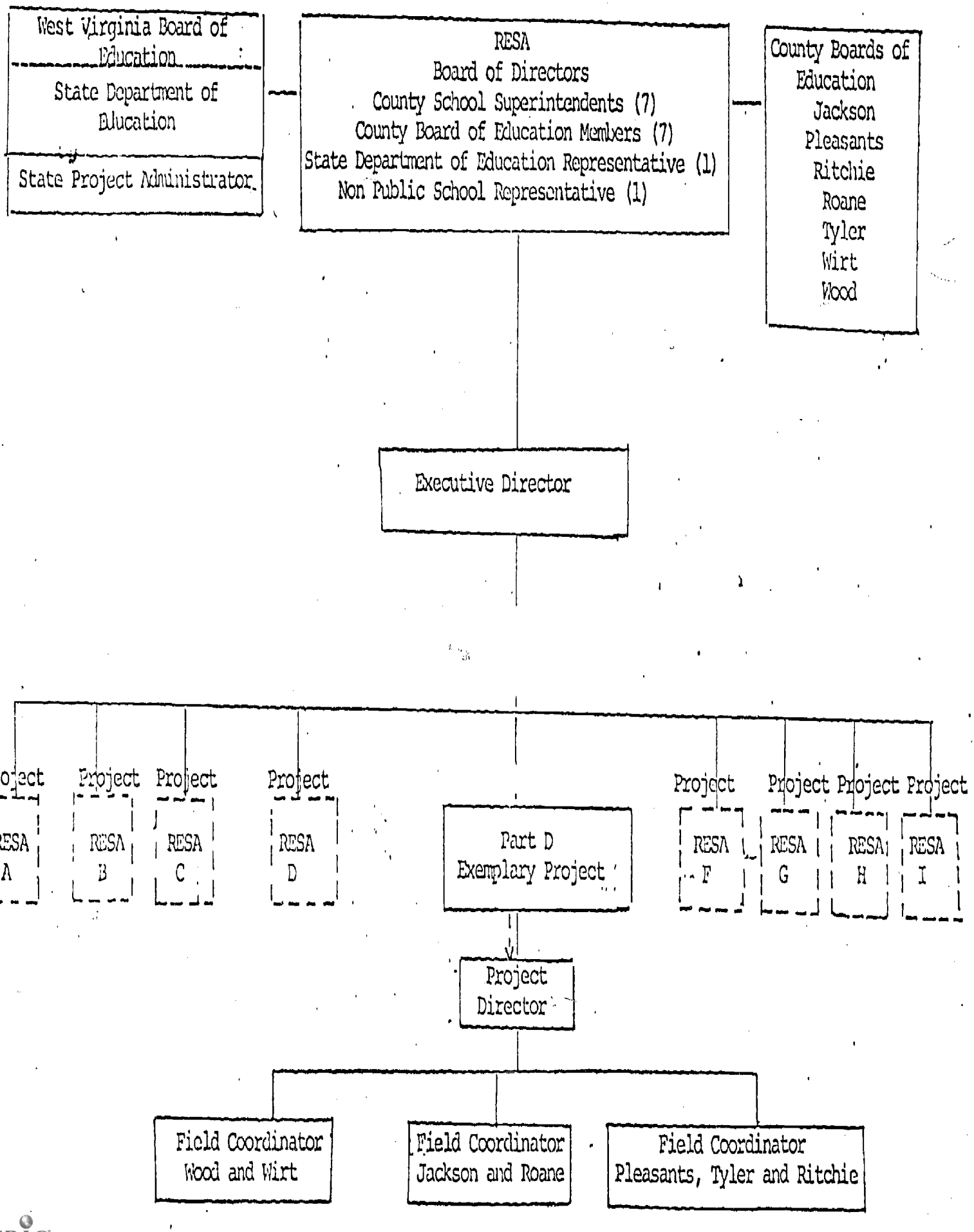


Figure 1

Project Implementation

Since a major section of this evaluation (see Chapter III) is concerned with the procedural developments of the program, it is not necessary at this juncture to present an elaborate nistorical description of its implementation. The process evaluation which follows later in this report addresses the central elements of the program's origin, programmatic assumptions, phases of development and implementation, major activities, participation and training of personnel, and preparation and dissemination of materials.

The main purpose, then, of this particular section is to highlight the functional components of the program.

Involvement of Teachers and Administrators

The Career Education program identified the classroom teacher as an indispensable element for the successful development of the program. Successful integration of career education into the established school curriculum required a systematic orientation program of in-service training for preparing teachers in selecting appropriate materials, developing innovative curriculum integration strategies, and devising work schedules for project initiation. Thus, a considerable proportion of the first year of the project was devoted to presenting workshops for participating teachers in the region. Similar workshops were also held for local school administrators, counselors, and other staff to insure that the proper structural support was present in each county and each school.

> In summary, specific attention will be directed toward designing career oriented educational programs to provide for educational and occupational competency.

> Curriculum modifications, resulting from the introduction of such concepts, will be accomplished by integration into the ongoing curriculum. Activities will focus upon the relevance of present curricula to contemporary society and the need for creating, in all students, positive attitudes toward work and the role of work in relation to meeting human social and economic needs. Emphasis will be placed on reviewing materials and techniques which have proven successful in the implementation of similar projects accompanied by a massive in-service professional development program.*

Involvement of the Community

An equally important component in the overall implementation of project was the local task force (whose purpose is described above). The contributory effects of dynamic involvement by parents and community representatives was not underestimated by the project director and his staff. The task force would promote the legitimacy of the program and assist in the placement of students in local career settings, such as in business and industries, for work experiences.

Career Educational Developmental Phases in the Schools

Consistent with current pedagogical concern for identifying competencies for all educational programs, the RESA V career education program established four discrete developmental phases for grades 1-12.

Phase One: Career Awareness (Grades 1-6). In the first grade, the student is introduced to the world of work "by investigating and interpreting the working life of members of his immediate family and those of others in the immediate neighborhood." The second grade is introduced to a variety of work patterns in his community, beyond those present in his immediate family or school.

*Grant Proposal, p. 33.

The principal method for instilling career concept development in grades 3-6 is the "activities learning approach" which is intended to expand a student's occupational horizons from the immediate to the larger community environment. More specifically, the fifth and sixth graders are provided with experiences which develop "positive attitudes toward work, identify and choose tentative goals for themselves, and select and study occupational areas in which they are interested."*

Phase Two: Career Orientation (Grades 7-8). This approach seeks to give students a general understanding of specific job clusters within the occupational spectrum. Opportunities for self appraisal and individual potential are arranged as part of this orientation phase which encourages each student to analyze occupational information, become acquainted with the diverse requirements of many jobs, and form positive attitudes about work.

Phase Three: Career Exploration (Grades 9-10). For these students, the program provides exploratory opportunities and exposure to actual work situations or "hands-on" experiences relevant to specific occupational clusters. Classroom simulations are also included, featuring career games, problem solving exercises, and group guidance activities.

Phase Four: Career Preparation (Grades 11-14). Three types of educational modules are included in this phase: (1) An institutional-based curriculum to prepare students for initial job entry and/or further education in a post-secondary occupational institution; (2) A community-based curriculum providing on-the-job training for students in business and industry (co-existent with related studies in the high school); and

*Grant Proposal, p. 35.

(3) A college-oriented curriculum for students who will enter baccalaureate programs. The three curricula are flexibly arranged so that a student may select aspects from each which meet his career goals and personal needs.

Guidance and Counseling (Grades 9-12). Buttressing the educational activities in Phases Three and Four is the provision for support services which include occupational services and materials, job placement, career orientation, and other guidance activities.

A Comprehensive Approach. The goal of this developmental career education model is to promote positive work attitudes in students so that they may subsequently find satisfaction and success in a selected career. As a comprehensive school-based model, the RESA V approach represents a sequentially developed program of career awareness, orientation, exploration, and job preparation for all students. A major expectation of the program is that students' performance in basic subjects should improve as the curriculum is made relevant and more meaningful by being focused around career education.

The Importance of Evaluation

At this point in the development of career education, there is a paucity of evaluation studies. The few assessments that have been made report very partial and unsubstantiated conclusions. Generally, these assessments fix on one outcome, predominantly, student achievement in the elementary grades, and imply that learner gains can be attributed directly to a career education program. The major fallacy operative in these studies is that significantly higher student scores in mathematics and reading can be distinctly related to just one variable, that is, caused

by the instance of career curricula in a school or district. Certainly causation in this respect must be assumed to be manifold and extremely complex. Significant gains on standardized tests have been shown to be related to a host of variables, including the socio-economic status of students, the effectiveness of teacher instruction, and classroom climate, not to mention the more complicated aspects of intelligence differentiations among students and prior academic preparation. In sum, these evaluations evidence dubious reasoning and hasty generalizations.

Moreover, the evaluation studies which have received the widest attention in the literature have neglected the important process dimension of program implementation. Very little attention has been given to measuring the attainment of goals and objectives of a program.

As outlined by Hoyt, Lincoln County, West Virginia, the Santa Barbara, California, the Dade County, Florida, and the Prince George's County, Maryland Studies. In each of these evaluations, the sample size is small (the evaluators base the sample on the number of students, which itself is not high, instead on the number of classes selected). For example, the Dade County assessment reports high mean gains for grades 4, 5, 6 for one inner city elementary schools as measured against the scores for other schools in the district (1973-74).*

The Office of Educational Research empathizes with the difficult plight of initial evaluators faced with assessing protean programs whose form and structure are embryonic. We are likewise aware that some evaluators are influenced by the disposition of many policy makers and career education

---

*Hoyt, pp. 391-392.

administrators who are anxious to demonstrate that career education has a direct effect on improving basic academic skills. Also, each evaluator ought to be able to learn from his predecessors. With this in mind, ERFS intends to perform an evaluation which analyzes the process and product dimensions of the program, making use of a careful design, complete with appropriate career education instruments and a detailed analysis of program goals and objectives.

This evaluation does not presume to put to rest all questions about the effectiveness of career education movement, but it does aspire to establish fundamental conclusions about one representative project at one point of time.

CHAPTER II

EVALUATION FORMAT

Evaluation Design: Summative/Formative, Process/Product

The salient purpose of the evaluation was to assess the project's success in attaining the stated goals and objectives as outlined in the RESA V project design. More specifically, the Process component of the evaluation focused on measuring and reporting the effectiveness of the various facets of the project operation, including organization and supervision, materials, in-service education program provided and educational approaches used. The Product component of the evaluation focused on measuring and reporting expected changes in behavior on the part of the administrators, teachers, and students, including their knowledge and attitudes toward the project and project activities.

More specifically, the evaluators considered, as data were available, the following format:

Summative Evaluation of
Career Education Processes

A. Planning and Administration:

1. What was done in planning and general coordination? Who was involved?

2. Was planning based on needs assessment?

3. Were coordination and instructional efforts revised when the need was indicated?

B. Instructional Support Services:

1. How many and what kind of instructional materials and curriculum units were:
   a. developed?
   b. revised or adapted?
   c. total made available including purchase and rental?

2. Who were instructional materials disseminated to?

3. How were community resources involved in instruction? What kind of involvement? How many people?

4. Was career guidance and counseling improved?
   a. How many counselors were added?
   b. Were counselors involved more in classroom and group guidance?
   c. Did counselors increase emphasis on career information and career guidance?

5. How many students were involved in job and educational placement activities? How provided?

C. Preparation of School and Community Personnel:

1. Who was involved in in-service career education activities? How many? How much time? What was done? (Both informal workshops and college courses).

2. How much and what kind of public relations and publicity activities were conducted?

3. How did in-service activities affect college degree programs of participants?

D. Instruction:

1. How many teachers provided career education instruction? (%) How much? What kind?
   a. field trips to work sites
   b. workers in class
   c. exploratory work experience
   d. audio-visuals
   e. class projects
   f. teacher-class discussion/presentation
   g. printed materials (reading)
   h. worksheets, tests, inventories
   i. curriculum units

2. Was there a residual effect? Did first year in-service career education teachers continue to conduct career education activities?

3. Were non-participating teachers affected? Did they conduct career education activities as a result of what participating teachers were doing?

4. Did administrators participate in in-service activities? How did that affect instruction in their schools?

5. What do students report as the kind and amount of career education activity they participated in?

6. How was career education implemented?
   a. integrated with other subject matter
   b. separate units of instruction in a class
   c. separate courses

7. Was vocational education expanded and broadened at grades 11-14?
   a. increase in number of students in existing programs
   b. increase in new types of programs

E. Transportability:

1. Are developed curriculum units suitable for use in many other schools? Have they been requested?

2. Is the administrative model for implementation transportable? What needs to be considered in adapting the model for use in another region or state?

Summative Evaluation of Career Education Product (Students)

A. All students: (Increased depth with age level)

1. More familiar with variety of work roles

2. More knowledgeable about why people work

3. More positive attitude about the value and dignity of work

4. Improved career decision-making skills
   a. consideration of information about self (attitudes, desires, interests, abilities)
   b. consideration of difference in work roles (work settings, job requirements, etc.)
   c. consideration of availability of jobs and educational programs (occupational outlook, finances, personal preferences)
   d. consideration of influence of significant others

B. Seventh Grade and Above

1. Knowledge of specific occupational requirements
2. Knowledge of educational requirements in occupational areas
3. Knowledge of life styles and work settings associated with occupational fields
4. Knowledge about sources of occupational and educational information and programs
5. Ability to analyze, synthesize, and evaluate career information and make career decisions
6. Planning orientation
7. Positive attitude about self as a potential worker
8. Positive attitude about need for continuing education

B. Tenth Grade and Above

1. Knowledge about how to find a job (application, interview, etc.)
2. Knowledge about how to keep and advance in a job or retrain for another job
3. Development of specific job performance skills

The evaluators provided the project staff with a prescribed set of basic or minimal evaluation procedures to be utilized in the assessment. These minimal procedures relate to Stufflebeam's CIPP model.

Minimal Evaluation

1. Context
2. Summary of Inputs and Processes
   a. existing records
   b. information from teachers
   c. survey of participating students
3. Product Outcomes (effectiveness and value of program)
   a. opinionaire from:
      participating teachers

non-participating teachers
students
parents
employers
community personnel

b. attendance reports
c. achievement test scores in math and reading
d. special test scores
   Preferred tests
      CEQ - 3rd, 6th, and 9th grades
      CDI - 9th and 12th grades
   Alternate tests
      SOS - 3rd and 6th grades
      CMI - 12th grades

4. Sampling plan of students
   a. Select all teachers in the Region who meet three (3) of the four (4) following criteria:
      1. frequent contact with field coordinators (at least once per month)
      2. participation in school, county, or regional in-service meetings or credit for Marshall University courses offered in conjunction with this project.
      3. Incorporation of career education resource materials into classroom teaching experience.
      4. Received administration (superintendent/principal) support.
   b. randomly select 4 teachers (high involvement and participation) from each of 3rd, 6th, 9th, and 12th grade levels with the above qualification.
   c. randomly select 4 teachers (low involvement and participation) who do not meet the specifications within each of the same grade levels as above.
   d. select corresponding numbers of teachers from outside the region not involved in career education.
   e. administer specified tests to students of selected teachers.

Evaluation Phases

The initial phase of the evaluation consisted of (1) the identification of specific Process and Product goal and objectives, (2) the identification and location of data sources related to each goal and objective, (3) the identification and design of appropriate methods and means for data collection, and (4) the placing of specific goal or objective related data collection within the total time frame of the evaluation.

Initial Phase: Planning and Development
January 5, 1976 - January 31, 1976

During this initial phase, the staff (5) of the Office of Educational Research and Field Services (ERFS) in cooperation with appointed official(s) of the RESA V project staff and appointed official(s) of the West Virginia State Department of Education, Division of Administration and Planning, Bureau of Vocational, Technical, and Adult Education formed a Task Force operation staff to review:

(1) Project stated goals and objectives,

(2) appropriateness and measurability of these goals and objectives,

(3) existing relevant data/information compiled during the first two years of operation, and

(4) methods, procedures, and sources of collecting needed data/information to perform comprehensive assessment of total project from inception to completion.

Those participating in this Task Force meeting were: Dr. Joseph Freund, a representative of the State Department; Dr. Roy Thomas, a representative of Marshall University; Mr. Ray Miller, project director; Mr. Charles Keefer, field coordinator; the Director of ERFS, Dr. Floyd L. Stead; and ERFS Research Associate, Mr. Mark Souther.

Phase II: Data Collection
February 1, 1976 - February 29, 1976

The early part of this phase included finalization, approval, purchase and/or duplication of instruments. The staff of ERFS then made on-site visits to each of the seven counties for the purpose of reviewing the means and methods of implementation (examination of process objectives of the career education project in each county).

At the same time, ERFS solicited appropriate data from students, teachers, administrators, and other personnel involved in the project.

Phase III: Processing, Analysis, and Synthesis
March 1, 1976 - June 30, 1976

During this phase, ERFS computerized, analyzed, and synthesized all pertinent data in preparation for writing the final report. This phase included preparation of appropriate figures and tables for inclusion in the final report.

Phase IV: Preparation of Final Report
July 1, 1976 - August 31, 1976

This phase included the final writing period. ERFS wrote, edited, reviewed and, as necessary, revised the final report before publication.

Research Methods

In order to obtain significant information regarding the project's progress towards the attainment of stated objectives and its overall accomplishments in integrating career education into a regional educational system, the evaluators (in conjunction with other evaluation Task Force members) identified four main sources of data: central educational decision-makers, primarily superintendents and their staff in each county; selected principals of regional schools; selected teachers in grades 3, 6, 9, and 12 within the region; and selected students in those same grades. Also ERFS analyzed relevant historical documentation via quarterly reports,

first/second year evaluation reports, and other pertinent central records (i.e., budgets, logs, etc.)

Moreover, the original design sought to include information relating to attendance records of school children, state and county achievement tests scores in mathematics and reading of participating and non-participating students, and responses from selected parents and representatives of local businesses and industries. Unfortunately, the records of attendance could not be obtained as prescribed within the evaluation design (see high/low group sample below) and achievement scores could not be made available to the evaluators because of potential legal problems associated with the use of such confidential materials without parent and student approval. Also, after careful re-consideration by both the project staff and ERFS, it was determined that responses from parents and community representatives could not feasibly be solicited, given the other evaluation priorities. Particularly critical was the task of testing a sufficiently large number of students in a relatively short period of time in order to generate an appropriate sample for statistical significance attempts. Furthermore, attempts to obtain a sample of non-participating students as a control (comparison) group proved extremely difficult. First of all, it was not possible to sustain the assumption that there were non-participating students in the region, because in itself the project design encompassed all students in all schools in every county in Region V. Searches outside Region V met with similar difficulties in so far as, within the state, none of the remaining seven regions could be described as lacking career education projects. After considerable efforts to this end, the contracting parties authorized the evaluators to re-assess

their focus and restrict their statistical design to comparisons between degrees of student and teacher participation by means of carefully identified high participating groups of teachers and students and low participating groups of teachers and students.

Sample Selection

It was determined that the single most important procedural element in the successful implementation of a career education demonstration project was the cooperation and active involvement of teachers. Concomitantly, the single most important product element is the performance of students. Testimony to these conclusions can be cited in every major study of career education (see Chapter I). Moreover, they were emphatically proclaimed by the RESA V project staff. Thus, ERFS first sought to identify teachers within the region who were most directly involved in integrating career education. It was assumed then that the effects of such a program could be best assessed through an evaluation of these teachers' practices, in the process dimension, but more importantly through an evaluation of their students' cognitive and affective performance on relevant career education instruments.

To identify high participating and low participating teachers, four criteria were established:

1. At least once per month contact with field coordinators.
2. Participation in school, county, or regional in-service meetings; or credit for Marshall University courses offered in conjunction with this project.
3. Incorporation of career education resource materials into classroom teaching experiences.
4. Evidence of support for the teacher from the administration (superintendent, principal, et al).

A high participating teacher was defined as one who met three of the four stated criteria. The field coordinators were asked to generate a list indicating the status of every teacher in the region on the basis of these criteria, i.e. high or low teacher. After all teachers had been assigned to one group or the other, the evaluators re-assessed the composition of the groups by means of administering a Teacher Practices Survey to each teacher. It was hypothesized that the high participating group should rate himself higher in such practices than would a low participating teacher. Convinced that an accurate and valid teacher classification had been made for grades 3, 6, 9, and 12, the evaluators then sought to select a random sample of students. The procedures for selecting a random sample of students were consistent with the following evaluation standards:

1. A sufficient N of students for each of the high and low groups for each of the four grade levels was determined to be at least 100.

2. All seven counties in the region should have equal opportunity for representation.

3. All schools in each county (with one or more of the grade levels) should have equal opportunity for representation.

4. A teacher's effectiveness should be measurable in terms of his students' performance on certain cognitive and affective instruments.

5. At the elementary level (grades 3 and 6), it is possible to trace a teacher's influence directly on his students performance because the randomly selected teachers in the 3rd and 6th grade groups were found to be totally in a self-contained classroom situation.

6. At the junior high and high school levels (grades 9 and 12), it is not possible to isolate one teacher's influence on student performance. Obviously, a 9th or 12th grader is exposed to a departmental situation in which the student is taught specific subjects by different teachers and may have as many as six or seven different instructors during a single school day.

7. Thus, it is not feasible to choose a random sample of 9th and 12th grade students in the same manner as one would select elementary students. In order to accomodate the multiple teacher influence phenomenon, a sufficiently large sample of 9th and 12th graders must be tested in order to obtain a sample size of 100 students representative of high and low participating group. Working inductively, one would select a certain percentage of all students in the region and on the basis of factual information supplied by the randomly selected students on a demographic cover sheet, high and low groups of students per grade could be identified on the basis of the total number of high participating teachers whom they were exposed to over a designated period of time.

8. In order to provide equal opportunity for all 9th and 12th graders, to be represented, it is necessary to select student groups on the basis of class assignment. Since all students in these grades are required to take English, test scheduling of students should, whenever possible, attempt to include these 9th and 12th grade English classes. Also, in the way of a limitation of this study, certain accommodations to internal school schedules must be considered, necessitating a flexible test schedule subject to local approval and facilitation by each building principal.

Regional Sample: 3rd and 6th Grades

Upon identification of the high participating teacher groups at these grade levels, the names of teachers were submitted to a computer program asking for a random sample of four high participating and four low participating teachers with two alternates for each group. The assumption was that a teacher would have approximately 25 students in a self-contained environment, providing the needed 100 student population per group per grade level. In other words, there would be generated a total N of 400 students representing 100 high participating 3rd graders, 100 low participating 3rd graders, 100 high participating 6th graders, and 100 low participating 6th graders. In the event that a conflict in scheduling or an unsatisfactory number of students occurred, the alternate teachers would be used.

3rd Grade Sample. The high group was composed of classes from the following schools: Kenna Elementary, Jackson County; Creed Collins Elementary, Ritchie County; Belmont Elementary, Pleasants County; and Arthur Boreman Elementary, Tyler County. The low group was composed of the following schools: Mineral Wells Elementary, Waverly Elementary, and Williamstown Elementary, Wood County; and Fairplains Elementary, Jackson County.

6th Grade Sample. The high group consisted of the following schools: Murphytown and Rayon Elementary schools, Wood County; Harrisville Elementary, Ritchie County; and the Belmont Middle School, Pleasants County. The low group was composed of classes from the following schools: Gihon and Park Elementary Schools, Wood County; Gilmore Elementary, Jackson County; and Paden City Elementary, Tyler County.

9th Grade Sample. With all schools represented in the sample, the following procedures were used. Proportional to the total number of 9th graders in the region, a specific percentage of students was picked for each school. In many sampling problems there is more than one type or size of sampling unit into which the population can be divided. In a survey of this nature, (i.e.) 9th grade school children in a region, one might regard the child as the sampling unit and select a sample of children from the combined school registers for that region. It would be administratively simpler, however, to take the school as the sampling unit, drawing a sample of schools and examining every 9th grade child in the selected schools.

Another approach -- the only one deemed feasible for this evaluation -- was to use a modified cluster sampling in which every school which contained

a 9th grade class was represented and to then select a portion of the 9th graders in every school on the basis of the size of the school. This would yield a representative and proportional N of 9th graders in every school, without favoring any particular school because of its smallness or largeness. This approach, in which the sampling unit consists of some natural group (the school) formed from the smaller units (the students), was the most practical technique for the evaluators to use. Faced with a choice between different sampling units, the evaluation Task Force attempted to select the approach (cluster sampling) which would yield the greatest precision for the available resources.*

In Region V, there were 18 schools which had 9th grade students. Naturally, the 9th graders inhabited both junior high schools and senior high schools. Depending upon the size of the 9th grade, the total number of classes tested ranged from a prerequisite minimum of one class (each school requiring representation) at one school to a maximum of three 9th grade classes at another school. For every one-hundred 9th grade student in a school, one class was tested. Thus if three classes were tested in a school, that school contained approximately 300 students in the 9th grade.

Schools and 9th Grade Classes Tested.

School	County	# Classes Tested	N Students
Blennerhassett Jr. High	Wood	2	59

*George W. Snedecor and William G. Cochran, Statistical Methods, (Ames, Iowa: The Iowa State University Press, 1972) pp. 504-539.

Edison Jr. High	Wood	2	49
Franklin Jr. High	Wood	2	38
Hamilton Jr. High	Wood	3	84
Jackson Jr. High	Wood	2	45
Van Devender Jr. High	Wood	2	54
Washington Jr. High	Wood	2	43
Harrisville H.S.	Ritchie	2	54
Pennsboro H.S.	Ritchie	1	20
Ravenswood H.S.	Jackson	2	23
Ripley H.S.	Jackson	3	81
Sistersville H.S.	Tyler	1	23
Tyler H.S.	Tyler	1	23
Spencer H.S.	Roane	2	44
Walton H.S.	Roane	1	17
St. Mary's H.S.	Pleasants	2	39
Williamstown H.S.	Wood	1	25
Wirt County H.S.	Wirt	1	32
TOTAL 18 Schools		32	753

The 753 9th graders were administered the Career Development Inventory (CDI) with 474 usable returns.

12th Grade Sample. The evaluators constructed a sampling approach identical in design to the one used for 9th graders (illustrated above). The ratio of students for the 12th grade ranged between 100 and 600 in the region; with one class tested for every 100 students in a school. The breakdown of schools, classes, and students tested is as follows:

Schools and 12th Grade Classes Tested.

School	County	# Classes Tested	N Students
Parkersburg High School	Wood	6	163
Parkersburg South H.S.	Wood	4	84
Harrisville High School	Ritchie	1	24
Pennsboro High School	Ritchie	1	18
Ravenswood High School	Jackson	2	40
Ripley High School	Jackson	2	55
Sistersville High School	Tyler	1	33
Tyler High School	Tyler	1	8
Spencer High School	Roane	2	44
Walton High School	Roane	1	18
St. Mary's High School	Pleasants	1	17

Williamstown H.S.	Wood	1	28
Wirt County H.S.	Wirt	1	16
TOTAL 13 Schools		24	548

Of the 548 total 12th graders tested, there were 270 usable returns.

Sample of Principals. A random sample of 30% of all school principals in the region was carried out for the purpose of administering a detailed questionnaire and a career education survey. Of the 101 principals in the region, 31 were selected; 22 of these principals returned the instruments. The make-up of the sample is as follows:

N of Returns	County	N of Principals
3	Jackson	3
3	Pleasants	3
2	Ritchie	2
3	Roane	3
1	Tyler	1
2	Wirt	2
8	Wood	17
22		31

The major purpose of the principal questionnaire and survey was to obtain necessary attitudinal perceptions and certain administrative details about the accomplishments of the project in their particular schools.

Sample of Superintendents. All superintendents in the region (N = 7) were sent detailed questionnaires relating to their involvement and perceptions about the career education project. Three central office administrators returned the instruments, with their staff (assistant superintendents) assisting in the completion of the questionnaires. This generated a

total of 7 central office replies for 3 counties.

Sample of Teachers. Of the total of 884 3rd, 6th, 9th, and 12th grade teachers in the region, the evaluators and project staff successfully administered a four-part questionnaire/survey instrument to 406 teachers, with 203 in the high participating group and 203 in the low participating group returning a completed instrument. The make-up of those returning instruments is summarized in Table 1 . This Table presents data detailing numbers of teachers, by grade group, by county, and by high/low participating group.

TABLE 1

NUMBER AND PERCENTAGE OF HIGH AND LOW PARTICIPATING TEACHERS BY GRADE LEVEL AND COUNTY

	High Part. Teachers		Low Part. Teachers		Total No. Of Teachers
	No.	% of total H & L	No.	% of total H & L	
Grade Three Counties					
Wood	15	23	49	77	64
Pleasants	5	100	0	0	5
Tyler	4	57	3	43	7
Ritchie	6	67	3	33	9
Wirt	3	37	5	63	8
Roane	0	0	9	100	9
Jackson	11	58	8	42	19
TOTAL	44	36%	77	64%	121
Grade Six Counties					
Wood	24	35	44	65	68
Pleasants	23	100	0	0	23
Tyler	7	64	4	36	11
Ritchie	8	89	1	11	9
Wirt	4	50	4	50	8
Roane	3	25	9	75	12
Jackson	5	18	23	82	28
TOTAL	74	47%	85	53%	159
Grade Nine Counties					
Wood	56	34	109	66	165
Pleasants	21	100	0	0	21
Tyler	11	39	17	61	28
Ritchie	11	31	24	69	35
Wirt	3	50	3	50	6
Roane	4	18	18	82	22
Jackson	8	28	21	72	29
TOTAL	114	37%	192	63%	306

TABLE 1 (Continued)

NUMBER AND PERCENTAGE OF HIGH AND LOW PARTICIPATING TEACHERS BY GRADE LEVEL AND COUNTY (Cont.)

	High Part. Teachers		Low Part. Teachers		Total No. of Teachers
	No.	% of total H & L	No.	% of total H & L	
Twelfth Grade Counties					
Wood	30	21	110	79	140
Pleasants	30	91	3	9	33
Tyler	11	39	17	61	28
Ritchie	10	43	13	57	23
Wirt	5	63	3	37	8
Roane	8	36	14	64	22
Jackson	18	41	26	59	44
TOTAL	112	38%	186	62%	298
GRAND TOTAL	344	39%	540	61%	884

Instruments

The tests and questionnaire utilized in this report are classified below according to the source or group to whom they were administered. Appendix B contains sample copies of all these materials.

Students. For students in the 3rd and 6th grades, the CEQ cognitive and affective instrument was used. For those in the 9th and 12th grades, the CDI was used. The CDI contains both cognitive and affective sub-scales. Moreover, a 14 item inventory was attached to the CDI (on a Yes/No Basis) to obtain data about specific career education activities pertinent to process and product objectives. Additionally all 9th and 12th graders tested completed a demographic section detailing the number of teachers whom they had had classes to over a two-year period. This information was used later to codify high and low student groups on the basis of their total high and low teachers.

The CEQ aims directly at probing the career awareness of elementary students (grades 3 and 6 in this study). The students' exposure to career exploration and career preparation (grades 9 and 12, respectively) can be measured through the CDI.

Furthermore, the CEQ contains specific grade-level tests in both cognitive and affective domains. The tests appeared to be extremely appropriate for the developmental phases being examined. However, the 3rd grade affective did not contain norming standards, forcing the evaluators to devise such criteria relative to the groups taking the test.

On the other hand, the CDI, which after extensive deliberation between ERFS and the evaluation task force concerning its merits vis-à-vis those of the Career Maturity Inventory (CMI), was selected for use with 9th and

12th graders. It should be pointed out that all existing cognitive and affective instruments for career education are relatively new and untested. One apparent weakness of the CDI is that a student taking this test must respond to each and every item on the test if his score is to be counted. If the student omits even one answer, his score cannot be used. With over 90 items covered on the test (requiring approximately one hour for a student to complete), it is more likely than not that many students will commit infelicities in taking it, ranging from marking two or more answers to certain questions because of lack of knowledge to mere forgetfulness. This was apparent for this sample; for example, 548 seniors took the test, yielding 270 usable returns.

Opinionnaires and Questionnaires. Teachers, principals, and central administrative staffs were administered specifically-designed opinionnaires and questionnaires. For the most part, each instrument contained both attitudinal and information-seeking items which related directly to stated project goals and objectives. All instruments were approved by the project staff prior to their being administered.

Data Treatment and Statistical Design

In Chapter III the data are presented within two distinct dimensions: process and product aspects of the project. For the most part, the attitudinal instruments (questionnaire and opinionnaire surveys) are presented within the product dimension. Below is a reference chart indicating the major presentation category for all instruments.

Process

Superintendent Questionnaire and Opinion Survey
Principal Questionnaire and Opinion Survey
Teacher Questionnaire and Opinion Survey
Student Questionnaire, Opinion and Practices Survey

Product

CEQ Cognitive/Affective
CDI (3 sub-scales)
(Parts of principal, teacher, and student questionnaire/surveys)

Obviously, parts of some instruments find overlap in both the process and product areas -- and are presented without undue concern for redundancy, striving for completeness and accuracy.

The evaluators in treating all commercial tests and questionnaire/opinionnaires used descriptive and inferential statistics as appropriate. The primary inferential methods utilized are F and t-tests of significance.

CHAPTER III

Presentation of Data

The data obtained by the evaluators is reported within two major classifications: the process dimension and the product dimension of the program.

Process Dimension

Although there have been some modifications in the original process goals and objectives, taking the form most frequently of re-emphasizing certain goals at different times, the RESA V program has maintained a consistent set of purposes for implementing and developing the project. Naturally, the implementation has undergone sequential phasing with orientation of school personnel and community representatives, for example, receiving considerable emphasis during the initial development phase. Extensive efforts were then directed toward training teachers in the use and application of classroom materials during an intermediate period of the project. During a more recent phase, the project staff has concentrated on facilitating and coordinating the on-going school programs after a two-year preparation and training sequence.

It is most useful in light of the pre-existing evaluations, both internal and external, of the Career Education project to establish a focus on the most recent project year (1975-76) as a source of data for gauging its overall procedural merits, i.e., attainment of goals and objectives. Reference to

prior developments will be included, for example initial planning and organization, as pertinent to 1975-76 implementation activities. For a detailed review of previous accomplishment of stated purposes, the reader is directed to the Yearly Report on the RESA V Career Education Project (July 1, 1974 - June 30, 1975), Bureau of Vocational, Technical and Adult Education, West Virginia State Department of Education.

Process Goals and Objectives

As defined in Chapter I, five process goals were established for program implementation. Four of these goals relate directly to the four educational phases also described in Chapter I. For ease of reference, the five goals and attendant objectives are listed below in an abbreviated form.

Goal I: Project Administration: A system for maximizing resources.

For purposes of this study, this goal refers to the on-going attempts by project staff in reviewing, re-organizing, coordinating, and controlling project activities in light of the emerging needs of the region.

The maximization of resources includes the use of individuals, materials and finances to attain the general purposes of the project. As a means of measuring the degree of successful administration of the project, the evaluators have identified specific indexes which stand as barometers to the effectiveness of the project staff in coordinating and directing the program. Data and major activities for each index are presented to evidence the quantity and types of initiatives undertaken. Interpretations as to the degree of effectiveness of this goal are reserved for Chapter IV.

The general emphasis during the 75-76 FY related to: (1) the coordination and involvement of school administrators on a regional, county, and school basis; (2) the coordination and initiation of the instructional process; (3) utilization of appropriate guidance and counseling services; (4) the dissemination, preparation, adoption, and adaptation of curriculum materials with a continued assessment of needs; (5) facilitation of community resources and program publicity; (6) potential transportability of the RESA V model; and (7) coordination of regional and local task force and liaison personnel.

(1) Coordination of School Administrators. This objective concerns the efforts made by the project field coordinators in facilitating the implementation of the model through the leadership and direction of county superintendents, their staff, and principals.

The sources of data for this and successive administrative objectives are extensive interviews with the above personnel, and their responses are catalogued below each objective.

Central Level Decision-Makers. The county superintendents and their staff offered varied responses concerning their direct administrative involvement in coordinating and planning for this program. By degree, their involvement ranged from extremely high to uninvolved. The best estimate is that only a few of the seven counties exhibited direct superintendent involvement in determining the direction and scope of career education in their districts. This should not be construed to signify that the program was not operative in their locale, but it only suggests that central decisions were not apparently conspicuous in its local implementation.

By type, those superintendents or their staff delegated this responsibility in implementing the program within their districts' schools. Substantive review or analyses of the career education curriculum or attendant content was not in evidence at this administrative level. To give direction to its implementation, these involved decision-makers met regularly with the field coordinators usually for the purpose of reviewing local school adoption and involvement of teachers. Also dissemination and adoption of curriculum materials was expedited through these conferences. Moreover, some of the superintendents obtained their Boards of Education endorsement to encourage teachers to enroll in graduate career education courses offered in the region by Marshall University.

At the regional level, it is apparent that the RESA V staff worked diligently with all levels of administration at the outset of the program to promote career education in the schools. While the staff's efforts may not have been continually active through the superintendents, their concern for county coordination and leadership were conspicuously apparent.

Local Administrators. Of the 22 principals interviewed on a random sample basis for this report, 73% (or N = 16) indicated that they were involved in the planning and coordination during the life of the program. The types of involvement assumed several specific directions:

COORDINATION ACTIVITY	N of PRINCIPALS
1. Formed Teacher Steering Committee (within their school to coordinate & plan cooperative units of career education instruction)	3
2. Conducted and/or facilitated In-Services for their teachers	5
3. Invited speakers and conducted mini-assemblies	2

4. Preparation and dissemination of career education materials within their school	5
5. Provided a philosophical base for the implementation of the program in their school	1

Asked to indicate whether they believed that their leadership produced an observable positive effect in the instruction process in their schools, 7 of the principals responded affirmatively, 6 negatively, and 9 offered no response. Pressed more specifically for their opinions about their abilities to influence those teachers who did not incorporate career education in their classes, 14 of those who responded expressed some satisfaction with their efforts in this regard, and only one of the respondents indicated no success whatever.

Nineteen principals indicated that they had some contact with the field coordinators during the 75-76 school year. The frequency of this contact ranged from daily to one or two times per year. The general pattern of this contact took the form of personal and/or by telephone (N = 14).

Only 7 of the principals offered responses about the manner by which the career education resource centers were established in their schools.

Of these, the most frequent method was a decision by the principal himself with a concession to available space and accessibility of the center within the school.

Asked to indicate the many variables which influence and determine the implementation (time, scope, extent, etc.) of career education in a local school, the principals cited several variables which are summarized below.

Variable	N of Principals
1. Individual teacher	3
2. Congruency with other educational activities	4
3. Availability of materials	3
4. Scheduling of In-Services (which assist in integrating career education)	2
5. Availability of resource people	2
6. Interest of students in career exploration	2

Implementers. Of the 406 randomly sampled teachers who responded, the majority indicated that time alloted by their administrators for incorporating career education in their classrooms was appropriate and sufficient. On a 1 - 5 scale (5 representing strong disagreement with their statement of time sufficiency and 1 strong agreement), the mean response was 2.85 indicating general agreement. However, the high participating teachers generally agreed with the statement: 3rd grade high, $\bar{X}$ = 2.4; 6th grade high, $\bar{X}$ - 2.8; 9th grade high, $\bar{X}$ = 2.5; and 12th grade high, $\bar{X}$ = 2.69. The low participating group evidenced general disagreement: 3rd grade low, $\bar{X}$ = 3.6; 6th grade low, $\bar{X}$= 3.5; 9th grade low, $\bar{X}$ = 2.8; and 12th low, $\bar{X}$ = 2.9.

Financial Support and Expenditures

Under terms of the Grant, the project administration was authorized to expend funds within seven line items. These expenditures were available at the time of this writing for fiscal periods 1974 and 1975. The reader is directed to consult the RESA V, three year Comprehensive Report for FY 1976 expenditure figures, which also contains expenditures which total about $125,000.

The total annual budget for this project (as appropriated by the federal government) was $125,000. The specific expenditures per line item were as follows:

ITEM	FY 1974	% of Total Budget	FY 1975	% of Total Budget
Personnel	73,908.26	59.58	75,752.00	60.66
Employee Benefits	6,946.36	5.60	7,489.00	5.60
Travel	4,836.60	3.90	5,453.98	4.37
Supplies/ Materials	17,549.70	14.15	10,988.70	8.80
Communications	2,320.00	1.87	2,050.00	1.64
Services	7,0691.8	5.70	13,418.00	10.75
Other Costs*	11,414.82	9.20	9,718.80	7.78
Grant Total	124,045.00	100.00	124,870.48	100.00

The expenditures for personnel represent approximately 60% of the total annual expenditures and include the salaries for the project director, 3 field coordinators, and a secretary. These expenditures appear to be quite appropriate and consistent with those in most developing projects in which the costs for well-qualified, professional personnel perennially assume the majority of the total expenditures. One should also note that the base increase from FY 1974 to FY 1975 is not unusually high.

The slight base increases in employee benefits (with a fixed 5.60%) are due of course to the salary increases and require no further comment.

The travel expenditures evidence a slight increase in the second year, due perhaps to the need for more travel by project personnel in coordinating project in-services and maintaining contact with participating school and community personnel. On the average (4.13% for both years), the travel incumberances are quite plausible given the size and other topographic characteristics of the region.

One notes immediately that the expeditures for supplies and materials are signficantly higher (5.35%) in the first year (1974), a result apparently of the requirement for providing initial training materials and other information to the teachers and school personnel.

Communications expenditures are a typically flat item cost and are proportionality insignificant items in these budgets.

Outlays for services took the form of costs for various types of internal activities such as workshops and inservices. The second year amount is approximately twice that of the first year's figure and would appear to be a function of the second year's emphasis on local on-the-job programs for

teachers and other school personnel after an initial year of training and orientation. On the whole, the expenditures appear to be relatively well proportionate within the total grant outlay.

(2) Instructional Preparation, Coordination, And Delivery

The essential nature of this objective concerns the project staff's efforts in facilitating appropriate career education instruction in classrooms within the region. The procedural aspects of integrating career education are assessed by means of extensive interviews with those personnel from whose vantage point the degree of preparation, coordination, and successful delivery at various levels within the region may be measured.

Central Level Decision-Makers. Superintendents and their staffs were asked to indicate the broad efforts made to maintain the delivery of the instructional process in areas about which they would be expected to be knowledgeable. The first area concerns the scope of inservice preparation of school personnel within the seven counties. All seven superintendents indicated that inservices were provided during the 1975-76 shcool year for their teachers and principals. The types of inservices included graduate courses from Marshall University; training workshops utilizing consultants provided by RESA V; county inservices for career educations; and inservices within specific instructional disciplines. In addition to teachers and principals, county curriculum specialists, and guidance counselors, some superintendents themselves (N = 4) took part in workshops and other inservice activities related to integrating career education in the classroom.

These superintendents were also asked whether coordination and instructional efforts were revised when necessary. Five voiced an affirmative reply, and two did not respond.

Local Administrators. The 22 principals interviewed responded to seven items dealing with the extent and effects of career education teaching

in their schools. The first related item probed the specific number of teachers who participated in inservices. From the 15 responding to this question, it was reported that 201 teachers took part in workshops (an average of about 13 per school). The total numbers of teachers who could have received inservices was approximately 270. Thus 75% of the teachers in this sample were involved.

The principals further indicated that the benefits of these inservices were varied, but the most consistent response was the establishment of teacher awareness of career choices.

The principals also felt that the majority of the teachers continued to integrate career education activities in their classrooms after their first year of participation. Moreover there seemed to be a "ripple effect"; that is, as observed by seven principals, the non-participating teachers did engage in some career education activities as a consequence of their interaction with participating teachers.

Perhaps, most importantly, 16 principals reported that most of their teachers introduced career education as part of the total subject matter-- in an integrated fashion as opposed to a separate unit (which was reported as occurring on only a marginal basis).

Ten principals reported that at least 50% or more of their teachers were teaching career education in their schools.

Implementers. The 406 teachers interviewed for this study were asked to indicate their attitudes, comprehension, and general impressions about the process of career education instruction. The following items are presented according to the mean for each item for each high and low group per grade on a 5 point Likert: [1 = strongly agree; 5 = strongly disagree].

#	Item	Mean Per Group 3rd High	3rd Low	6th High	6th Low	9th High	9th Low	12th High	12th Low	Total
29	Field coordinators helped to identify community resources for instructional purposes	1.96	3.21	2.31	3.41	2.14	2.60	2.19	2.57	2.50
#	Item Summary									
1	Understood purposes of career education at the outset	2.12	3.16	2.53	2.86	2.04	2.58	1.84	2.52	2.40
25	Other teachers in school have a favorable attitude toward career education	1.96	2.65	2.44	2.77	2.34	2.56	2.55	2.55	2.50
26	Career education is important for student self-appraisal	1.45	1.71	1.68	1.85	1.54	1.71	1.63	1.66	1.65
27	Career education is relevant to student grade level	2.16	2.58	2.31	2.62	1.88	2.09	1.85	2.07	2.14
30	Field coordinators helped in instructional planning and coordinating	2.43	3.53	2.90	3.73	2.60	3.10	2.49	2.96	2.92
31	Field coordinators assisted in actual classroom presentation	2.50	3.46	3.22	3.79	2.90	3.29	2.80	3.03	3.10

The overall means by high and low group per item demonstrates that the high group is consistently more in agreement (than is the low) about the effectiveness and clarity of comprehension about the instructional objective. The high groups, for example, tended toward agreement in item #1, while the low third grade was uncertain and tended toward disagreement. Taken as a whole (N = 406), the sample tended to agree that the purposes

of career education were understood at the beginning of the school year ($\bar{X}$ = 2.40).

In assessing whether their colleagues had a favorable attitude toward career education, the total sample (N = 406) agreed ($\bar{X}$ = 2.50) that other teachers within their school maintained such an attitude. The only marked difference in opinion from the total mean ($\bar{X}$ = 2.50) was registered by the high third grade teachers who tended to indicate a strong agreement ($\bar{X}$ = 1.96) with this statement.

It is important to note that the overall sample agreed strongly ($\bar{X}$ = 1.65) that career education is significantly effective in helping students appraise their abilities, interests, and potential. This item (#26) was endorsed with strong agreement, by all high and low groups, with only a small discernible difference in the favor of the high.

In item #27, the teachers were asked to remark about the relevance of career education with respect to their students' grade level (i.e., 3rd, 6th, 9th, and 12th). The total sample was in agreement about its relevancy ($\bar{X}$ = 2.14), with the high 9th and low 12th grades showing the strongest agreement.

The two items concerning the role of the field coordinators (#s 30 and 31) demonstrate a distinct cleavage between the high and low groups at all grade levels, with the exception of the 12th grade (high and low). The high participating teachers at the 3rd, 6th, and 9th grades agreed that the coordinators provided assistance in the coordination, planning, and presentation of career education. The low groups indicated either uncertainty (item mean of 3.0) or disagreement (4.0 and above) with this statement.

(3) Guidance and Counseling

As stated in the Grant Proposal (p. 37), career education guidance and counseling services were to be included in grades 9-12. The major activities or functions to be performed were: providing of specialized occupational materials and services, offering job placement services, and assisting teachers with career orientation and exploration activities.

The only indexes to the extent of the operationalization of career guidance and counseling services are items from the principal's questionnaire. These items probe their perceptions about the quality and manner of implementation of counseling and placement services provided in secondary schools.

ITEM		YES	NO	NR
6	Were career guidance and counseling services improved as a result of the project?	4	0	1
9	Did counselors increase their emphasis on career information?	4	1	0

The principals also indicated the manner or extent to which the counselors were involved. Four of those responding to this item indicated guidance counselors frequently providing additional career educational materials. One principal reported infrequent provision. Concerning the extent of individual career guidance sessions, all five principals stated, "frequently." Two other items related to conducting small or large group sessions (#8a) and organizing and coordinating field trips (#8b). The responses were:

Item	Frequent	Infrequent	Never	NR
8a	1	3	0	1
8b	4	0	1	0

When asked about the number of students involved in some form of career guidance or counseling, the five principals (aggregate) indicated that approximately 65% of their students utilized these services.

Concerning job and career education placement activities, the secondary principals cited four main avenues: guidance counseling office; cooperative programs with business and industry; counselors and teachers as a team; and visitation by testing and resource personnel.

It appears that in the five Secondary schools from which responses were offered that the guidance, counseling, and placement activities were appropriately augmenting the career education curriculum and instruction activities.

The evaluators looked for a significant difference in the high and low groups responses to what they considered to be critical facets of the overall procedural merits of the project: the effectiveness of the field coordinators in introducing and helping to maintain appropriate career instruction in the schools. Items 30 and 31 probe this effect as well as items 28 and 29 which, respectively, concern the roles of the coordinators in selecting appropriate instructional materials and identifying possible instructional resources within a community.

The high groups as a whole (grades 3, 6, 9, and 12) evidenced a statistically significant difference to an extreme degree in the positive or strongly agree direction: 3rd grade high (.0005); 6th grade high (.0004); 9th grade high (.0007); and 12th grade high (.0059).

(4) Preparation, Dissemination, Adaption, and Adoption of Career Education Curriculum Materials

Although this objective relates directly to the instructional process, the evaluators chose to present their findings for it in a separate context, primarily for ease of reference and lucidity.

Central Decision-Makers. Only two superintendents (or their staff) could offer specific information regarding the amount and nature of curriculum materials developed specifically within their district. One decision-maker observed that there were 15 occupational cluster materials and 10 on-the-job video tapes. The other superintendent reported that there were 90 classroom teaching units developed and six curriculum implementation units. The same two respondents stated that a vast majority of the curriculum materials were continuously revised and adapted.

Local Administrators. The items in the principal's questionnaire related to this objective are presented below with appropriate quantifiable results included:

3a Nature of materials developed	(1) Integrated reading material (2) Job evaluation worksheets
3b Types of materials used in schools as developed by RESA	(1) Films (2) Weekly Reader (3) RESA V Curriculum Materials Resource Guide (4) Books (5) Occupational pamphlets (6) Pre-existing subject-matter materials now applied to caree education
3c Revision or adaptation of curriculum materials	The only materials emendated were RESA V Resource Guides and some pamphlets
3d Manner by which materials were made available	(1) RESA V Coordinated

(3d continued)

(2) Introduced by school counselors to classroom teachers

(3) Made available by media special

Implementers. The teachers sampled for this evaluation were asked to respond to three items directly related to this process objective. Their responses are summarized below (based on a 1-5 Likert scale) according to high and low group and sample mean.

#	Item	Mean Per Group 3rd High	3rd Low	6th High	6th Low	9th High	9th Low	12th High	12th Low	Total
10	Adequate materials made available for the Program	2.43	3.48	2.97	3.51	2.50	2.93	2.60	2.90	2.87
28	Field coordinators assisted in selecting appropriate instructional meterials	1.90	3.21	2.63	3.35	2.29	2.92	2.40	2.69	2.65
	Frequency of Use (Number of Teachers Utilizing)									
41	Use of specific types of curriculum materials at least once a year									
	printed materials	19	7	23	6	35	25	33	20	168
	work sheets	14	7	22	4	28	21	29	14	139
	curriculum units	20	8	18	4	30	17	31	13	141

Items 10 and 28 demonstrate that the high groups for each grade tend more towards agreement in a positive direction (1 = strongest agreement) than do the low groups. The largest divergence is between the 3rd grade high and 3rd grade low (1.05 difference). The total mean for the sample ($\bar{X}$ = 2.87) suggests that there is some uncertainty among the teachers as to the availability of adequate materials.

Item 28 has been discussed in relation to the preceding objective on the general instructional process, and it evidences strong agreement by the high groups.

Item 41 refers to the total number of teachers by group using career education materials and/or supplies.

The percentages of teachers utilizing the materials in the three categories are presented in the table below according to each grade level and group.

The percentage differences between total high and low groups for each of the three categories is as follows:

Category (Use of:)	% Total High	%Total Low	%Difference
Printed materials	54	[illegible]	25
Work Sheets	46	23	23
Curriculum Materials	49	21	28

Thus, the high groups as a whole evidence considerably greater utilization of these materials.

The other process objectives identified by means of analysis of the entire project's stated purposes and cluster activities relate to two areas: (a) the external development of the project through such activities as publicity and coordination, and (b) the procedural aspects of the program which make it transportable or capable of being replicated in other locales or under different circumstances.

(5) Publicity and Attendant Promotional Activities and Central Decision-Makers

The three superintendent (4 no responses) who replied to this question remarked that publicity activities were many and multi-faceted. One chief administrator reported such axtivities as forming an Industry Education Committee and involving the local Small Business Association in planning, developing and disseminating a career resource list. Also this same respondent mentioned an annual highlighting of the career education program through local newspaper articles. Another superintendent reported the use of a survey to determine the district's needs as well as conducting a survey of teachers to gauge their interest in career education. He also indicated the instance of cooperation of local industries in providing job information.- The other county representative singled out the activities of school guidance counselors

to promote interest in the program.

Local Administrators. The principals were asked to repond to one item concerning program publicity. Those reporting (N = 10) publicity activities indicated that these activities assumed four general patterns:

1. Letters to parents
2. Newspaper articles
3. Meetings with local community/business/industry representatives
4. Film Strips

Implementers. The teachers, because of their specific local instructional functions, were not queried about central publicity efforts.

(6) Transportability of Program Processes

Respondents were asked to indicate their perceptions about the current processes and activities in light of their potential for future replication or transportability in other systems and locales.

Central Level Decision-Makers. The superintendents' responses can be best presented in table form.

#	ITEM	RESPONSE		
		Yes	No	No Response
9	Are developed curriculum units suitable for use in other school systems?	6	0	1
10	Have any units been requested by other schools or regions?	2	3	2
11	Is the administrative model replicable?	4	1	2

When asked about changes which might be necessary for transportability of the administrative model, these respondents suggested that (1) availability of human resources and occupational modes requires considerable attention; (2) values of local constituents play a significant part in program success; and (3) the attitudes of chief administrators must be favorable and they must believe in the program prior to its implementation.

Local Administrators. The principals were asked to respond to a set of items identical to that of the superintendents.

#	ITEM	RESPONSE Yes	No	No Response
24	Are developed curriculum units suitable for use in other school systems?	10	1	6
25	Have any units been requested by other schools or regions?	2	9	6
26	Is the administrative model replicable?	8	1	8

Asked similarly about any administrative modifications necessary for transportability, the respondents pointed to: (1) local job opportunities and available resource people for instruction; (2) increased availability of personnel for presenting teacher inservices and; (3) a greater knowledge and interchange of instructional models and strategies.

Implementers. For reasons already explained in objective 4, teachers were not asked direct questions about overall program replicability.

(7) Coordination of Regional and Local Personnel

Initial planning objectives for this project identified two major sources of local coordination: (a) a task force composed of parents, school personnel and community representatives and (b) a local liaison for each county school system

The formation of task forces and liaisons between the program and each county apparently continued during the 75-76 FY. The evaluators met with several liaisons in the region -- some of whom demonstrated high involvement in the program. However, a precise description of their activities is not available, and, in general, quantifiable data is not of sufficient substance to permit a specific presentation of data for this group. In some cases, liaison's reactions to their role in the program are subsumed within the superintendents' interviews, the results of which were presented earlier.

Similarly, hard data about the specific functioning of the task forces are not forthcoming from central office (superintendents), principal, or teacher

interviews. Separate attempts to interview representative community task force members were not specified in the evaluation design. For an illustration of general efforts by the project staff in this regard, the reader is referred to Appendix C for a sample of publicity on county task forces.

Goal II: Promotion of Career Awareness In 3rd and 6th Grades.

This goal contains several objectives relating to providing occupational information, fostering positive work attitudes, and including realistic views about careers in relation to students' abilities and self-images. Three main sources were established for obtaining pertinent information as to the degree and scope of implementing career awareness at the 3rd and 6th grade levels. The evaluators analyzed the responses from superintendent, principal, and teacher questionnaires and opinionaires. As a concession to clarity, these responses are presented as direct referents to the goal, rather than being specifically analyzed according to each objective. Also the presentation of data is treated in combined form for 3rd and 6th grade. Data form superintendents and principals could not be analyzed discretely for each grade separately.

Central Level Decision Makers. The opinionaire administered to the county superintendents and their staffs contained 11 items which dealt specifically with career awareness concepts for the 3rd and 6th grade levels. The items and mean scores per item (on a 1-5 scale; 1 = strongly agree and 5 = stongly disagree) are as follows:

ITEM	Summary Statements	N = 7	MEAN
5	Students gained first-hand knowledge of the world of work (field trips, resource people, etc.)		1.43
7	Students explored their capabilities in various areas under a variety of situations pertaining to the world of work.		2.00
8	Students learned to self-appraise their emerging potentials.		2.20

12	Students became aware of the factors that contributed to success in an occupation.	1.40
13	The student understands, accepts, and relates himself/herself emotionally, mentally, and physically to his/her social, educational, and career ventures.	2.28
14	The student understands that there are certain physical, mental, and emotional characteristics which make him/her unique.	1.86
15	The student understands the importance of inter personal interaction and its affect on others.	2.28
17	The student is able to understand the value of school subjects in terms of their function within and outside the classroom.	2.43
19	The student is able to function in the performance of decision-making and work adjustment processes.	2.43
21	The student is able to understand that there are physical, mental, and emotional aspects of work which may or may not be satisfying.	2.28
22	The student is able to comprehend the diversity and complexity of work alternatives both available and appropriate to him/her in the present and future.	2.28

Group Mean = 2.08

These responses evidence an appropriate degree of agreement on the part of the three county-level central administrative staffs. The items suggest that students were provided adequate opportunities for developing career awareness concepts, especially as those concepts merge with their own capacities and self-images. Moreover, activities aimed at realistic views and experiences attained the highest mean ratings, showing balance in this goal between actual world of work orientations and more abstract conceptual integration. The least favorable ratings pertain to the effects of career education on students'

perceptions of school subjects and to an item probing students' abilities in decision-making and work adjustment processes. Both of these areas may not be compatible with elementary level developmental stages. It may be also that the respondents had difficulty understanding the essence of the latter item as it relates to 3rd and 6th grade levels. Nevertheless, the mean ratings are not within the "disagreement" continuum.

Local Administrators. For comparison purposes, the elementary school principals (N = 15) were asked to rate the same items as the superintendents with the following results:

ITEM	Summary Statements	N = 15	MEAN
5	Students gained first-hand knowledge of the world of work (field trips, resource people, etc.)		2.57
7	Students explored their capabilities in various areas under a variety of situations pertaining to the world of work.		3.23
8	Students learned to self-appraise their emerging potentials.		3.15
12	Students became aware of the factors that contributed to sucess in an occupation		2.90
13	The student understands, accepts, and relates himself/herself emotionally, mentally, and physically to his/her social, educational, and career ventures.		3.05
14	The student understands that there are certain physical, mental, and emotional characteristics which make him/her unique.		2.55
15	The student understands the importance of interpersonal interaction and its affect on others.		2.90

17	The student is able to understand the value of school subjects in terms of their function within and outside the classroom.	2.80
19	The student is able to function in the performance of decision-making and work adjustment processes.	3.10
21	The student is able to understand that there are physical, mental, and emotional aspects of work which may or may not be satisfying.	2.45
22	The student is able to comprehend the diversity and complexity of work alternatives both available and appropriate to him/her in the present and future.	2.85

Group Mean = 2.87

The group mean for these items tends toward uncertainty or a point of neutrality on the Likert-scale approaching 3.0. It deserves mention however that items 14 and 21, which concern the students self-image vis à-vis the conditions and attributes of work, attain the highest ratings, tending towards agreement. In that the emphasis of this goal relates directly to awareness, these ratings deserve special notice. The items exhibiting the least agreement (#s 7, 8, 13, and 19) concern concepts and experiences which may be more indigenous to more advanced developmental stages (i.e., 9th and 12 grades).

In any case, it is interesting to compare principals' ratings with those of superintendents. On the surface, composite agreement would not appear to be present. However, a more detailed analysis demonstrates an interesting congruence between the two groups on those items in which they exhibit strong agreement. More specifically, items 5 and 14 are ranked as

2nd and 3rd by the principals, with the slight exception that item 14 is rated slightly more agreeable by those local adminstrators than item 5. The agreement on these two items suggests that realistic work experiences and understanding of one's individuality and uniqueness (work situations) are being well emphasized in the context of this sample.

Implementers. The 3rd and 6th grade teachers' responses to this goal took place within items identical to those presented for local and central administrators. For comparison purposes, a discrete high and low participating group response tabulation is presented. The data in this section combine the responses of the 3rd and 6th grade teachers because of the composite nature of the goal as it relates singularly to career awareness without distinction as to intensification or expansion at the higher grade level. The reader is referred to the Appendix section of this report for individual grade level responses.

The data for 3rd and 6th grade teachers combined is as follows:

GOAL II: CAREER AWARENESS AS MEASURED BY A LIKERT QUESTIONNAIRE ADMINISTERED TO 3RD AND 6TH GRADE HIGH AND LOW PARTICIPATING TEACHERS

ITEM	Summary Statement	High		Low	
		N	Mean	N	Mean
5	Students gained first-hand knowledge of the world of work (field trips, resource people, etc.)	80	2.75	66	1.98
7	Students explored their capabilities in various areas under a variety of situations pertaining to the world or work	79	3.24	66	3.59

		High N	High $\bar{X}$	Low N	Low $\bar{X}$
8	Students learned to self-appraise their emerging potentials.	80	3.04	65	3.25
12	Students became aware of the factors that contributed to success in an occupation.	79	2.70	64	3.17
13	The student understands, accepts, and relates himself/herself emotionally, mentally, and physically to his/her social, educational, and career ventures.	75	2.93	65	3.08
14	The student understands that there are certain physical, mental, and emotional characteristics which make him/her unique.	75	2.27	64	2.55
15	The student understands the importance of interpersonal interaction and its effect on others.	75	2.41	63	2.71
17	The student is able to understand the value of school subjects in terms of their function within and outside the classroom.	74	2.47	63	2.75
19	The student is able to function in the performance of decision-making and work adjustment processes.	73	2.88	63	2.95
21	The student is able to understand that there are physical, mental, and emotional aspects of work which may or may not be satisfying	75	2.39	63	2.73
22	The student is able to comprehend the diversity and complexity of work alternatives both available and appropriate to him/her in the present and future	73	2.86	63	2.86
Group Means ----------			2.76		2.87

Particularly significant is the distinctively more positive rating accorded to 9 of these 11 items by the high group (one item was rated exactly the same). Their ratings are consistently more in agreement with

the fact that these activities and experiences were successfully implemented than are the low groups ratings. Suprisingly, the low group rated item 5 (gaining first-hand knowledge of the world of work) more favorably than the high group. This item, it should be remembered, receives a positive endorsement by superintendents and principals and its presence seems to be well established in the region.

The evaluators also administered a Teacher Activity Survey to probe specific instances of career awareness implementation in the 3rd and 6th grades. Again, the teachers responses are combined for both grades but presented separately by high and low group. The results by mean scores are as follows:

3RD & 6TH GRADE TEACHER ACTIVITY SURVEY

ITEM	Summary Statement	High N	High Mean	Low N	Low Mean
1	Have your students talked or done anything in school that helped them find out more about themselves?	66	2.74	63	2.73
2	Have your students talked or done anything in school that helped them find out more about workers?	68	2.60	64	2.34
3	Have your students talked or done anything in school that helped them find out about the education or training that workers need?	68	2.43	64	2.33
4	Did your class walk to some place to see workers at their jobs in school or near school?	68	1.63	62	1.37
5	Did your class take a field trip in cars or on a school bus to see workers doing their jobs?	68	1.39	63	1.32

6	Did someone other than you talk to your class about careers or jobs?	68	1.99	62	1.40
7	Did a worker show your class things that he uses in his work?	68	1.88	64	1.44
8	Did a worker come to your classroom to show the students how he does something in his work?	68	1.88	64	1.36
9	Did members of your class act like they were workers and do things that workers do?	68	1.75	62	1.61
10	Did members of your class make things in school that a real worker would make?	67	1.66	62	1.50
11	Did some members of your class talk about real work that they did with a worker?	67	1.91	64	1.81
12	Did some members of your class use math in a project like a real worker would use math?	67	1.97	63	1.84
13	Did members of your class use speaking and writing of correct English like a real worker would?	67	2.15	63	2.19
14	Did members of your use science in a way that real workers would use science?	67	2.10	61	1.89
	Group Means ----------		2.006		1.795

T Range:
Frequent 3.0
Infrequent 2.0
Never 1.0

The high group's mean frequencies are unanimously higher than the low groups, with the exception of item 13 (application of English to Career situation). Moreover, the total group mean for the high is .21 higher than the total low group mean, indicating a tendency for the former in the direction of frequent career education practices.

These same 3rd and 6th grade teachers were also asked to respond to a Teacher Practices Survey which provided for detailed replies to 13 instructional items relating to career education. The results are tabularized first on the basis of raw scores and percentage differences per group for frequency of initiating a particular practice on a range of at least once during the year, never, and no response. The second table presents mean scores per group on the basis of specific frequencies of initiating a particular practice from at least once during the year through a maximum of 36 times (or once a week) during the school year.

The percentage differences between high and low groups range between 5% and 43% in favor of the high group. The instance of the use of curriculum materials by workers received a percentage rating of 68% by the high as opposed to 25% by the low. In other words, 68% or 38 of the 56 high group respondents indicated that they utilized career education curriculum materials at least once during the most recent academic year as opposed to only 12 of 48 low group respondents. The most noticeable observation about this table is that the high group surpassed the low group in the percentage ratings on every item.

The second table, which details the average times during which a practice was initiated during the year, indicates that the high group excelled in terms 2, 4, 6, 7, 10, 11, 12, and 13. The high group, in this respect, held more class visits by workers, held more teacher in class discussions, provided students more opportunities to make posters, presentations, and take part in class projects, utilized newspapers, magazines, and made more use of

Table 2

FREQUENCY AND PERCENT OF TEACHERS INITIATING OCCUPATIONAL INFORMATION ACTIVITIES: HIGH VS. LOW GROUPS, 3RD AND 6TH GRADE, 1975-1976

ITEM	N = 82 Frequency: High Group			N = 70 Frequency: Low Group			% High - Low		% Diff.
	1 or More	Never	No Response	1 or More	Never	No Response	1 or More	Responses	High vs. Low
1. Field Trips	27	47	8	19	42	9	36	31	+ 5
2. Class Visits: Workers	52	23	7	18	42	10	69	30	+39
3. A-V Materials	57	11	14	28	28	14	84	50	+34
4. Class Discussion: Teacher	59	10	13	47	11	12	86	81	+ 5
5. Discussion: Small Group	43	20	19	26	27	17	68	49	+19
6. Student Presentation	32	28	22	19	26	15	53	42	+11
7. Poster Displays	41	23	18	22	32	16	64	41	+23
8. Role-Playing Simulation	38	24	20	19	34	17	61	36	+25
9. Library Resources	45	16	21	23	30	17	74	43	+31
10. Newspaper, Magazines	40	22	20	18	33	19	65	35	+30
11. Class Projects	39	24	19	19	27	14	62	34	+28
12. Integration of Basic Skills with Career Ed.	40	20	22	20	29	21	67	41	+26

FREQUENCY AND PERCENT OF TEACHERS INITIATING OCCUPATIONAL INFORMATION ACTIVITIES: HIGH VS. LOW GROUPS, 3RD AND 6TH GRADE, 1975-1976 (Cont.)

	N = 82 Frequency: High Group			N = 70 Frequency: Low Group			% High - Low		% Diff.
	1 or More	Never	No Response	1 or More	Never	No Response	1 or More	Responses	High vs. Low
iculum rials	38	18	26	12	36	22	68	25	+43

Table 3

THE MEAN AVERAGE OF TEACHER INITIATING OCCUPATIONAL INFORMATION ACTIVITIES: HIGH VS. LOW GROUPS, 3RD AND 6TH GRADE, 1975-1976

	ITEM	HIGH MEAN	LOW MEAN
1.	Field Trips	2.41	2.47
2.	Class Visits: Workers	5.63	2.75
3.	A-V Materials	14.47	16.17
4.	Class Discussion: Teacher	21.90	14.72
5.	Discussions: Small Group	11.81	14.81
6.	Student Presentation	10.25	8.46
7.	Poster Displays	11.96	7.86
8.	Role-Playing Simulation	12.39	13.25
9.	Library Resources	18.15	18.99
10.	Newspapers, Magazines	16.11	15.92
11.	Class Projects	8.67	6.03
12.	Integration of Basic Skills with Career Ed.	22.08	18.80
13.	Curriculum Materials	5.47	4.92
	* Group Mean	12.41	11.17

* Combined 3rd and 6th activities mean score of average times per year intiating the activity.

career education curriculum materials. Of particular importance is item 12 which sought to determine the degree of integration of career education with basic skills. This item assumes greater importance to the evaluators than any other single item because of the difficluty experienced in gaining access to state testing results relating to basic skills and the ability of career education projects to have a direct relationship to a student's performance. The high participating respondents reported that they incorporated career education with basic skills on an average of over 22 times per year or 4 more times on the average than their counterparts. Nearly 67% of the high participating teachers integrated career education and basic skills (see Table 2) at least once as opposed to only 41% of the low group.

Extended conclusions about the significance of data presented for this goal are reserved for Chapter 4.

Goals III and IV: Promotion of Career Exploration and Preparation In 9th and 12th Grades

These goals, as they are incorporated within the process component of the project, are treated together as twin parts of the secondary school approach for including career education at the 9th and 12th grade developmental stages. In essence, testimony as to their degree of implementation exists in a combined form; that is responses from superintendents, principals, and teachers cannot be discretely referenced for one grade as opposed to the other. For this reason, all responses from these sources are presented for exploratory and preparatory implementations in a combined fashion. Furthermore, the process objectives for each goal are not assessed individually, but are used

as descriptors for analyzing and summarizing the general responses from each source. This is done for ease of reference and as an alternative to an otherwise awkward and unnecessarily complicated display of data.

The essential functions associated with these goals are concerned with providing opportunities for students to make realistic occupational choices, to understand the psychological elements of work, to engage in work-study programs, and generally to remove the artificial barriers that may exist between education and work.

Central Level Decision Makers. The superintendents and their staffs (N = 7) replying to these phases of the career education program were asked to indicate their perceptions (on a 1-5 Likert questionnaire with 1 = strong agreement and 5 = strong disagreement). Their responses are as follows:

Table 4

GOALS III & IV CAREER EXPLOATION & CAREER PREPARATION AS MEASURED BY LIKERT QUESTIONNAIRE ADMINISTERED TO SUPERINTENDENTS

	ITEM	MEAN
5.	Students gained first-hand knowledge of the world of work (field trips [illegible] ople, etc.)	1.43
6.	Students were [illegible] uate hands-on experiences.	2.14
7.	Students explored [illegible] capabilities in various areas under a variety of situations pertaining to the world or work.	2.00
16.	The student is able to plan his/her chosen career and progress within the career or change the direction of his/her career if necessary or desirable.	2.57
17.	The student is able to understand the value of school subjects in terms of their function within and outside the classroom.	2.43
18.	The student is able to comprehend the diversity and complexity of educational alternatives in relationship to a change in the job market, society, and self.	2.57
19.	The student is able to function in the performance of decision-making and work adjustment processes.	2.43
20.	The student is able to supply educational skills in the planning and preparation for entry into the career world.	2.43
22.	The student is able to comprehend the diversity and complexity of work alternatives both available and appropriate to him/her in the present and future.	2.28
23.	The student is able to recognize that jobs emerge and diminish because of the value society places on the resulting products and services.	2.57
	Group $\bar{X}$ =	2.29

It is apparent that the respondents exhibit agreement with the efforts of the project in initiating appropriate career exploration and preparation activities. They are particularly positive about the provision for realistic or first-hand knowledge of the work environment (item #1, $\bar{X}$ = 1.43). Also impressive agreement is evidenced in their replies to item #7 which concerns the opportunities for career exploration within variegated situations ($\bar{X}$ = 2.00). Item 23 receive the lowest ratings (but still approach agreement). Item be rated relatively low due to the difficulty which any administrator or educator would have in obtaining concrete or verifiable benchmarks to the degree of student abilities to plan or change his career -- especially since the student has not embarked on a career yet. It may have been equally difficult to estimate student abilities in understanding the complex ebb and flow of occupational opportunities in a rapidly changing society.

Local Administrators. Key responses from sample principals are as follows:

Table 5

GOALS III & IV CAREER EXPLORATION & CAREER PREPARATION AS MEASURED BY LIKERT QUESTIONNAIRE ADMINISTERED TO 9th & 12th GRADE PRINCIPALS N = 5

	ITEM	MEAN
5.	Students gained first-hand knowledge of the world of work (field trips, resource people, etc.)	2.57
6.	Students were exposed to adequate hand-on experiences.	3.29
7.	Students explored their capabilities in various areas under a variety of situations pertaining to the world or work.	3.23
*16.	The student is able to plan his/her chosen career and progress within the career or change the direction of his/her career if necessary or desirable.	3.10
17.	The stud[illegible] is able to understand th[illegible] value of school subjects in terms [illegible]nction within and outside the classroom.	2.80
18.	The student is able to comprehend the diversity and complexity of educational alternatives in relationship to a change in the job market, society, and self.	3.10
19.	The student is able to function in the performance of decision-making and work adjustment processes.	3.10
20.	The student is able to apply educational skills in the planning and preparation for entry into the career world.	3.00
22.	The student is able to comprehend the diversity and complexity of work alternatives both available and appropriate to him/her in the present and future.	2.85
23.	The student is able to recognize that jobs emerge and diminish because of the value society places on the resulting products and services.	2.80

*Item sixteen refers to 12th Grade principals only.

Group $\bar{X}$ = 2.98

The five secondary principals answering this Likert-Questionnaire reported only mild agreement with the success of the process dimension of the project (Group $\overline{X}$ = 2.98). In fact as a whole their answers tend more to uncertainty. Only four items are below 3.0 (#s 5, 17, 22, and 23). Perceptions about students gaining first-hand knowledge of the world of work attains the highest positive mean rating ($\overline{X}$ = 2.57), just as it does in the superintendents' questionnaire. There also appears to be congruence between both groups in their ranking of item 22 (comprehension of diverse work alternatives available) in so far as both principals and superintendents react to it as their fourth most positive item (principals $\overline{X}$ = 2.85; superintendents $\overline{X}$ = 2.28).

The most preplexing observation in the principals' responses is the apparent distinction by mean ranking which they make between the instances of first-hand knowledge opportunities and exposure to adequate hands-on experiences. The difference between the means is .72, but more significantly the principals evidence considerable uncertainty about the overall success of hands-on experiences while indicating much more certainty about a very similarly related activity in item 5.

Implementers. Questionnaires administered to high and low participating 9th and 12th grade teachers contained 10 items (identical to those answered by central and local school officials). Their responses on the Likert-scale are as follows:

Table 6

GOALS III & IV CAREER EXPLORATION & CAREER PREPARATION AS MEASURED BY
A LIKERT QUESTIONNAIRE ADMINISTERED TO 9th & 12th GRADE HIGH AND LOW PARTICIPATING TEACHERS

ITEM	Summary Statements	HIGH GROUP N	HIGH GROUP Mean	LOW GROUP N	LOW GROUP Mean
5	Students gained first-hand knowledge of the world of work (field trips, resource people, etc.)	119	2.37	129	2.87
6	Students were exposed to adequate hands-on experiences.	119	2.66	129	2.98
7	Students explored their capabilities in various areas under a variety of situations pertaining to the world or work.	118	2.64	129	3.06
16	The student is able to plan his/her chosen career and progress within the career or change the direction of his/her career if necessary or desirable.	119	2.76	129	2.77
17	The student is able to understand the value of school subjects in terms of their function within and outside the classroom.	118	2.64	128	2.83
18	The student is able to comprehend the diversity and complexity of educational alternatives in relationship to a change in the job market, society, and self.	119	2.84	129	2.96
19	The student is able to function in the performance of decision-making and work adjustment processes.	119	2.91	129	2.89
20	The student is able to apply educational skills in the planning and preparation for entry into the career world.	118	2.49	129	2.72
22	The student is able to comprehend the diversity and complexity of work alternatives both available and appropriate to him/her in the present and future.	118	2.65	128	2.80

GOALS III & IV CAREER EXPLORATION & CAREER PREPARATION AS MEASURED BY
A LIKERT QUESTIONNAIRE ADMINISTERED TO 9th & 12th GRADE HIGH AND LOW PARTICIPATING TEACHERS (Cont.)

ITEM	Summary Statements	HIGH GROUP N	HIGH GROUP Mean	LOW GROUP N	LOW GROUP Mean
23	The student is able to recognize that jobs emerge and diminish because of the value society places on the resulting products and services.	118	2.57	128	2.77
	Group $\bar{X}$ =		2.65		2.87

On the whole, the high group demonstrates greater agreement ($\bar{X}$ = 2.65) with these items than the low ($\bar{X}$ = 2.87). Even more significantly, the high group -- to a degree very similar to the superintendents and principals -- shows agreement with the area of first hand knowledge of the work environment. Furthermore, their cleavage with the low group is greatest in this item on the questionnaire (item 5, $\bar{X}$ = 2.37). They are also positively disposed toward item 20 which relates to the application of basic skills to career decisions. They show the least consensus in item 19 ($\bar{X}$ = 2.91) tending toward uncertainty (as does the low group) about this almost job-specific experience.

Items significantly referenced to career exploration and to improving the ties between education and work are generally well rated by the high group (#s 7 and 17, both $\bar{X}$ = 2.64). By contrast, the low group accorded these two items an average rating of 2.95.

On the Teacher Activity Survey, the secondary teachers were presented with 14 items probing their general involvement in exploratory and preparatory career activities. The results for high and low groups by mean for frequent, infrequent, and never are as follows:

Table 7

9th & 12th GRADE TEACHER ACTIVITY SURVEY

ITEM	Summary Statements	HIGH GROUP N	HIGH GROUP Mean	LOW GROUP N	LOW GROUP Mean
1	Have your students talked or done anything in school that helped them find out more about themselves?	104	2.54	120	2.59
2	Have your students talked or done anything in school that helped them find out more about workers?	104	2.44	119	2.26
3	Have your students talked or done anything in school that helped them find out about the education or training that workers need?	104	2.58	118	2.31
4	Did your class walk to some place to see workers at their jobs in school or near school?	103	2.51	118	1.16
5	Did your class take a field trip in cars or on a school bus to see workers doing their jobs?	103	1.53	118	1.37
6	Did someone other than you talk to your class about careers or jobs?	104	1.98	119	1.65
7	Did a worker show your class things that he uses in his work?	103	1.72	115	1.50
8	Did a worker come to your classroom to show the students how he does something in his work?	102	1.58	116	1.41
9	Did members of your class act like they were workers and do thing that workers do?	102	1.59	115	1.63
10	Did members of your class make things in school that a real worker would make?	102	1.76	117	1.75
11	Did some members of your class talk about real work that they did with a worker?	102	1.92	117	1.77
12	Did some members of your class use math in a project like a real worker would use math?	101	1.77	116	1.78
13	Did members of your class use speaking and writing of correct English like a real worker would?	102	2.00	116	2.06
14	Did members of your class use science in a way that real workers would use science?	100	1.54	116	1.66
	3.0 Frequent, 2.0 Infrequent, 1.0 Never	Group $\bar{X}$ =	1.75		1.78

The overall mean for the high teacher group is less (.03) than that of the low group and indicates that the former group tended to initiate these activities infrequently and to a degree almost equal to that of the latter group. The highest item was #3 (finding out in school about job education requirements, $\bar{X} = 2.58$). Also item 1 ($\bar{X} = 2.54$) received a relatively high rating as it concerns student self-awareness.

Teachers were also asked to indicate the frequency with which they introduced occupational information activities in their 9th or 12th grades. The results of this survey are tabularized below: (1) According to frequency and percent per activity and (2) By mean scores of times per year.

The frequencies by percent of the high group's activities indicates an overwhelmingly superior and positive effort in incorporating critical career activities in the classroom. The range of percentage difference between groups is between 8% and 38%. Significantly, item 12 -- integration of basic skills -- received the highest percentage difference, with 77% of the high participating teachers reporting at least one instance of this integration per year, as opposed to 39% of their counterparts. The use of curriculum materials also is accorded a high frequency (67% of the high vs. 34% of the low). There are eight other items which display positive differences in favor of the high group (#s 3, 4, 5, 6, 7, 8, 9, and 10). The only marginal positive percentage difference relates to the frequency of utilizing employment agencies (8% difference). Since the project has other (intrinsic) means of locating and preparing students for occupations, this marginal difference may not be too surprising. Also using employment agencies may be viewed by many teachers as more of a county or community function.

Table 8

FREQUENCY AND PERCENT OF TEACHER INITIATING OCCUPATIONAL INFORMATION ACTIVITIES IN HIGH VS. LOW GROUPS, 9th & 12th GRADES

ITEM	N = 121 Frequency: High Group 1+	Never	NR	N = 133 Frequency: Low Group 1+	Never	NR	% High - % Low 1 or More	Responses	% Diff.
1. Field Trips	48	61	12	36	85	12	44	30	+14
2. Class Visits: Workers	73	41	7	59	64	10	64	48	+16
3. A-V Materials	76	26	19	48	55	30	75	47	+28
4. Class Discussion: Teacher	97	4	20	82	25	26	96	77	+19
5. Discussions: Small Group	59	35	27	32	63	38	63	34	+29
6. Student Presentations	59	35	27	32	65	36	63	33	+30
7. Poster Displays	76	22	23	54	47	32	78	53	+25
8. Role Playing Simulation	39	45	37	21	76	36	46	22	+24
9. Library Resources	66	29	26	46	55	32	69	46	+23
10. Newspapers/ Magazines	64	29	28	36	59	38	69	38	+31
11. Class Projects	58	42	21	39	60	34	58	39	+29
12. Integration of Basic Skills with Career Ed.	68	20	33	36	56	41	77	39	+38

FREQUENCY AND PERCENT OF TEACHER INITIATING OCCUPATIONAL INFORMATION ACTIVITIES IN HIGH VS. LOW GROUPS, 9th & 12th GRADES (Cont.)

ITEM	N = 121 Frequency: High Group 1+	Never	NR	N = 133 Frequency: Low Group 1+	Never	NR	% High - % Low 1 or More Responses		% Diff.
Curriculum Materials	61	30	30	30	59	44	67	34	+33
Exploratory Work Expectency	60	33	28	48	55	30	65	47	+18
Employment Agency	14	68	39	8	83	42	17	9	+ 8

Table 9

MEAN SCORES OF AVERAGE TIMES PER YEAR OF COMBINED
9th AND 12th GRADE TEACHERS INITIATING SELECTED CAREER EDUCATION ACTIVITIES

	ITEM	High Group Mean	Low Group Mean
1.	Field Trips	2.52	2.83
2.	Class Visits: Workers	4.26	3.41
3.	A-V Materials	10.36	13.29
4.	Class Discussions: Teacher	15.44	10.06
5.	Discussions: Small Group	12.80	10.06
6.	Student Presentations	8.81	8.19
7.	Poster Displays	9.32	3.69
8.	Role Playing Simulation	10.08	13.33
9.	Library Resources	9.36	11.11
10.	Newspapers/ Magazines	12.25	11.03
11.	Class Projects	6.10	9.51
12.	Integration, Basic Skills with Career Ed.	21.12	20.58
13.	Curriculum Materials	7.95	13.33
14.	Exploratory Work Experiences	14.63	16.42
15.	Employment Agency	4.43	5.75
	Group $\bar{X}$ =	9.96	10.38

The mean scores table also demonstrates some significant achievement by the high group in the average times per year (ranging from once to 36 times during the term) spent in incorporating important career experiences in the classroom. Particularly noteworthy are items concerning teacher - class discussions, small group discussions, student presentations, poster displays, use of newspapers and magazines, and, perhaps, most importantly of all, the integration of career education with basic skills.

The evaluators administered a student survey of 15 items probing activities in the classes as observed by the students. The results of this questionnaire were inconclusive with no apparent discrimination by the respondents. The items in the instrument were seemingly ambiguous and restricted in degree with only a yes/no response option.

Process Goals: Summary

Four identical items on the superintendent, principal, and teacher questionnaires serve as a barometer to the progress of the project in implementing career concepts as well as to the overall importance of the program. The tables below illustrate mean Likert ratings for superintendents, principals, and high and low groups of 3rd, 6th, 9th, and 12th grade teachers.

All four groups evidence some agreement that the general goals of the project were met. Even more significantly, most respondents strongly agree that this program is necessary for all students. Concomitantly, they perceive the integrated instructional approach to be relevant to student needs.

Table 10

SUMMARY STATEMENTS TAKEN FROM SUPERINTENDENT LIKERT QUESTIONNAIRE

#	ITEM	N = 7 Mean
3.	The major purposes set forth for Career Education were adequately met during the school year.	2.43
11.	Career Education of this type should be made available to every student.	1.00
26.	Helping students to appraise their abilities, interests and potentials is an important part of Career Education.	1.43
27.	Instruction in Career Education is relevant to the needs of students at this level.	1.80

SUMMARY STATEMENTS TAKEN FROM PRINCIPAL LIKERT QUESTIONNAIRE

#	ITEM	N = 24 Mean
3.	The major purposes set for the Career Education were adequately met during the school year.	2.85
11.	Career Education of this type should be made available to every student.	2.10
26.	Helping students to appraise their abilities, interests and potentials is an important part of Career Education.	1.55
27.	Instruction in Career Education is relevant to the needs of students at this level.	2.35

Table 11

SUMMARY STATEMENTS TAKEN FROM 3rd & 6th GRADE TEACHER QUESTIONNAIRE

ITEM	High N	High Mean	Low N	Low Mean
The major purposes set forth for Career Education were adequately met during the school year.	78	2.73	66	3.58
Career Education of this type should be made available to every student.	80	2.10	66	2.05
Helping students to appraise their abilities, interests and potentials is an important part of Career Education.	75	1.59	63	1.82
Instruction in Career Education is relevant to the needs of students at this level.	75	2.25	64	2.61

Table 12

SUMMARY STATEMENTS TAKEN FROM 9th & 12th GRADE TEACHER QUESTIONNAIRE

ITEM	High N	High Mean	Low N	Low Mean
The major purposes set forth for Career Education were adequately met during the school year.	118	2.55	128	2.86
Career Education of this type should be made available to every student.	118	1.89	127	1.97
Helping students to appraise their abilities, interests and potentials is an important part of Career Education.	118	1.58	128	1.69
Instruction in Career Education is relevant to the needs of students at this level.	117	1.87	128	2.09

Product Dimension

Consonant with nine product goals and their attendant objectives, the following summative categories or research questions have been generated by the evaluators so as to present the data in a meaningful form. The categories established relate specifically to the three developmental phases (i.e., Career Awareness, Exploration, and Preparation). It was determined that the stated objectives are congruent with each of these categories. Furthermore the evaluators determined that being bound explicity to the objectives which are stated in a rather philosophical and non-quantifiable context might prove awkward and necessitate a complicated analysis possibly obscuring the presentation of findings.

Each of the categories subsumes the product goals and objectives to which it most closely relates. This allows for subsequent ease of reference in the presentation of conclusions about the product goals and objectives.

Category A: Increase Career Awareness

Each of the following items within this category relate to all of the four grades identified for assessment in this report. Naturally, the expectation is that students in the 9th and 12th grades should evidence increased depth of awareness.

All Students: (Increased depth with age level)

1. More familiar with variety of work roles
2. More knowledgeable about why people work
3. More positive attitude about the value and dignity of work
4. Consideration of information about self (attitudes, desires, interest, (abilities)
5. Consideration of difference in work roles (work settings, job requirements, etc.)
6. Consideration of availability of jobs and educational programs (occupational outlook, finances, personal perferences)
7. Consideration of influence of significant others

GRADE LEVEL: 3rd GRADE

1. Familiarity with variety of work roles. The third grade sample chosen for this evaluation consisted of eight randomly - selected classes in the region for a total of 166 students. There were 91 high or experimental students and 75 low or control students. The CEQ Cognitive and Affective instruments were administered to each student in the sample with the following results.

Regarding the assumption that high participating students should be more familiar than their control counterparts with work roles, the evaluators found that the total scores on the cognitive instrument for the high group (N = 91), (P = .095) were not significantly different than those of the low (N = 75). These results puzzled the evauators and led to a further analysis of items on the test. It should be remembered that the CEQ Cognitive Test had to be hand-scored and it was not possible to factor analyze or compute statistic significance tests for each and every item, given the large sample. Instead ERFS performed a random item frequency of two groups (1 high and 1 low) and found that students generally missed the exact same items which leads the evaluators to believe that the data as presented is correct --that being the case that there is no significant difference between the 2 groups on this 3rd grade level cognitive instrument. Concerning the difference between the two groups on the related 13 items in the CEQ Affective instrument it was discovered that one item (#41) was highly significant, that three items were significant (#s 18, 21, 45) and one item (#13) tended towards significance. See Table 13 for complete list of items.

	ITEM	LEVEL OF SIGNIFICANCE
13	Awareness of Where People Work	.056
18	Interest In Talking To Workers	.03
21	Interest In Worker Income	.03
41	Thinking About Work and Career Preparation	.009
45	Work Re-location For Job Satisfaction	.011

It should be noted that item 41 is expressly related to the essence of the research question posed herein: familiarity with work and career awareness.

2. Knowledge about why people work. The Cognitive CEQ contained no items which relate to this area. The affective part of the CEQ contained three items which allowed the evaluators to test the question of significant differences between high and low groups. Two of these items (#s 12 and 27) were significant for the high group (.016 and .03 respectively). These items concerned students' attitudes toward working for pay and the importance of some workers in relation to others. The other item (#25) which probed the respondents' views about a person's need to have money to spend was not significant (.29). The reader is also referred to item 21 above which is significant and concerns this classification.

3. Positive attitude about the value and dignity of work. All data related to this classification are based on 22 items in the Affective CEQ. Four of those items (#s 14, 16, 47, and 50) were positively significant at the .05 level or better for the high group. Three items (#s 17, 38, and 40 favoring the low group) were significant in the opposite direction. Two other items tended toward significance for the high group (#s 36 and 49). Thirteen items failed to obtain significance (#s 2, 3, 4, 20, 22, 26, 28, 31, 34, 35, 39, 43, and 48). The significant items for the high group are depicted below and the reader is directed toward Table 13 for a complete item list.

	ITEMS (Attitudes)	LEVEL OF SIGNIFICANCE
14	Completion of Work	.007
16	Un-compensated Work (At Home)	.009
17	Wasting Time After School	.002 (low group)
38	Reward For Hard Work	.008 (low group)
40	Workers May Skip Work	.029 (low group)
47	All workers Are Important	.032
50	Jobs Make People Happy	.037

The four items significant for the high group seem to suggest that the students understand the importance of work and realize some fundamental characteristics of worker psychology.

4. Consideration of information about self. The Affective CEQ contained nine related items, of which only two (#s 8 and 15) were significantly different. In each case, the low group obtained more scores in the favorable direction than did the high group. However, the high group had scores on two other items (#s 9 and 32) which tended towards significance in the expected direction.

	ITEM	LEVEL OF SIGNIFICANCE
8	Being Told Your Work Is Good	.003 (low group)
9	Working With Peers	.085 (high group)
15	Learning About What You Like To Do	.026 (low group)
32	Comparisons With Others To Choose Appropriate Occupation	.061 (high group)

5. Consideration of difference in work roles. Three items on the attitudinal instruments were related to this area. Item 27 obtained significance at .03 level of significance for the high group, and items 30 and 32 were not significant.

6. Consideration of availability of jobs and educational program: No items correlated with the area.

7. Consideration of influence of signifcant others. One item related to this classification: #23 (listening to people talk about their jobs), which was not significant.

TABLE 13
3rd GRADE AFFECT LEVELS OF SIGNIFICANCE
BY QUESTION

Part One

Question No.		N High	N Low	(1) High Mean	(2) Low Mean	Level of Significance
#1		91	74	1.076	1.108	.249
#2		91	74	1.604	1.635	.344
#3	(A-1)	91	74	1.593	1.743	.021
#4		91	74	1.098	1.135	.239
#5		91	74	1.285	1.263	.379
#6		91	74	1.054	1.027	.182
#7		91	74	1.043	1.068	.253

Part Two

Question No.	Cat.+	N High	N Low	(1) High Mean	(2) Low Mean	Significance
#1	A-1	91	74	1.340	1.391	.260
#2	A-3	91	75	1.252	1.186	.181
#3	A-3	90	75	2.800	2.720	.141
#4	A-3	91	78	1.824	1.833	.470
#5	A-5	91	74	2.736	2.851	.046
#6	A-1	91	75	1.384	1.413	.363
#7	A-1	91	75	1.384	1.426	.331
#8	A-4	91	75	1.076	1.000	.003
#9	A-4	91	76	1.109	1.197	.085
#10	A-4	91	75	1.494	1.394	.154
#11	A-3,4	91	80	2.901	2.880	.365
#12	A-2	91	75	1.065	1.187	.016
#13	A-1	91	76	1.340	1.466	.056
#14	A-3	91	74	2.780	2.526	.007
#15	A-4	91	74	1.164	1.054	.026
#16	A-3	91	72	2.087	2.364	.009
#17	A-3	91	75	2.296	2.597	.002
#18	A-1	91	73	1.252	1.400	.030
#19	A-4	91	74	2.065	2.178	.175
#20	A-3	91	73	1.054	1.054	.492
#21	A-1,2	91	74	1.406	1.561	.038
#22	A-3	91	74	1.032	1.013	.201
#23	A-7	91	74	1.483	1.513	.375
#24	A-4	91	74	2.439	2.459	.431
#25	A-2	90	74	1.466	1.405	.295

+Refers to Research Category A and attendant items.

3rd GRADE AFFECT LEVELS OF SIGNIFICANCE
BY QUESTION (Cont.)

Part Two Question No.	Cat.	N High	N Low	(1) High Mean	(2) Low Mean	Level of Significance
#26	A-3	91	74	1.142	1.148	.463
#27	A-2,5	91	74	1.494	1.716	.030
#28	A-3	91	74	1.296	1.243	.396
#29	A-1	92	74	1.173	1.135	.266
#30	A-1,5	91	74	1.197	1.243	.259
#31	A-3	91	74	1.593	1.540	.331
#32	A-4,5	91	73	1.329	1.479	.061
#33	A-4	91	73	1.329	1.356	.386
#34	A-3	91	74	2.659	2.648	.462
#35	A-3	91	75	2.714	2.760	.302
#36	A-3	91	75	1.032	1.106	.066
#37	A-4	90	73	1.166	1.136	.326
#38	A-3	91	74	1.351	1.162	.008
#39	A-3	91	75	2.208	2.080	.166
#40	A-3	91	75	2.655	2.840	.029
#41	A-1	91	74	1.142	1.351	.009
#42	A-4	90	75	1.055	1.106	.141
#43	A-3	91	73	1.736	1.849	.199
#44	A-1	91	73	1.142	1.150	.453
#45	A-1	91	62	1.703	1.435	.011
#46	A-1	91	75	1.021	1.000	.079
#47	A-3	91	77	1.087	1.220	.033
#48	A-3	91	74	1.043	1.067	.276
#49	A-3	91	75	1.054	1.120	.092
#50	A-3	92	74	1.141	1.270	.037

Additional Career Awareness Indexes

Another index to the product accomplishments within the third grade developmental phase of the project is the Teacher Opinion Survey (items 13-24 which probe teachers' perceptions about the effects of various career activities on their students). As completed by 66 third grade teachers, the instrument contained six items bearing some relationship to Career Awareness and its attendant content classifications. The items and mean scores per high and low groups are as follows:

THIRD GRADE TEACHER OPINION SURVEY
(1-5 SCALE WITH 1 STRONGLY AGREE AND 5 STRONGLY DISAGREE)

ITEM		Mean High Group	Mean Low Group
13	The student undertands, accepts, and relates himself/herself emotionally, mentally, and physically to his/her social, educational, and career ventures.	2.93	3.10
14	The student understands that there are certain physical, mental, and emotional characteristics which make him/her unique.	2.09	2.55
15	The student understands the importance of interpersonal interaction and its effect on others	2.29	2.71
17	The student is able to understand the value of school subjects in terms of their function within and outside the classroom.	2.40	2.67
21	The student is able to understand that there are physical, mental, and emotional aspects of work which may or may not be satisfying.	2.45	2.82
23	The student is able to recognize that jobs emerge and diminish because of the value society places on the resulting products and services.	2.74	3.10

Ther is an obvious consistent mean difference in favor of the high group in all 6 items. In addition to the pronounced agreement by this group on items 14 and 15, the relatively high agreement demonstrated for item 17 deserves particular attention. Similar to other items on other questionnaires used in this study, this item pertains to the relationship between career education and basic school subjects. The 3rd grade high participating teachers agree that this program has a positive effect on basic academic skill subjects. Table at the end of the Capter presents mean scores for all teachers per product item on this survey.

Grade Level: 6th Grade

Eight classrooms in the region were randomly selected and 193 students were administered the 6th grade CEQ Cognitive and Affective instruments. There were 92 high students and 101 low students. The results per research category are presented first for the cognitive instrument and then for the affective.

Cognitive Differences

1. Familiarity with variety of work roles. The cognitive CEQ contained two content classifications related to this area: (1) tools and equipment of an occupation and (2) identification of jobs and job clusters. Neither of these classifications attained a significant difference. (See Table).

2. Knowledge about why people work. The only CEQ classification for this area was Social Status. The low group obtained a better total score which was significant at the .032 level.

3. Positive attitude about the value and dignity of work. This is strictly an attitudinal area, and there are no related items for it on the cognitive CEQ.

Table 14

LEVELS OF SIGNIFICANCE OF 6TH GRADE STUDENTS; HIGH VS. LOW BY CONTENT CLASSIFICATION AS RELATED TO GOALS OF PROGRAM

Content/Class	Number of Students High	Number of Students Low	Mean of Students High	Mean of Students Low	Level of Significance
Tools & Equipment of an Occupation	92	101	3.40	3.39	.416
Identification of Jobs and Job Clusters	92	101	6.16	6.29	.359
Social Status	92	101	0.86	1.05	.032
Abilities & Duties Required	92	101	4.47	4.54	.390
Education & Training Requirements	92	101	11.00	11.12	.401
Working Conditions	92	101	7.21	7.96	.025
Industrial Trends	92	101	.88	.01	.115
Information Sources	92	101	1.25	.34	.189
Total	92	101	31.33	32.50	.152

4. Consideration of information about self. This area was probed on the cognitive CEQ in the form of one content classification: Work Abilities and Duties Required. However, no significant differences appeared.

5. Consideration of difference in work roles. Two content classifications are relevant to this area: (1) working conditions and (2) education and training requirements. The first classification was significant (.025) in favor of the low group; the second classification was not significant (.40).

6. Consideration of availability of jobs and educational programs. Industrial Trends and Information Sources were the two related classifications for this area. Neither attained significance.

7. Consideration of influence of significant others. No related content classification appears for this area in the cognitive domain.

The total CEQ cognitive score for all 6th grade respondents in high and low groups was not significant (.152). 3rd grade group differences are also shown below.

DIFFERENCE BETWEEN HIGH AND LOW 3rd GRADE COGNITIVE CEQ - TOTAL SCORE

No. High	No. Low	$\bar{X}$ High	$\bar{X}$ Low	Significance
91	75	29.05	29.89	.095

DIFFERENCE BETWEEN HIGH AND LOW 6th GRADE COGNITIVE CEQ - TOTAL SCORE

No. High	No. Low	$\bar{X}$ High	$\bar{X}$ Low	Significance
92	101	31.33	32.50	.152

Additional Career Awareness Indexes

Similar to measures incorporated in items for assessing the 3rd grade accomplishments, six items from the Teacher Opinion Survey were used to measure this category for the 6th grade. As completed by 48 high participating teachers and 38 low, the results for each item are as follows:

SIXTH GRADE TEACHER OPINION SURVEY
(1-5 SCALE WITH 1 = STRONGLY AGREE AND 5 = STRONGLY DISAGREE)

ITEM		High Group Mean	Low Group Mean
13	The student understands, accepts, and relates himself/herself emotionally, mentally, and physically to his/her social, eduational, and career ventures.	2.93	3.05
14	The student understands that there are certain physical, mental, and emotional characteristics which make him/her unique.	2.38	2.54
15	The student understands the importance of interpersonal interaction and its effect on others.	2.50	2.71
17	The student is able to understand the value of school subjects in terms of their function within and outside the classroom.	2.52	2.80
21	The student is able to understand that there are physical, mental, and emotional aspects of work which may or may not be satisfying.	2.34	2.65
23	The student is able to recognize that jobs emerge and diminish because of the value society places on the resulting products and services.	2.79	3.00

Again there is a consistent positive mean difference in favor of the high group. Items 21, 14, and 15 represent the highest agreement. Item 17 -- the integration factor -- obtained agreement also (2.52). Like their counterparts in the 3rd grade, the 6th grade high participating teachers exhibit fairly strong consensus about the effects of the project in the product context.

6th Grade Affective Classifications

The classifications for this area are identical to those presented earlier for the 6th grade cognitive.

Classification 1: Familiarity with Variety of Work Roles. Three of the 13 items in this class attained statistical significance in favor of the high students. Items 36, 41, and 42 concerned students' attitudes towards finding out where people work (.054); learning about jobs which they could do well (.018); and finding out more about what people do for a living (.055). These are central concepts in the career awareness developmental stage and augur well for the program. No items were significant in the opposite or low group direction.

Classification 2: More Knowledge About Why People Work. Three of the 10 items were significant: one for the high group and two for the low group. Item 40, learning how much workers get paid, was significant for the high group at the .005 level. Items 46 and 51 were significant at the .0001 and .012 level, respectively, and both dealt with the issue of working without remuneration.

Classification 3: Value and Dignity of Work. Of the 22 items in this area, five were significant, of which 2 were in favor of the high group. These two items, #s 58 and 60, concerned the rewards by employers for good work and the superiority of having a job to being unemployed (.025 and .044 respectively). The three low group items of significance (#s 13, 47, and 74 with .001, .005, and .012 significance levels (in that order) related to working diligently regardless of the task, the issue that work produces only fatigue, and the issue of tardiness with regard to work.

Classification 4: Information About Self. Of the 18 items here, 3 items gained significance: 2 for the low student group and 1 for the high. The low items are #s 19 and 23 on the CEQ Affective (.022 and .001 respective significance levels) pertaining to the issue of being corrected by a superior on any kind of work situation. The high group item probes the motivation of money to inspire work interests (#7, .0002)

Classification 5: Difference in Work Roles. Two of 6 items here were significant for the high student group: items 35 and 62 (.057 and .011 respectively). These questions probed the opportunities for handicapped to secure work and the methods by which one might obtain information about work roles.

Classification 6: Consideration of Availability of Jobs and Educational Programs. Three of 22 items attained significance: #s 45, (.035), 78 (.041), and 88 (.006). Two of the three questions were statistically in favor of the high group (#s 78 and 88) and related to the necessity of planning one's education to gain suitable employement and the importance of experiencing a real occupational situation before leaving school. Surprisingly, the low group demonstrated high agreement with a very similar issue in item 45 which dealt with planning and learning about careers.

Classification 7: Consideration of Influence by Significant Others. There were 2 high and 3 low group significant items out of 16 total questions. The low group items (#s 5 (.019), 10 (.011), and 22 (.018) concerned following employer's rules; having other people make decisions for one; and obeying instructions to perform a job. Numbers 18 (.006), and 25 (.011) evidence statistical difference for the high group on questions pertaining to acquaintance with knowledgeable career advisors and gaining respect of others for one's work accomplishments.

Table 15 below presents mean scores per high and low 6th grade student groups on the 105 - item CEQ Affective instrument.

Table 15

SIXTH GRADE AFFECTIVE LEVELS OF SIGNIFICANCE
BY QUESTIONS

Question No.	N High	N Low	Mean High	Mean Low	Level of Significance
A 1	95	99	1.14	1.17	.3389
A 2	95	100	1.22	1.16	.1487
A 3	93	100	1.87	1.55	.0016
A 4	95	98	2.15	2.25	.1887
A 5	91	98	1.92	1.70	.0193
A 6	94	100	2.78	2.85	.2066
A 7	95	100	1.08	1.29	.0002
A 8	95	100	1.41	1.32	.1455
A 9	95	100	1.16	1.25	.1120
A10	95	100	2.58	2.76	.0114
A11	95	100	1.11	1.08	.2262
A12	95	100	1.11	1.07	.1649
A13	95	100	1.58	1.35	.0013
A14	95	99	1.18	1.10	.0672
A15	95	100	2.75	2.83	.1617
A16	95	100	1.28	1.30	.4232
A17	95	99	1.23	1.19	.2742
A18	95	100	1.45	1.70	.0064
A19	93	99	1.63	1.42	.0222
A20	95	100	1.08	1.08	.4659
A21	95	100	1.25	1.25	.4854
A22	95	100	1.41	1.24	.0182
A23	95	98	1.64	1.27	.0001
A24	94	98	2.62	2.74	.0958
A25	94	100	1.39	1.62	.0109
A26	95	100	1.58	1.52	.2527
A27	95	99	1.34	1.31	.3433
A28	95	100	1.03	1.07	.1330
A29	95	99	1.16	1.21	.2462
A30	94	100	1.28	1.22	.1544
A31	95	99	1.34	1.33	.4304
A32	94	100	1.23	1.21	.3525
A33	95	100	1.24	1.14	.0550
A34	95	100	1.09	1.15	.1305
A35	94	97	1.78	1.95	.0572
A36	94	97	1.67	1.82	.0542
A37	93	99	1.59	1.60	.4408
A38	95	100	1.50	1.61	.1244
A39	93	99	1.46	1.43	.3797
A40	93	95	1.33	1.56	.0056
A41	95	98	1.06	1.17	.0183
A42	95	99	1.51	1.65	.0556
A43	94	100	1.25	1.19	.1812
A44	95	98	1.17	1.14	.2640
A45	95	100	1.47	1.33	.0349

SIXTH GRADE AFFECTIVE LEVELS OF SIGNIFICANCE
BY QUESTIONS (Cont.)

Question No.	N High	N Low	Mean High	Mean Low	Level of Significance
A46	94	99	2.03	2.45	.0001
A47	94	99	2.54	2.77	.0056
A48	93	99	1.23	1.26	.3080
A49	94	99	2.04	2.18	.1181
A50	95	100	1.33	1.26	.2155
A51	93	98	2.22	2.47	.0121
A52	94	98	1.45	1.56	.1137
A53	95	98	1.51	1.69	.0360
A54	95	100	2.56	2.62	.2627
A55	94	98	1.45	1.39	.2652
A56	92	100	1.18	1.21	.3448
A57	95	100	1.21	1.24	.3462
A58	95	100	1.51	1.69	.0250
A59	94	99	1.56	1.46	.1446
A60	94	100	1.28	1.44	.0441
A61	95	100	2.58	2.64	.2547
A62	95	100	1.24	1.43	.0113
A63	95	100	1.14	1.14	.4781
A64	94	99	1.30	1.31	.4303
A65	95	100	1.11	1.08	.2951
A66	95	100	1.27	1.29	.4172
A67	95	99	1.38	1.37	.4369
A68	93	99	1.25	1.15	.0723
A69	94	99	2.46	2.44	.4558
A70	95	100	2.64	2.66	.4251
A71	95	99	1.84	1.75	.1874
A72	93	97	1.34	1.42	.1708
A73	93	99	1.32	1.27	.2589
A74	93	100	2.25	2.48	.0123
A75	92	97	1.81	1.97	.1862
A76	93	99	1.31	1.26	.2639
A77	94	100	1.23	1.34	.1018
A78	94	100	1.40	1.58	.0410
A79	94	99	1.98	2.13	.0926
A80	88	96	2.09	2.13	.3923
A81	90	96	2.66	2.74	.1864
A82	92	100	2.47	2.62	.0748
A83	94	98	2.69	2.71	.4041
A84	94	98	1.44	1.42	.4293
A85	92	97	2.39	2.55	.0692

SIXTH GRADE AFFECTIVE LEVELS OF SIGNIFICANCE
BY QUESTIONS (Cont.)

Question No.	N High	N Low	Mean High	Mean Low	Level of Significance
A86	94	100	2.36	2.48	.1171
A87	93	100	1.34	1.38	.3366
A88	91	99	1.47	1.72	.0066
A89	94	100	1.20	1.23	.3292
A90	93	100	2.12	2.26	.1022
A91	94	98	1.60	1.59	.4823
A92	94	96	1.65	1.69	.3537
A93	92	98	1.95	1.95	.4875
A94	94	99	1.67	1.82	.0882
A95	94	98	1.18	1.19	.4251
A96	94	95	1.62	1.66	.3197
A97	93	100	1.51	1.59	.1748
A98	93	99	1.56	1.55	.4425
A99	93	97	1.63	1.61	.3942
A100	87	89	1.23	1.22	.4676
A101	94	99	1.28	1.19	.1215
A102	94	100	1.79	1.75	.3531
A103	93	100	1.57	1.58	.4582
A104	93	98	1.76	1.70	.2772
A105	92	100	1.74	1.62	.1277

Research Category B: Career Exploration and Preparation

The principal content classifications for this project category are Career Planning Orientation (scale A), Career Resources For Exploration (scale B), and Career Information and Decision-Making (scale C). These classifications are identical with the three scales used in the CDI instrument and are consistent with the general goals and objectives of the RESA V project (as stated in the Grant Proposal).

Specific instrument scoring directions and correlations between the 91 - items on the CDI and the instrument scales are contained in the Appendix B section of this report.

Administering the CDI. The instrument, which contains both attitudinal (Scales A and B) and cognitive (Scale C) sections, was given to 474 9th graders and 270 12th graders by means of the sampling method explained in Chapter II. The evaluators analyzed the accompanying demographic and factual information provided by each student and classified the inventories according to the number of high participating teachers whom each student had had for a class. A computer program was then written and the grades were treated separately with comparisons attempted between ranges of high participating teacher - students, i.e., those with one or more. More discrete comparisons were also made comparing students with no high participating teachers to those with 1 or more high teachers, 2 or more high teachers, 3 or more high teachers, 4 or more high teachers, 5 or more high teachers.

Another multi-comparison was run between students with none or one high participating teachers to chose with: 2 or more high teachers, 3 or more high teachers, 4 or more high teachers, and 5 or more high teachers.

Table 16

GRADE 9: COMPARISON PAIRS BY NUMBER OF HIGH PARTICIPATING TEACHERS

N of High Participating Teachers	N	Mean	S.D.	t-test of Significance
SCALE A				
0	44	94.04	19.94	
1+	696	101.51	19.11	.006
SCALE B				
0	44	248.28	61.72	
1+	696	249.08	49.13	N.S.*
SCALE C				
0	44	10.84	5.27	
1+	696	13.64	5.08	.0002
TOTAL				
0	44	353.15	77.01	
1+	696	364.24	62.19	N.S.
SCALE A				
0	44	94.04	19.94	
2+	552	102.40	18.67	.002
SCALE B				
0	44	248.28	61.72	
2+	552	252.30	48.90	N.S.
SCALE C				
0	44	10.84	5.27	
2+	552	14.01	4.98	.0001

* N.S. = No Significance

TOTAL

0	44	353.15	77.01	
2+	552	368.71	61.14	.056

SCALE A

0	44	94.04	19.04	
3+	325	101.11	18.78	.01

SCALE B

0	44	248.28	61.72	
3+	325	249.35	48.63	N.S.

SCALE C

0	44	10.84	5.27	
3+	325	13.91	4.80	.0001

TOTAL

0	44	353.15	77.01	
3+	325	364.36	59.66	N.S.

SCALE A

0	44	94.04	19.94	
4+	230	102.45	19.00	.004

SCALE B

0	44	248.28	61.72	
4+	230	251.00	49.52	N.S.

SCALE C

0	44	10.84	5.27	
4+	230	13.88	4.85	.0004

TOTAL

0	44	353.15	77.01	
4+	230	367.34	60.55	.087

SCALE A

0	44	94.04	19.94	
5+	169	102.85	17.98	.0025

SCALE B

0	44	248.28	61.72	
5+	169	253.71	50.68	N.S.

SCALE C

0	44	10.84	5.27	
5+	169	13.96	5.18	.0002

TOTAL

0	44	353.15	77.01	
5+	169	370.52	61.41	.057

SCALE A

0 and 1	198	96.92	20.50	
2+	552	102.40	18.67	.005

SCALE B

0 and 1	198	238.38	51.76	
2+	552	252.29	48.90	.001

SCALE C

0 and 1	198	11.89	5.26	
2+	552	14.01	4.98	.0001

TOTAL

0 and 1	198	347.19	67.02	
2+	552	368.71	61.14	.0001

SCALE A

0 and 1	198	96.92	20.50	
3+	325	101.11	18.78	.01

SCALE B

0 and 1	198	238.38	51.76	
3+	325	249.35	48.63	.008

SCALE C

0 and 1	198	11.89	5.26	
3+	325	13.91	4.80	.0001

TOTAL

0 and 1	198	347.19	67.02	
3+	325	364.36	59.66	.0016

SCALE A

0 and 1	198	96.92	20.50	
4+	230	102.45	19.00	.0021

SCALE B

0 and 1	198	238.38	51.76	
4+	230	251.00	49.52	.0052

SCALE C

0 and 1	198	11.89	5.26	
4+	230	13.88	4.85	.0001

TOTAL

0 and 1	198	347.19	67.02	
4+	230	367.34	60.55	.0006

SCALE A

0 and 1	198	96.92	20.50	
5+	169	102.85	17.98	.0017

SCALE B

0 and 1	198	238.38	51.76	
5+	169	253.71	50.68	.0022

SCALE C

0 and 1	198	11.89	5.26	
5+	169	13.96	5.18	.0001

TOTAL

0 and 1	198	347.19	67.02	
5+	169	370.5]	61.41	.0003

SCALE A

0 and 1	198	96.92	20.50	
6+	116	102.83	19.37	.0062

SCALE B

0 and 1	198	238.38	51.76	
6+	116	253.43	52.39	.0069

SCALE C

0 and 1	198	11.89	5.26	
6+	116	13.22	5.06	.0147

	TOTAL		
0 and 1	347.19	67.02	
6+	369.48	63.77	.0020

This data demonstrates that those 9th grade students with none or one high participating teacher when compared to any group above them (2+, 3+, 4+, 5+, and 6+) are significantly lower by mean CDI score on all 3 scales. Correspondingly, the same treatment was performed on the 12th grade data with the following results:

Table 17

GRADE 12: COMPARISON PAIRS BY NUMBER OF HIGH PARTICIPATING TEACHERS

N of High Participating Teachers	N	Mean	S.D.	t-test of Significance
	SCALE A			
0	112	106.48	20.90	
1+	391	107.14	21.59	N.S.
	SCALE B			
0	111	240.33	60.61	
1+	389	233.55	63.06	N.S.
	SCALE C			
0	112	12.06	8.76	
1+	391	12.18	8.22	N.S.
	TOTAL			
0	111	359.20	83.09	
1+	389	353.07	82.24	N.S.

SCALE A

0	112	106.48	20.90	
2+	267	105.74	20.93	N.S.

SCALE B

0	111	240.33	60.61	
2+	265	226.09	66.77	.0225

SCALE C

0	112	12.06	8.76	
2+	267	10.76	8.83	N.S.

TOTAL

0	111	359.20	83.09	
2+	265	342.84	87.04	.0438

SCALE A

0	112	106.48	20.01	
3+	168	109.40	21.27	N.S.

SCALE B

0	111	240.33	60.61	
3+	166	252.56	58.06	.0462

SCALE C

0	112	12.06	8.76	
3+	168	15.23	6.70	.0003

TOTAL

0	111	359.20	83.09	
3+	166	377.68	74.95	.0303

SCALE A

0	112	106.48	20.90	
4+	105	109.70	21.53	N.S.

SCALE B

0	111	240.33	60.61	
4+	103	250.50	63.17	N.S.

SCALE C

0	112	12.06	8.76	
4+	105	14.13	7.42	.0305

TOTAL

0	111	359.20	83.09	
4+	103	375.13	30.84	.0783

SCALE A

0	112	106.48	20.90	
5+	45	109.25	20.92	N.S.

SCALE B

0	111	240.33	60.61	
5+	44	240.82	67.10	N.S.

SCALE C

0	112	12.06	8.76	
5+	45	12.47	9.14	N.S.

TOTAL

0	111	359.20	83.09	
5+	44	363.22	88.72	N.S.

		SCALE A		
0 and 1	244	108.87	21.88	
2+		105.74	20.93	.0500
		SCALE B		
0 and 1	243	245.05	55.10	
2+	265	226.09	66.77	.0002
		SCALE C		
0 and 1	244	13.66	7.41	
2+	267	10.76	8.84	.0001
		TOTAL		
0 and 1	243	367.75	73.95	
2+	265	342.84	87.04	.0002

		SCALE A		
0 and 1	244	108.87	21.88	
3+	168	109.40	21.27	N.S.
		SCALE B		
0 and 1	243	245.05	55.10	
3+	166	252.56	58.06	N.S.
		SCALE C		
0 and 1	244	13.66	7.41	
3+	168	15.23	6.70	.0133
		TOTAL		
0 and 1	243	367.75	73.95	
3+	166	377.68	74.95	N.S.

		SCALE A		
0 and 1	244	108.87	21.88	
4+	105	109.70	21.53	N.S.
		SCALE B		
0 and 1	243	245.05	55.10	
4+	103	250.50	63.17	N.S.
		SCALE C		
0 and 1	244	13.66	7.41	
4+	105	14.13	7.42	N.S.
		TOTAL		
0 and 1	243	367.75	73.95	
4+	103	375.13	80.84	N.S.

		SCALE A		
0 and 1	244	108.87	21.88	
5+	45	109.25	20192	N.S.
		SCALE B		
0 and 1	243	245.05	55.10	
5+	44	240.82	67.10	N.S.
		SCALE C		
0 and 1	244	13.66	7.41	
5+	45	12.47	9.14	N.S.
		TOTAL		
0 and 1	243	367.75	73.95	
5+	44	363.22	88.72	N.S.

Successive treatments (6+, 7+, etc.) yielded no significant differences in the 12th grade population.

The only significant comparisons in the positive direction is the comparison between those 12th grade students with no high participating teacher and the group with 3 or more high participating teachers.

Other Indexes

Certain items on the Teacher Opinion Survey as completed by 9th and 12th grade teachers provide a useful index to the product effects of career exploration and preparation of the program. These items and their mean ratings are as follows:

Table 18

9th AND 12th GRADE TEACHER OPINION SURVEY
(1-5 SCALE WITH 1 = STRONGLY AGREE AND 5 = STRONGLY DISAGREE)

	ITEM	9th Grade $\bar{X}$ High	9th Grade $\bar{X}$ Low	12th Grade $\bar{X}$ High	12th Grade $\bar{X}$ Low
16	The student is able to plan his/her chosen career and progress within the career or change the direction of his/her career if necessary or desirable.	2.80	2.95	2.72	2.57
18	The student is able to comprehend the diversity and complexity of educational alternatives in relationship to a change in the job market, society, and self.	2.85	2.98	2.82	2.93
19	The student is able to function in the performance of decision-making and work adjustment processes.	2.95	2.84	2.86	2.93
20	The student is able to apply educational skills in the planning and preparation for entry into the career world.	2.47	2.76	2.50	2.67

22	The student is able to comprehend the diversity and complexity of work alternatives both available and appropriate to him/her in the present and future.	2.67	2.85	2.64	2.75
24	The student is motivated toward, pursues, and becomes employed in constructive work.	2.90	2.82	2.64	2.70

In this table, it is especially interesting to observe the difference in the mean scores for both 9th and 12th grade group responses as they relate to items 20 and 22. Two central program concepts are at stake here: the relationship and application of career education with academic preparation and the ability of students in such a program to understand the diversity of occupational opportunities in the adult world. Also item 18 probes a related issue of the diversity of educational alternatives in modern society and speaks well for the project.

CHAPTER 4

CONCLUSIONS

The evaluators utilized a CIPP evaluation model to generate major conclusions and recommendations for central decisions about project continuation and/or transportability to other areas. The CIPP model contains four major porgram components or decision modes, each of which could in itself be an evaluation model. Taken as a whole, the model becomes a cyclical or cybernetic paradigm as explained below.

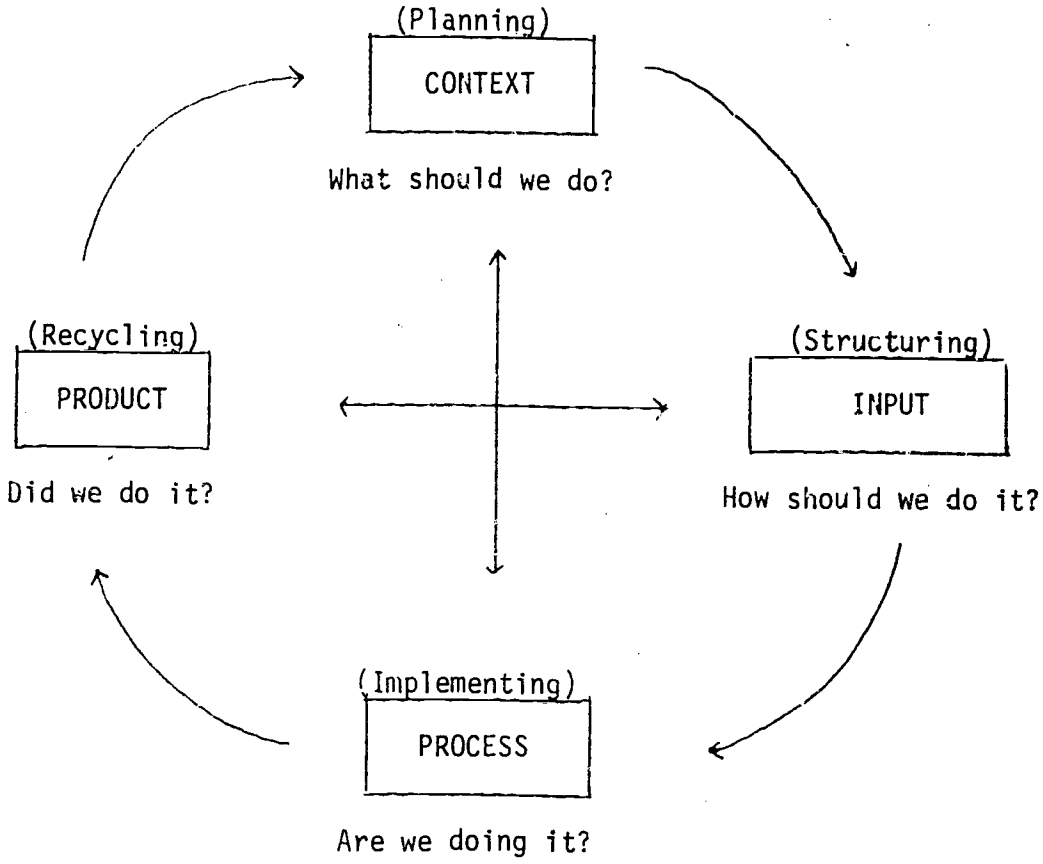


Figure II
CIPP-Model*

*Stufflebeam, Daniel I., et al., Educational Evaluation and Decision Making (F. E. Peacock Publishers, Inc., Itasca, Ill., 1971).

The context mode as a planning function focuses on the status of program goals, objectives, needs, and target groups served in relation to the overall impact of the program. By means of an assessment of the degree of fit between impact and program aims, program decision-makers may decide to initiate changes on a contingency or congruency basis, i.e., based on future needs or current needs.

The following conclusions about the context dimension take their form from the above CIPP Classification and relate specifically to the general RESA V career education program needs, goals, and objectives. These context elements were set forth rather explicitly by the project planners and administration in the Grant Proposal. The need for such a program was predicated on the desire of the State Department of Education to establish a multi-county or regional career education program within a pre-existing and viable educational structure. The program would hopefully magnify the accomplishments of the Lincoln County (W.Va.) program, which had been diagnosed as having been extremely effective. Further, the need for a career education program to serve a broad constituency in the state was based on several demographic factors: the most important of which was graphic population decline during the preceding decade (6.2% in the 1960's) which prompted concern and a desire to erect a social and educational plan for improving direct services to potential emigrants.. "In order to reverse the trend of outmigration a substantial program of economic development is mandated with corresponding emphasis in the provision of public education and other human development services for residents of the State." The establishment of career education programs would be aimed at providing relevant educational services to improve the future social and economic prospects of young West Virginians and, in the process, arrest out-migration.

Attendant to these needs, the major purpose of the project was to establish a K-14 career-oriented educational program incorporating occupational and guidance and counseling services in cooperative work experience programs. An extremely strong attribute of the RESA V career education project was the high degree of cooperation among representatives of the State Department of Education, the project director and staff, county school officials, business and industry, teachers and students, and other private and parochial sectors.

However, the weakest area within the context mode concerns the development of objectives. The stated process and product objectives arise from needs and goal statements, but are typically non-quantifiable and vaguely descriptive of intended outcomes. Program objectives should incorporate seven indexes for eventual monitoring. They should specify: (1) the population to be measured; (2) the behavior being measured; (3) the specific time frames and schedule of intermediate monitoring; (4) expected outcomes; (5) percentage expected to achieve objectives: (6) methods of measurement or how the behaviors will be assessed; and (7) when the measurement will take place.

The evaluators found themselves confronting a project whose objectives were conspicuously lacking each of the above 7 indexes. Thus, it was not possible to evaluate the project according to a proper sequence and behavioral blueprint for specific activities, particularly guidelines for expected student outcomes or measurables changes in process implementation. There was no way to identify the relationship between teacher processes or behaviors and specific expected student outcomes. How would one ascertain whether an accomplished student outcome (e.g. awareness of the dignity of work) was the product of a particular teacher's classroom performance?

*As quoted in the Grant Proposal, p. 3.

In sum, the project was not established to permit its decision-makers the opportunity to compare the stated goals with specific consequences or impact of the venture, so as to, in turn, effect necessary contingency or congruency changes in relation to future or current needs, trends, dysfunctions, accomplishments, and the like.

The input mode consists of examining the operationalization of goals as they have been clarified or at least pinpointed by the context evaluation. This dimension focuses directly on the means by which broad aims are implemented. The means are comprised of such functions as feasibility of operations, availability of proper strategies, utilization of staff, scheduling of activities, and incorporation of outside resources.

The major inputs for this project are summarized in Chapter 1. The principal strategy was to direct program implementation at the central regional office and extend coordination and facilities through 3 field coordinators who worked directly in assigned counties with local administrators, teachers, and other personnel. The implementation was phased over a 3-year period including orientation, training, and maintenance sequences for teachers and administrators. The significant avenues of orientation and training were workshops and in-services conducted on a regional, county, and school basis. Appropriate curriculum and training materials were disseminated at these sessions and were made available also to each teacher by the field coordinators. Moreover, the plan called for establishing career education resource/learning centers in each school. A sample log of project input education activities illustrates the range and extent of these implementation efforts.

Results and accomplishments of the project: 1973-74*

1. Total number of workshops held with educational personnel in Region V were 34.

2. Total number of conferences held with educational personnel in Region V i.e., teachers, principals and counselors were 907.

3. Total number of counties in which task forces have been organized in Region V were 7.

4. Total number of task force meetings held and conferences with task force members in Region V were 76.

5. Total number of career education curriculum units delivered to professional personnel in Region V were 555.

6. Total number of video taping sessions held in Region V were 10.

7. Total number of persons successfully completing Marshall University curriculum development class (VTE 582) were 193.

8. Total number of persons successfully completing Marshall University practicum (VTE 579) were 60.

9. Total number of mobile unit visitations made in Region V were 32.

10. Total number of professional conferences held outside of Region V were 4.

11. Total number of on-site visits to career related facilities in Region V were 14.

12. Total number of material displays held in Region V were 7.

13. Total number of teacher observations held in Region V were 168.

14. Total number of field trip participants in Region V were 4.

15. Total number of talks to community organizations in Region V were 5.

16. Total number of business and industry meetings in Region V were 4.

17. Total number of contact person conferences held in Region V were 19.

18. Total number of slides and pictures taken in Region V were 152.

19. Total number of news releases, radio and television activities in Region V were 20.

*Yearly Report, 1974, pp. 4-5, 31-35.

20. Total number of audio visual presentations in Region V were 5.

21. Total number of superintendent conferences held in Region V were 13.

Other activities:

Career Guidance Institude, Fairmont, West Virginia
WVPGA, Cedar Lakes, West Virginia
World of Work Conference, Morgantown, West Virginia
Career Education Implementation Workshop at Cedar Lakes, Blackwater Falls, and Beckley, West Virginia
Tour of Pittsburgh, Pennsylvania Vocational Technical Schools
Career Education Institute for Principals, Parkersburg, West Virginia
Meeting with third party evaluation participants
Career Day at St. Marys High School, St. Marys, West Virginia
Career Exposition
Meeting with Gary Little, Community Action representative in Parkersburg, West Virginia
Meeting with James Halterman, Youth Coordinator of Community Action in Harrisville, West Virginia
Meeting with Department of Employment Security, Jackson County

Results and accomplishments of the project: 1973-74*

The majority of persons contacted have been receptive to the concept of career education.

The career education curriculum units developed by the Region V VTE 582 class participants have been evaluated by professionals at the state and university levels and found to be of excellent quality.

Business and industry have been very receptive to working cooperatively with schools in career education.

Parents and students particularly have given enthusiastic support to the career education movement.

Approximately $11,000.00 worth of new materials, including films, filmstrips, cassettes, posters, kits, and curriculum resource guide materials have been purchased and made available to teachers involved in career education in Region V.

A tremendous amount of positive response has been received from teachers, counselors and administrators toward the new career education materials.

A tremendous amount of positive response has been received in association with the principals' institute.

Field testing conducted as part of the third party evaluation has been completed.

No significant findings can be reported at this time, however, within two months evaluation data from the third party evaluation will be available for analysis.

Practicum (VTE 579) was completed with all sixty participants meeting performance criteria.

Review and survey of available career education literature (local and national). The staff visited the National Clearinghouse on the Career Education at Ohio State University.

Reviewed project goals and established priorities for staff members.

Wrote suggested activities which could be used in meeting the goals outlined in the project.

Designed and planned brochure for promotional and dissemination purposes.

Negotiated agreement with Marshall University for Professional Development classes in Career Education offered in Region V.

Made personal visits to all County Superintendents involved in the Region V project. The purpose of the visitation was to arrange for time to present the new Region V project to all county professional personnel.

The orientation presentation was made to approximately 2,000 professional personnel in Region V.

Participants were recruited for the Marshall classes through personal visits, telephone contacts, and group meetings. Four classes were arranged throughout the region with a total enrollment of approximately 174.

Contacts were made to set up county task force groups involving the seven areas set forth in the project proposal.

The project director attended a USOE regional meeting in Philadelphia, Pennsylvania to receive relevant information and material about part D projects.

Meetings were held with the Director of the Research Coordinating Unit based at Marshall University to write specifications for the RFP involving the third party evaluations for the project.

1. Teachers and administrators are willing to become involved in career education classes offered either as in-service or for university credit.

2. A tremendous increase in the availability of commercial career education materials is evident. (Using a timeline from July 1, 1973 to June 30, 1974).

3. Classroom teachers are using career education materials in the classroom both commercially and locally produced (i.e. career education project materials such as OEG-0-73-5295).

4. Those teachers and administrators who become involved in the actual process of developing and revising career education materials are more likely to be supportive of career education as evidenced by the principals' institute evaluation summary listed as Appendix G.

5. State Department of Education support has added a major emphasis to career education as evidenced by the number of requests for career education staff members presenting county wide teacher staff meetings.

6. The field coordinators by virtue of the personal contacts made at the local, administrative level, have stimulated an interest in career education concepts for teachers and administrators as evidenced by the number of requests made for materials and staff support after a school in-service presentation.

7. The use of a mobile unit carrying a large quantity and variety of commercial and project produced materials has stimulated increased interest in career education as evidenced by administrators requesting a visit from the mobile unit and the number of materials checked out for use by those teachers observing the materials on the unit.

8. The decentralization concept of having a field coordinator locally available and on call to teachers and administrators has proven very effective and is a more direct identification process than would be otherwise true if the field coordinator were located in a central office isolated from the local educational agencies.

LOG OF CAREER EDUCATION ACTIVITIES*

	July 1, 1974-June 30, 1975 Total Number of Activities
IN-SCHOOL ACTIVITIES	
A. Teacher Conferences	677
B. Teacher Visitations	293
C. Material Display	52
D. Material Delivery & Pickup	427
E. Field Trip Participants	8
F. Audio Visual Presentation	33
G. Program Taped	7
H. Slides, Pictures Taken	80
I. Mobile Unit Utilization	39
J. Principal Conferences	426
K. County Contact Person Conferences	98
L. Counselor Conferences	129
WORKSHOP IN-SERVICE ACTIVITIES	
A. Faculty Meetings	27
B. Curriculum Area Meetings	12
C. Countywide Teachers Assembly	5
D. County Principals Meeting	5
TASK FORCE	
A. Meetings Attended	25
B. Conferences With Members	122
COMMUNITY ACTIVITIES	
A. Talks to Community Organizations	4
B. Visiting Area Employers	20
C. Publicity (News Release, Radio, Television)	42
D. Talking With Employees	57

*Yearly Report, 1975, p. 123.

The evaluation staff is not in the position to offer major conclusions as they relate to the input mode. Substantive and quantifiable data for determining the successes and/or weaknesses of this mode require a comprehensive analysis of all procedures and activities since the inception of the project.

In lieu of this input evaluation, ERFS offers the following judgmental impressions. Implementation was retarded by the competition for teacher/administration participation by other programs and educational initiatives in the state. Secondly, the sequence developmental phasing (Orientation through Maintenance) depended heavily on the success of the local administrative involvement strategy: i.e., teachers must receive support, direction, and facilitation from their principals and central office administrators as they embark on an innovative instructional integration venture. The provision for this support may have accidentally occurred at times, but there are few visible traces of its being mapped out in advance or, more importantly, provided for on a continuing basis. The identification of county liaisons was anticipated, but there are no specific indications as to what effects such a relationship would have on energizing local administrative support.

More specific indexes to the progress of the project's implementation were secured through obtaining a register of viewpoints and attitudinal perceptions from participating personnel: superintendents, principals, and teachers.

As presented in Chapter III, the summary responses (pp. 68-70) from all three groups overwhelmingly endorse the assumption that the purposes, suitability, and relevancy to target groups of the career education program were effectively implemented. The conclusion from this collective agreement

is that, from the standpoint of many participants, the general means of operationalization are outstanding. At this vantage point, the conclusion might be further expressed to suggest that even in the absence of proper quantifiable objectives and implementation design, the program goals have been operationalized and its aims successfully adopted.

The process mode is similar to the input mode but relates more directly to periodic program decisions and specific functions in the delivery system, including monitoring and feedback capacities. Graphic instances as to the degree of success and/or failure in this mode are based on the data presented in Chapter III relating to specific items on Career Awareness, Exploration, and Preparation strategies as responded to by superintendents, principals, and teachers. Main conclusions result from an extrapolation of these data. (1) Career education awareness endeavors saturate the region. Even the low participating teachers are more than marginally involved and certainly aware, themselves, of particular strategies and activity options. This suggests that a "ripple effect" at the elementary level may be taking place with high participating teachers influencing their counterparts. In effect, the career education concept appears to have taken hold in the classrooms. (2) The high participating teachers evidence the conclusion that the greater the contact between coordinator and implementer, the higher the amount of involvement and participation by the teacher. The high groups (3rd and 6th grade) reported considerably more career education practices (see Tables 2 and 3) than did the low group of teachers. Therefore, direct contact with teachers is as equally critical as the mobilization of administrative support. (3) By inference, the cleavage of perception between principals and each of the other respondent groups (teachers and superintendents) as demonstrated on

the questionnaires would seem to suggest that communication among project staff, the superintendents, and the teachers may be responsible for the latter groups' endorsement of the program. The weak link may be the lack of systematic and prescribed channels of communication between the project and the principals, which is discussed under the input conclusion. In other words, the liaisons who represent extensions of the central office to each local administrator should provide the key link in the internal coordination of the program in each district. Gaps in this linkage may explain the otherwise inexplicable disparity of principals' perception as to the merits of most awareness activities. (4) The most graphic instances of the success of the career awareness goal are the inculcation of realistic career views and proper work attitudes in students and the integration of the approach with basic academic subjects, suggesting that in substance and form in the 3rd and 6th grades the project is attaining stupendous success.

Testimony to the effectiveness of career exploration and preparation strategies resides in the attitudinal perceptions proffered by these same respondents. There is consistency between the responses for 9th and 12th grade groups and elementary groups; that is, the superintendents and teachers reach a similar plateau of consensus about related functions and the principals evidence disparity. The activities more proper to these secondary developmental stages which exhibit singular effectiveness are provisions for first-hand knowledge of work, opportunities for exploration of careers, and application of career education to basic academic skills. One would have to conclude that the implementation of the project is aimed in the right direction expecially in so far as it has attracted prerequisite participation and support by chief administrators and teachers. The enigmatic incongruency of principals' perceptions

suggests again, that the project finds adoption at levels related to project staff priorities and efforts. Principals are in the middle and may have the least direct involvement in the venture.

The product mode serves to measure program attainments by focusing on the extent to which goals have been achieved. The product dimension also prepares the decision-maker for quality control and subsequent modifications in key areas of the context, input, and process modes. The consequences of a product assessment may take the forms of project termination, project continuation, or project modification.

In the career awareness state, it is possible to conclude that there were no significant cognitive gains for 3rd and 6th grade students selected for the sample tested on the CEQ cognitive instruments. In the affective awareness area, the array of positive attitudinal changes in students does not suggest that the high groups (3rd and 6th) have achieved more than the low groups.

Some items, however, are encouraging and may suggest that some major educational objectives fare better for the high groups. Particularly noteworthy is the instance of more student awareness of the variety of work roles. Moreover, it may be more important for the decision-makers to consider the relatively high mean scores attained by both groups of children, and to delight in the fact that awareness has been instilled, regardless of the structural contingencies.

The stages of career exploration and preparation yield somewhat similar conclusions. First of all, it appears that there is not a discernibly consistent difference in student CDI scores as related to the number of high participating

teachers that students encounter in the secondary school program in the region. Although significant differences were obtained for both 9th and 12th high groups at some point along the continuum (0 vs. 2+ for the 9th grade and 0 vs. 3+ for the 12th grade), a consistent pattern has not developed below or above these fixed intervals.

Therefore whatever gains occur-and there are some --for students, it is not statistically possible to attribute those gains directly to the precise number of high participating teachers. Rather, a quite confusing and sporadic array appears which obviates against ascribing significance to the relationship of teacher involvement to student career education performance.

CHAPTER 5

RECOMMENDATIONS

The following suggestions are intended for a wide audience of educators and administrators who may study this report for its implications on potential or already established career education programs in their locales. Concomitantly, the recommendations are formed logically from the conclusions and are further extended to translate into guidelines for transportability.

Context

It is recommended that a program of this type be conceptually structured with more precise behavioral objectives and that the relationship between process (learning activities) and product (learning outcomes) goals be made more direct and content-specific. Moreover, it is critical that baseline data on students as they proceed through the program be kept so as to provide periodic feedback about the adequacy of the goals and objectives. Too often, we arrive at the termination level of a project wishing that quantifiable baseline data had been gathered prior to the initiation or implementation of the project. Very often, the acquisition of such data can be included as a component of the needs assessment. More often than not, a third-party assessment is required at the culmination of these projects. A local agency is then faced with probably the most important decision concerning the project--continue, terminate, or modify. Without proper baseline data and continual monitoring and feedback, the third-party evaluation must be performed in vacuo, in an isolated and restricted context.

Input

Any career education project should be organized and planned to provide for an assessment of feasiblity of goals, determination of the availability of strategies to meet goals, analysis of costs and benefits of various strategies, the calculation of the probability of success based on past experiences and future trends, the understanding of the legal and moral implications of the strategies, a plan for staff utilization, a set of standard. for scheduling activities, and a provision for use and acceptance by outside resources.

The potential adoptor of a career education project has many educational alternatives or options for implementation, ranging from a school-specific model to a region or state-wide arrangement. Assessments which include the aforementioned input elements provide invaluable information to the potential implementer.

Process

The preeminent recommendations generated for this mode concern two conclusions highlighted in Chapter 5. It is strongly suggested that those charged with continuation of this project and implementers of future endeavors consider the residual effects of peer teacher influences in a school. In this project, it was discovered that a "ripple" or an apostolic effect may explain the accomplishments of the overall program. And future implementers would be well-advised to concentrate initially in the first year of development on building up a strong --even if numerically small --cadre of early adoptors in each school. It will, in all probability, be these adoptors who "sell" the program to others in their immediate environment and magnify its accomplishments.

It is also imperative to establish systematic links between program staff and local school administrators. Principals are key personnel for facilities and lend support to any innovative educational endeaver. Thus a precise job descritpion and set of expected accomplishments for each county liaison are critical. Otherwise the principal is too easily by-passed or, at worst, neglected entirely and thereby alienated.

Product

A product assessment is the means for providing quality control by decision-makers in monitoring the context, input, and process modes. Product measures must be performed regularly and systematically. If delay or inconsistency sets in, a goal may be already drifting too far away from its original axis of aim/intent. The result becomes one of discovering too late that certain plans, strategies, or procedures are not working well, after the project has gained too much momentum in an unintended direction. Efforts to steer it back to its original course are futile at this point.

To avoid this predicament, proper testing and securing of participant's perceptions should be undertaken regularly with predetermined instruments.

Coda

The reader should be left with a final impression about the essential nature of this program which will assist him in replicating a program of a similar nature. That impression is this: a sine qua non for successful development of a career education program is the provision for coordination among State Department of Education staff, central and local school administrators, implementers, representatives of business and industry, parents, students, university professors, and project staff. The RESA V project obtained this cooperation to a large degree, and its salient accomplishments are traceable directly to the harmonious integration of its planners, implementers,

consultants, and coordinators. It is recommended that potential adoptors examine this factor and analyze the underlying ingredients prompting its success.

Correspondingly, a RESA Agency provides the most advantageous structure for a career-oriented educational program which aspires to effect positive educational benefits for the children of a multi-county area. The capacities and expertise for program coordination, and follow-up, are characteristically the strong suites of a RESA Agency, such as RESA V. The evaluators strongly recommend that future developers of career education in West Virginia and states consider the immediate advantages to be gained by situating the program with a RESA or intermediate agency.

APPENDIX A

REGION V DEMOGRAPHY I

tutional capability to implement this model is not presently available. However, the construction of numerous area vocational-technical education centers across the state and the development of a state community college system will result in increased continuing education program capability with appropriate career education program emphasis.

The need for career oriented educational programs in West Virginia can be well documented during the decade of the sixties, the State lost 6.2 percent of its population with the population decline in some localities being even more severe. While some have pointed out that a declining population may be regarded as a desirable reaction to economic change - that population loss is an adjustment to a level that can be supported by the available economic base - there are important additional considerations. In order to reverse the trend of outmigration a substantial program of economic development is mandated with corresponding emphasis in the provision of public education and other human development services for residents of the State.[2]

The FY 72 CAMPS plan identifies the need to equip young people entering the work force with skills to enable them to compete in the job market as a priority for state manpower planning. A further priority identified in this plan relates to the need to arrest the out-migration of the states citizens in order that future economic development of the state will not be jeopardized. The

[2]John L. Mikesell, The Impact of Population Loss on Local Government Finances in West Virginia (Morgantown: Regional Research Institute, West Virginia University, 1972), pp.1-2.

prime target population in need of manpower services, according to the CAMPS plan, are young workers in the 16 to 24 age group category. Additionally, it is estimated that almost 82,000 individuals whose incomes are at or below the poverty level are in need of such services. Thus, implementation of a career oriented educational program model, with provisions for adequate services in relation to such needs, seems imperative to future social and economic development in the state.

The allocation of over $750,000 for support of career education programs in West Virginia and the experiences of these programs has stimulated a high level of interest on the part of local educational agencies throughout the state. The need to design specific strategies for facilitating career education program development throughout the state to meet this level of interest is apparent. Thus, this project is designed as a model for career education development on a regional basis for West Virginia. The need for a model of this type is amplified by an assessment of the state in regard to the availability of fiscal resources for developing career oriented educational programs on a statewide basis.

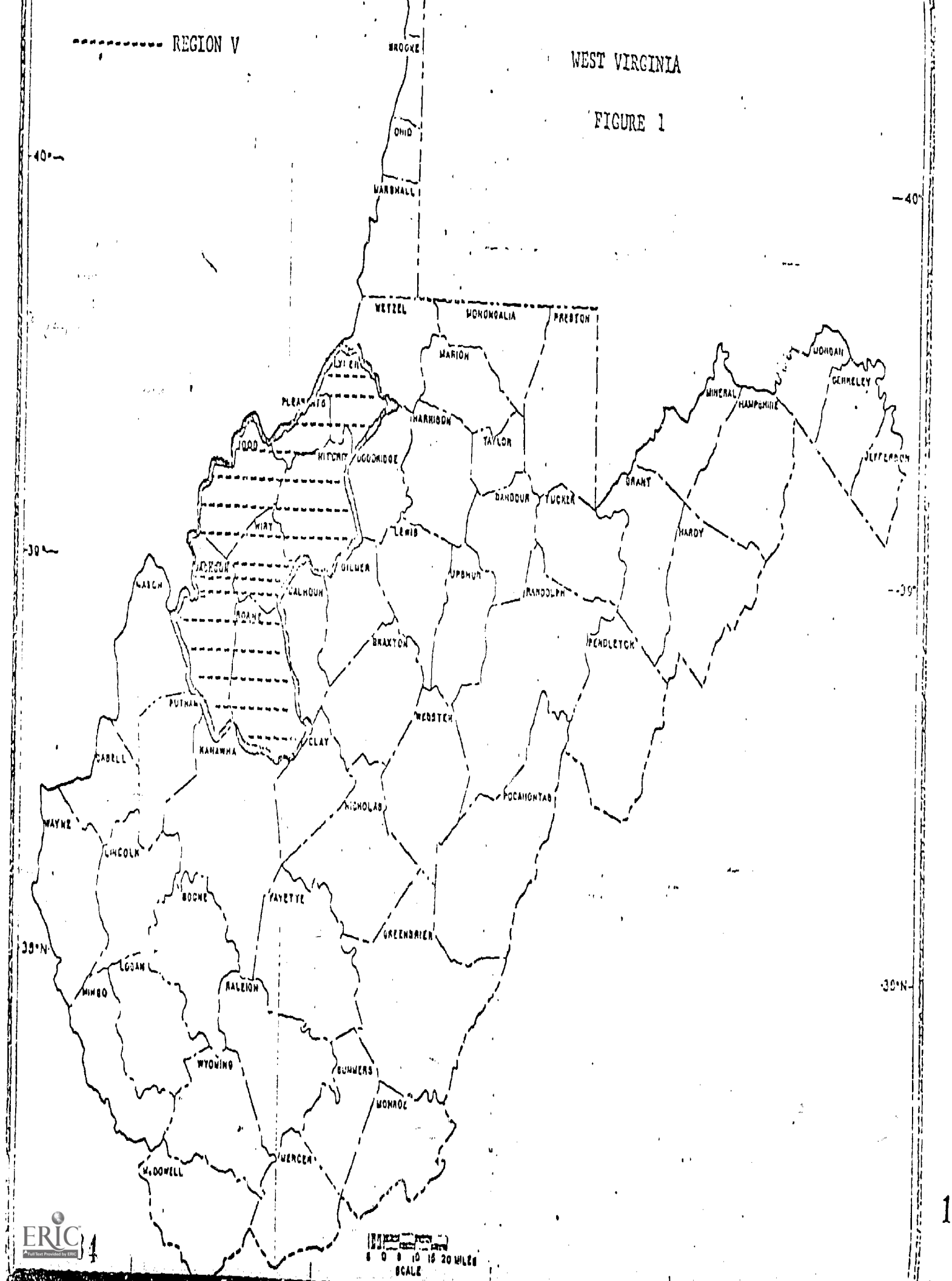
West Virginia school districts are organized on the county level with school system boundaries being concurrent with county lines. There are fifty-five county systems in the state, ranging in size from 1,130 students in grades 1-12 in Wirt County to 51,007 in Kanawha County, with a total state enrollment of 395,346 students in grades 1-12. (1971-1972 enrollment data). If available

resources are to be wisely utilized in order to gain the maximum impact, a program must be devised to move a number of counties toward a career oriented educational program on a simultaneous basis. This project constitutes the explication of such a plan and involves a Regional Education Service Agency in the establishment of such a program throughout a seven county area.

The geographic area to be served by the project lies in west central West Virginia and includes the counties of Jackson, Pleasants, Ritchie, Roane, Tyler, Wirt and Wood. The map on the following page outlines the boundary of the Region V Service Area, which was so approved under rules and regulations which were established by the State Board of Education.

The total population of the region, according to the 1970 Census, is 153,334. Information relative to population by county and density of population is as follows:

COUNTY	POPULATION	DENSITY PER SQUARE MILE
Wood	86,818	230
Jackson	20,903	44
Roane	14,111	29
Ritchie	10,145	22
Tyler	9,929	38
Pleasants	7,274	54
Wirt	4,154	18
Total for Region V	153,334	60
Total for West Virginia	1,734,237	72


REGION V
WEST VIRGINIA
FIGURE 1
BROOKE
OHIO
MARSHALL
WETZEL
MONONGALIA
PRESTON
MARION
TYLER
PLEASANTS
HARRISON
TAYLOR
WOOD
RITCHIE
DODDRIDGE
BARBOUR
TUCKER
GRANT
MINERAL
HAMPSHIRE
MORGAN
BERKELEY
JEFFERSON
WIRT
LEWIS
HARDY
JACKSON
GILMER
UPSHUR
RANDOLPH
CALHOUN
ROANE
BRAXTON
PENDLETON
PUTNAM
WEBSTER
KANAWHA
CLAY
CABELL
NICHOLAS
POCAHONTAS
WAYNE
LINCOLN
BOONE
FAYETTE
GREENBRIER
LOGAN
RALEIGH
MINGO
WYOMING
SUMMERS
MONROE
MERCER
MCDOWELL
40°
39°N
0 5 0 10 15 20 MILES
SCALE

Population density is greatest along the Ohio River industrial centers. Population growth in the 1960-70 period was noted in Wood, Jackson and Pleasants counties while the inland counties experienced a population loss. The black population is not large in the region, constituting only one percent of the total population, with the heaviest concentration being in Wood County.

The area is primarily rural non-farm. Manufacturing is the principal employer. Production includes metal, glass, clothing, chemicals and food produc Industry is concentrated along the Ohio River. Major industries in the area are Union Carbide, FMC Corporation, Quaker State Oil Refining, Corning Glass, American Cyanamid, DuPont, Borg-Warner, Carborundum Metals, Kaiser Aluminum, Ravens Metal Products and Textron Incorporated.

The labor force has increased during the past few years and is comprised primarily of men. This has resulted in a large untrained female work force.

In addition to public elementary and secondary schools, the area is served by a number of public and private schools. Wood County has a number of private elementary and secondary schools, the Parkersburg Community College and the Mountain State Business College. A beauty school is also located in Wood County. Glenville State College in nearby Gilmer County and Marietta College in Marietta, Ohio are within commuting distance of many students in the area.

Three new area vocational schools are being planned to serve the region. One, which is currently under construction, will service Jackson and Roane Counties. Another, in the advanced planning stage, would service Tyler, Pleasants and Ritchie Counties, while the design for a new facility located in Wood County is currently in the preliminary planning stage.

The completion of these facilities will greatly expand the number of secondary, postsecondary and adult vocational programs which are available in the area. Parkersburg Community College and the beauty school and business college in Parkersburg are additional sources of postsecondary career preparation program opportunities.

The school population of the counties in the area and the number of schools in each county are provided in the Tables on the following page. It may be noted that a total of 37,908 elementary and secondary school students reside in the Region V Regional Education Service Agency area.

The density of population in the area requires that the Regional Education Agency be service oriented in providing programs designed to affect broad areas of education for children throughout the region.[3]

The development of a program designed to provide occupational competency on the part of each student as he moves through the educational system is viewed as a priority item for improving education in the region. The model, which will be introduced

[3]Harry M. Laing for the Board of Directors, "A Proposal for the Establishment of the Regional Education Service Agency," September 29, 1972.

TABLE I

ELEMENTARY AND SECONDARY ENROLLMENT

	K	1-6	7-12	Total
Jackson	217	2,935	2,777	5,929
Pleasants	69	857	844	1,770
Ritchie	35	1,191	1,050	2,276
Roane	41	1,758	1,297	3,096
Tyler	40	1,373	956	2,369
Wirt	0	608	530	1,138
Wood	539	10,590	9,487	20,616
Parochial	29	298	387	714
TOTAL	970	19,610	17,328	37,908

TABLE II

NUMBER OF ELEMENTARY AND SECONDARY SCHOOLS

	Elementary	Secondary	Total
Jackson	16	3	19
Pleasants	3	1	4
Ritchie	7	2	9
Roane	10	2	12
Tyler	9	2	11
Wirt	6	1	7
Wood	42	10	52
Parochial	1	2	3
TOTAL	94	23	117

in this project, while realizing that the ideals of educational and occupational competency can never be fully met, provides the means through which the educational systems involved can become more responsive to this need.

The model and the program it will [illegible]der, will reflect the purpose and focus of Part D Exemplary Programs as provided in the Vocational Act Amendments of 1968. In so doing, it will enable the school systems involved to a) better bridge the gap between education and work, b) promote further cooperation between the educational systems involved and other manpower agencies, and c) broaden the educational experiences of youth in the region through creation of additional opportunities through which they may become educationally and occupationally competent.

APPENDIX B

SAMPLE COPIES OF EVALUATION INSTRUMENTS

SUPERINTENDENT OPINION SURVEY

Adapted from LeRoy A. Olson

This is not a test. There are no right or wrong answers. We are interested in your opinion about career education in your school. Information obtained during this survey will be reported on a regional basis only. No information about individuals, schools, or counties will be provided to Local, State, or Federal agencies. The information you provide will be kept strictly confidential.

Please respond to each of the statements I am about to read with:

STRONGLY AGREE
AGREE
NOT SURE
DISAGREE
STRONGLY DISAGREE

Your response should indicate your opinion about each statement.

1.	The purposes of Career Education were clear to me by the beginning of this school year.	1	2	3	4	5
2.	The purposes of Career Education appeared to be clear to most of the students.	1	2	3	4	5
3.	The major purposes set forth for Career Education were adequately met during the school year.	1	2	3	4	5
4.	The time we had allotted was sufficient to accomplish the purposes set forth for Career Education.	1	2	3	4	5
5.	Students gained first-hand knowledge of the world of work (field trips, resource people, etc.)	1	2	3	4	5
6.	Students were exposed to adequate hands-on experiences.	1	2	3	4	5
7.	Students explored their capabilities in various areas under a variety of situations pertianing to the world or work.	1	2	3	4	5

1 - [illegible]
2 - [illegible]
3 - [illegible]
4 - [illegible]
5 - strongly disagree

8. Students learned to self-appraise their strengths, potentials. 1 2 3 4 5

9. Equipment was adequate to accomplish the objectives of the Program. 1 2 3 4 5

10. Adequate materials and supplies were made available for the Program. 1 2 3 4 5

11. Career Education of this type should be made available to every student. 1 2 3 4 5

12. Students became aware of the factors that contributed to success in an occupation. 1 2 3 4 5

As a result of the Career Education Program:

13. The student understands, accepts, and relates himself/herself emotionally, mentally, and physically to his/her social, educational, and career ventures. 1 2 3 4 5

14. The student understands what there is to certain physical, mental, and emotional characteristics that make him/her unique. 1 2 3 4 5

15. The student understands the importance of interpersonal interaction and its affect on others. 1 2 3 4 5

16. The student is able to plan his/her chosen career and progress within the career or change the direction of his/her career if necessary or desirable. 1 2 3 4 5

17. The student is able to understand the value of school subjects in terms of their function within and outside the classroom. 1 2 3 4 5

18. The student is able to comprehend the diversity and complexity of educational alternatives in relationship to a change in the job market, society, and self. 1 2 3 4 5

19. The student is able to function in the performance of decision-making and work adjustment processes. 1 2 3 4 5

20. The student is able to apply educational skills in the planning and preparation for entry into the career world. 1 2 3 4 5

1 - strongly agree
2 - agree
3 - not sure
4 - disagree
5 - strongly disagree

21.	The student is able to understand that there are physical, mental, and emotional aspects of work that may or may not be satisfying.	1	2	3	4	5
22.	The student is able to comprehend the diversity and complexity of work alternatives both available and appropriate to him/her in the present and future.	1	2	3	4	5
23.	The student is able to recognize that jobs emerge and diminish because of the value society places on the resulting products and services.	1	2	3	4	5
24.	The student is motivated toward, pursues, and becomes employed in constructive work.	1	2	3	4	5
25.	Other teachers in this school have a favorable attitude toward Career Education.	1	2	3	4	5
26.	Helping students to appraise their abilities, interests and potentials is an important part of Career Education.	1	2	3	4	5
27.	Instruction in Career Education is relevant to the needs of students at this level.	1	2	3	4	5

The local project coordinators have provided assistance in:

28.	selecting appropriate instructional materials.	1	2	3	4	5
29.	identifying people and materials within the community as possible resources in the presentation of the Career Education Units	1	2	3	4	5
30.	coordinating and planning activities among teachers	1	2	3	4	5
31.	the actual presentation of the Career Education Units within the classrooms.	1	2	3	4	5

1 - strongly agree
2 - agree
3 - not sure
4 - disagree
5 - strongly disagree

8. Students learned to self-appraise their emerging potentials. 1 2 3 4 5

9. Equipment was adequate to accomplish the objectives of the Program. 1 2 3 4 5

10. Adequate materials and supplies were made available for the Program. 1 2 3 4 5

11. Career Education of this type should be made available to every student. 1 2 3 4 5

12. Students became aware of the factors that contributed to success in an occupation. 1 2 3 4 5

As a result of the Career Education Program:

13. The student understands, accepts, and relates himself/herself emotionally, mentally, and physically to his/her social, educational, and career ventures. 1 2 3 4 5

14. The student understands that there are certain physical, mental, and emotional characteristics which make him/her unique. 1 2 3 4 5

15. The student understands the importance of interpersonal interaction and its affect on others. 1 2 3 4 5

16. The student is able to plan his/her chosen career and progress within the career or change the direction of his/her career if necessary or desirable. 1 2 3 4 5

17. The student is able to understand the value of school subjects in terms of their function within and outside the classroom. 1 2 3 4 5

18. The student is able to comprehend the diversity and complexity of educational alternatives in relationship to a change in the job market, society, and self. 1 2 3 4 5

19. The student is able to function in the performance of decision-making and work adjustment processes. 1 2 3 4 5

20. The student is able to apply educational skills in the planning and preparation for entry into the career world. 1 2 3 4 5

1 - strongly agree
2 - agree
3 - not sure
4 - disagree
5 - strongly disagree

21.	The student is able to understand that there are physical, mental, and emotional aspects of work which may or may not be satisfying.	1 2 3 4 5
22.	The student is able to comprehend the diversity and complexity of work alternatives both available and appropriate to him/her in the present and future.	1 2 3 4 5
23.	The student is able to recognize that jobs emerge and diminish because of the value society places on the resulting products and services.	1 2 3 4 5
24.	The student is motivated toward, pursues, and becomes employed in constructive work.	1 2 3 4 5
25.	Other teachers in this school have a favorable attitude toward Career Education.	1 2 3 4 5
26.	Helping students to appraise their abilities, interests and potentials is an important part of Career Education.	1 2 3 4 5
27.	Instruction in Career Education is relevant to the needs of students at this level.	1 2 3 4 5

The local project coordinators have provided assistance in:

28.	selecting appropriate instructional materials.	1 2 3 4 5
29.	identifying people and materials within the community as possible resources in the presentation of the Career Education Units	1 2 3 4 5
30.	coordinating and planning activities among teachers	1 2 3 4 5
31.	the actual presentation of the Career Education Units within the classrooms.	1 2 3 4 5

TEACHER PRACTICES SURVEY

Please limit your responses to the 75-76 school year. We again remind you that all responses are confidential and will not be shared with any individual within your school system.

1.a. How often do you plan to conduct or have conducted field trips to work sites this year? _____

b. What kinds of work sites have been visited or do you plan to visit?

_____

_____

_____

_____

_____

2. a. How often do you have workers visit in class?

at least (number)_____ times per (check one) _____week
_____month
_____year
_____never

b. List the different kinds of workers who have visited your class(es).

_____ _____

_____ _____

_____ _____

3. a. How often do you provide exploratory work experience for each student?

at least (number)_____ times per (check one) _____week
_____month
_____year

b. What kinds of exploratory work experiences have been provided for your students?

_____

_____

_____

_____

4. Do you have a Career Activities Center in your school? Yes No

5. What is the degree of your utilization of the Career Activities Center? Frequent Infrequent Never

6. What is the degree of utilization of it by your students? Frequent Infrequent Never

7. How often do you use audio-visual materials (films, tape-slide programs, film strips) in your career education instruction?

   at least (number)_____time per (check one) _____week
   _____month
   _____year

   What audio-visual materials have you used for career education instruction?

   _____ _____ _____

   _____ _____ _____

   _____ _____ _____

   _____ _____ _____

8. Indicate the frequency (number of times per week, month, semester) of the following activities during your career education instruction.

   a. teacher-class discussion of careers and/or opportunities ____times per_____

   b. small group discussion of careers and/or opportunities ____times per_____

   c. student presentation of careers and/or job opportunities ____times per_____

   d. displays or posters concerning careers and jobs ____times per_____

   e. career related role playing and simulation ____times per_____

   f. use of library resources related to careers ____times per_____

   g. use of newspaper and magazines related to job opportunities ____times per_____

   h. integration of basic skills with career education ____times per_____

   i. use of professional employment agencies ____times per_____

9. How often do you use special class projects in career education instruction?

at least (number)_____times per (check one) _____week
_____month
_____year

List the kinds of special class projects.

_____

_____

_____

_____

_____

10. How often (number of times per week, month, or year) do you employ the following materials in career education instruction?

a. printed materials _____times per_____

b. work sheets, tests, inventories _____times per_____

c. curriculum units _____times per_____

11. How often do you meet with the field coordinator to plan career education instruction?

at least (number) _____times per_____week
_____month
_____year

Please check any of the following activities that were utilized in your career education instruction this year.

PROCESS OBJECTIVES (LEARNING ACTIVITIES) FOR CAREER EDUCATION

These objectives describe very specific behavior while they are in the process of learning concepts related to school subjects and career education. The process objectives (called learning activities in the modules) indicate specific behavior which is intended to help students achieve the performance objectives.

Sample learning experience (process objectives) are as follows:

PRIMARY

___Plant Seeds
___Make Pop Corn
___Churn Butter
___Toys
___Visitors
___Safety Game
___Discusstion
___Mural
___Mailbox Rotary Rack
___Paint
___Measuring
___Star for a Day
___Draw Family
___Happy and Sad Pictures
___View Films
___Draw Myself
___Life Size Cutouts
___Make Dictionary
___Field Trip
___Select Foods
___Question and Answer
___Cut Out Pictures
___Write Invitations
___Bulletin Board Tree
___Table Display
___Write Stories
___Library Books

___Children Reaction
___Dramatic Play
___Dress-up Box
___PTA Presentation
___Invitations
___Draw Maps
___Room Duty
___Listen to Speaker
___Follow Rules
___Bulletin Board
___Match Pictures and Names
___Show and Tell
___Draw Home, Pets, Etc.
___Discuss Feelings
___Creative Play
___Discuss Tools
___Draw Pictures
___Collage of Workers
___Collect Materials
___Tasting Party
___Write Thank You Notes
___Astronaut Launch Game
___Design Placemats
___List Jobs
___Committee Work
___Buss Sessions
___Invite Mothers for Cookies and Punch

___Scrapbook
___Make Costumes
+++Make Hats
___Matching
___Coloring
___Cutouts
___Square Dance
___Tour Facilities
___Designing
___Count Letters in Names
___Grown-up Activities
___View Film-Strip
___Read Stories
___Who Am I?
___Pantomine
___Resource Persons
___Guessing Riddles
___Singing
___Role Playing
___Prepare Menu
___Discuss Manners
___Measure Ingredients
___Word Cards
___List Questions
___Make Booklets
___"Im Thinking of Someone Who Likes. . ."

INTERMEDIATE

___Discussion
___Read Books
___Sing Songs
___Role Play
___Fractions
___Math Story
___Make Signs
___Construct Props

___List Jobs
___Verbs to Nouns
___Dance
___Mural
___Plan Field Trip
___List Job Duties
___Match Jobs and Equipment
___Simulate Work

___Demonstrations
___Campaign
___Research
___Measuring
___Decorations
___Collect Items
___Match Jobs and Skills
___Application Form

INTERMEDIATE (Cont.)

___Cashiering
___Posters
___Spell Words
___Group Work
___Listening
___Guest Speakers
___Thank You Notes
___Spelling Lesson
___Write Poems
___Drawings
___Pantomine
___Take Notes
___Field Trip
___Operate Equipment
___Prepare Script
___Slides
___Filmstrip
___Money Problems
___Count Money
___Model Tools
___Mat Pictures
___Read Instructions
___Write Story
___Read Pamphlets
___Open Bank Account
___Design Product
___Write Letters
___Compute Costs
___Group Work
___Research Report

___Price Merchandise
___Newspaper
___Identify Symbols
___Progress Reports
___Questioning
___Evaluation
___Written Reports
___[illegible]
___View Films
___Prepare Skit
___Introduction
___Collect Pictures
___Film
___Invitations
___Read Brochures
___Share Feelings
___Committee Work
___Definitions
___Refine Job Clusters
___Cut Out Pictures
___Sand
___Host Open House
___Dramatize
___Write Summaries
___Keep Records
___Who Am I?
___Scrapbook
___Make Change
___Panel Discussion
___Charcoal Sketch

___Selling
___List Words
___Bulletin Board
___Elections
___Check List
___Money Games
___Oral Reports
___Interviewing
___Observation
___Vocabulary
___Newspapers
___Prepare Questions
___Learn Equipment
___Research Letters
___Map Measurement
___Library Books
___Build Models
___Team Research
___Portrayal
___Color Schemes
___Finish Materials
___Weave Rugs
___Question Children
___List Questions
___Prepare Charts
___Write Essays
___Oral Reports
___Survey
___Audio Tapes

SECONDARY

___Research Paper
___Mock Situation
___Assembly Line
___News Letter
___Quiz
___List Jobs
___Theme
___Classified Ads
___Collage
___Experimentation
___Score Tests
___Collect Data
___Typing
___Lettering
___Utilize Equipment
___Drawings
___Labeling
___On-the-Job Experience
___Observe Workers

___Reading
___Bulletin Board
___Crossword Puzzles
___Term Papers
___Simulation Exercises
___Role Playing
___Lecture
___Discussion
___Take Notes
___Newspaper "Want Ads"
___Films
___Filmstrips
___Oral Reports
___Teletrainer
___Interviewing
___Demonstrations
___Occupational Uglies
___Video Taping
___Questioning

___Write Resume
___Occupational Notebook
___Interest Inventories
___Table Display
___Work Sheets
___Civil Service Exam
___Field Trip
___Pantomine
___Buzz Sessions
___Posters
___Construct Props
___List Terms
___Prepare Foods
___Sewing
___Resource Person
___Cost Accounting
___Committee Work
___Interaction Groups
___Library Visits

___Maintain Records
___Body Language
___Form Business
___Produce Merchandise
___Television Reports
___Produce Show
___Imitation
___Meditation
___Write Summations
___Write Essay
___Student Elections

___Thank You Letters
___Read Plays
___Apply for Social Security Cards
___Complete Job Applications
___Personal Data Cards
___Mobiles
___Research
___Prepare Ads
___Tape Recording
___Slogans
___Voting

___Student Projects
___Equipment Nomenclature
___Dictionary Use
___SKits
___Prepare Costumes
___Prepare Survey Instrument
___Survey Individuals
___Activity Sheet
___Charts
___Audio Tapes

Name of Principal _____

School _____

Name of Career Ed. Coordinator _____

Area of Planning and Administration:

1. What has been done in planning and general coordination for career ed? ___

_____

2. Were you involved in the coordination and planning? _____(If so, how?)

_____

Instructional Support Services:

3. How many and what kind of instructional materials and curriculum units were

   a. developed? _____

   _____

   b. revised or adapted? _____

   _____

   c. made available to your school including purchase and rental? _____

   _____

4. How were instructional materials disseminated? _____

_____

5. How were community resources involved in instruction?

   _____ Field trips (on-site visitation)
   _____ Resource personnel visiting school
   _____ providing materials for teaching career education
   _____. _____(specify)

6. Was career guidance and counseling improved by involving community resources?

_____

_____

7. How many counselors were added? _____.

8. To what extent were counselors involved in:
Please use - F - frequently (at least once a week)
I - infrequently (once per month or less)
N - Non-existent

_____ organizing and coordinating field trips and or guest speakers
_____ conducting small or large gro[illegible]s in classrooms
_____ providing additional caree[illegible]tructional materials
_____ conducting individual sess[illegible]ts concerning career aspirations
_____ conducting parent-student conferences concerning career aspirations
_____ other (specify)

9. Did counselors increase emphasis on career information and career guidance?

_____.

10. How many students were involved in job and educational placement activities provided? _____

11. How were job and educational placement activities provided? _____

_____.

Level of Preparation of School and Community Personnel:

12. How many were involved in in-service career education activities? _____

_____principals and or vice principals
_____teachers
_____counselors
_____other (specify)

13. What do you feel was accomplished by these activities? _____

_____

_____

14. What kind of public relations activities were conducted? (e.g. letters to parents, newspaper articles).

1. _____
2. _____
3. _____
4. _____
5. _____

15. How did in-service activities affect college degree programs of participants?

_____

_____

Area of Instruction:

16. Did first year in-service career education teachers continue to conduct career education activities? _____

17. [illegible] non-participating teachers affected? _____

18. As a consequence, did non-participating teache[illegible] onduct career education activities? _____

19. Did your involvement have an apparent affect on instruction in your school? _____

20. How was career education implemented?

_____ integrated with other subject matter?
_____ separate units of instruction in class?
_____ separate courses?
_____ other?

21. Was secondary vocational education expanded and broadened at grades 11-14? _____

22. Was there an increase in the number of students in existing vocational programs? _____

23. Was there an increase in new types of vocational programs? _____
(If yes please specify) _____

_____

Area of Transportability:

24. Are developed curriculum units suitable for use in most other schools? _____

25. Have they been requested? _____

26. Is the administrative model for implementation transportable? _____

27. What needs should be considered in adapting the model for use in another region or state? _____

_____

_____

Additional Areas:

28. How frequently did you have contact with the career education coordinator?

29. What was the pattern of communication between the principal and coordinator? (e.g. by phone, personal contact, etc.,)

30. How were the sites for career education centers chosen?

31. Who was responsible for the decisions on where the sites would be established?

32. How much influence does the principal have on teachers who are reluctant to participate in career ed. instruction?

33. What percentage of teachers in your school are teaching career education? _____%

34. What kinds of things influence when career education is scheduled in the school year?

a. _____
b. _____
c. _____
d. _____
e. _____
f. _____

PRINCIPAL OPINION SURVEY

Adapted from LeRone A. Wood

This is not a test. There are no right or wrong answers. We are interested in your opinion about career education in your school. Information obtained during this survey will be reported on a regional basis only. No information about individuals, schools, or counties will be provided to Local, State, or Federal agencies. The information you provide will be kept strictly confidential.

Please respond to each statement by placing a circle around the answer which best indicates your opinion about each statement according to the following criteria.

1 - I strongly agree with the statement
2 - I agree with the statement in general
3 - I am not sure
4 - I disagree with the statement
5 - I strongly disagree with the statement

1. The purposes of career education were clear to me by the beginning of this school year.	1	2	3	4	5
2. The purposes of Career Education appeared to be clear to most of the students.	1	2	3	4	5
3. The major purposes set forth for Career Education were adequately met during the school year.	1	2	3	4	5
4. The time we had allotted was sufficient to accomplish the purposes set forth for Career Education.	1	2	3	4	5
5. Students gained first-hand knowledge of the world of work (field trips, resource people, etc.)	1	2	3	4	5
6. Students were exposed to adequate hands-on experiences.	1	2	3	4	5
7. Students explored their capabilities in various areas under a variety of situations pertaining to the world of work.	1	2	3	4	5

1 - strongly agree
2 - agree
3 - not sure
4 - disagree
5 - strongly disagree

8.	Students learned to self-appraise their emerging potentials.	1	2	3	4	5
9.	Equipment was adequate to accomplish the objectives of the Program.	1	2	3	4	5
10.	Adequate materials and supplies were made available for the Program.	1	2	3	4	5
11.	Career Education of this type should be made available to every student.	1	2	3	4	5
12.	Students became aware of the factors that contributed to success in an occupation.	1	2	3	4	5

As a result of the Career Education Program:

13.	The student understands, accepts, and relates himself/herself emotionally, mentally, and physically to his/her social, educational, and career ventures.	1	2	3	4	5
14.	The student understands that there are certain physical, mental, and emotional characteristics which make him/her unique.	1	2	3	4	5
15.	The student understands the importance of interpersonal interaction and its affect on others.	1	2	3	4	5
16.	The student is able to plan his/her chosen career and progress within the career or change the direction of his/her career if necessary or desirable.	1	2	3	4	5
17.	The student is able to understand the value of school subjects in terms of their function within and outside the classroom.	1	2	3	4	5
18.	The student is able to comprehend the diversity and complexity of educational alternatives in relationship to a change in the job market, society, and self.	1	2	3	4	5
19.	The student is able to function in the performance of decision-making and work adjustment processes.	1	2	3	4	5
20.	The student is able to apply educational skills in the planning and preparation for entry into the career world.	1	2	3	4	5

1 - Strongly Agree
2 - Agree
3 - not sure
4 - disagree
5 - strongly disagree

21.	The student is able to understand that there are physical, mental, and emotional aspects of work in that may or may not be satisfying.	1	2	3	4	5
22.	The student is able to comprehend the diversity and complexity of work alternatives both available and appropriate to him/her in the present and future.	1	2	3	4	5
23.	The student is able to recognize that jobs emerge and diminish because of the value society places on the resulting products and services.	1	2	3	4	5
24.	The student is motivated toward, pursues, and becomes employed in constructive work.	1	2	3	4	5
25.	Other teachers in this school have a favorable attitude toward Career Education.	1	2	3	4	5
26.	Helping students to appraise their abilities, interests and potentials is an important part of Career Education.	1	2	3	4	5
27.	Instruction in Career Education is relevant to the needs of students at this level.	1	2	3	4	5

The local project coordinators have provided assistance in:

28.	selecting appropriate instructional materials.	1	2	3	4	5
29.	identifying people and materials within the community as possible resources in the presentation of the Career Education Units	1	2	3	4	5
30.	coordinating and planning activities among teachers	1	2	3	4	5
31.	the actual presentation of the Career Education Units within the classrooms.	1	2	3	4	5

CAREER DEVELOPMENT INVENTORY

Form I

Donald E. Super, et. al.

Teachers College, Columbia University
New York, New York

****

Introduction

The questions you are about to read ask you about school, work, you future career, and some of the plans you may have made. The only right answers are the ones which are right for you. Later, some questions ask about career facts; others ask you to judge students' plans. Give the best answers you can.

Answers to questions like these can help teachers and counselors offer the kind of help which high school students want and need in planning and preparing for a job after graduation, for vocational and technical school training, or for going to college.

The First Step

You must use a Number Two pencil for all of the work which follows. Ask if you do not have one. Check your booklet to make sure it has 16 pages all in the right order. Now look at the computer answer sheet. At the top, fill in only your name, grade, sex, and school. Do that now!

On the top of your answer sheet you will find a heavy red arrow pointing down. Under this arrow please write the following 3-digit number. On the fourth or next block down write a 1 if you are male or 2 if you are female.

You should now have completed the blanks at the top of the answer sheet. You should also have 4 numbers under the heavy red arrow. Directly to the right of each number darken in the corresponding number.

The Second Step - Your Future Occupation

In your present thoughts and plans, what kind of work would you like to do when you finish all your education and training? From the list of occupational areas on the next page, please choose the kind of occupation you plan to enter and place the number beside the kind of occupation in the 5th and 6th box under the red arrow on your answer sheet.

EXAMPLE: Telephone is 15; place the number 1 in box 5 and 5 in box six and darken in one and five to the right. Look at the example on the board.

Please choose one from the following occupational choices:

A. AGRICULTURE & NATURAL RESOURCES
- 01. Agriculture (Farming)
- 02. Forestry (silviculture/dendrology)
- 03. Mining (mining/industry)
- 04. Petroleum (petro-chemical)
- 05. Wildlife (management & control)

B. BUSINESS & OFFICE
- 06. Accounting
- 07. Finance
- 08. Management
- 09. Personnel
- 10. Secretarial

C. COMMUNICATIONS & MEDIA
- 11. Broadcasting
- 12. Journalism
- 13. Motion Pictures
- 14. Recording
- 15. Telephone

D. CONSTRUCTION
- 16. Electrical
- 17. Finishing
- 18. Masonry
- 19. Metal
- 20. Wood

E. CONSUMER & HOMEMAKING
- 21. Child Development
- 22. Clothing
- 23. Food
- 24. Home Management
- 25. Household Equipment

F. ENVIRONMENT
- 26. Air
- 27. Plants
- 28. Soil
- 29. Water
- 30. Wildlife

G. FINE ARTS & HUMANITIES
- 31. Historical
- 32. Performing Arts
- 33. Religion
- 34. Visual Arts
- 35. Writing

H. HEALTH
- 36. Administration Services
- 37. Emergency Services
- 38. Personal Services
- 39. Pharmaceutical Services
- 40. Supportive Services

I. RECREATION & HOSPITALITY
- 41. Industrial Recreation
- 42. Private Recreation
- 43. Public Recreation
- 44. Transportation
- 45. Travel Agencies

J. MANUFACTURING
- 46. Engineers
- 47. Technicians
- 48. Skilled Workers
- 49. Semi-Skilled Workers
- 50. Un-skilled Workers

K. MARINE SCIENCE
- 51. Aquaculture
- 52. Fishing
- 53. Mineral & Chemical Extraction
- 54. Research
- 55. Support Personnel

L. MARKETING & DISTRIBUTION
- 56. Distribution
- 57. Management
- 58. Purchasing
- 59. Promotion
- 60. Sales

M. PERSONAL SERVICES
- 61. Apparel Services
- 62. Beauty Services
- 63. Domestic Services
- 64. Food Services
- 65. Lodging Services

N. PUBLIC SERVICES
- 66. Education
- 67. Health
- 68. Postal
- 69. Protective
- 70. Utility

O. TRANSPORTATION
- 71. Air
- 72. Highway
- 73. Pipeline
- 74. Rail
- 75. Water

76. Undecided

Six of the identification boxes should now be filled with numbers, and the spaces to the right of the boxes should be marked. The boxes should be filled with the following information.

Number of box (counting down)	Code
1,2,3	The 3-digit number that ...
4	Sex: 1 = ... 2 = fem
5,6	Occupation num...

The Third Step - How to Answer the Questions

All your answers go on the answer sheet. Do not write any more in the booklet. Use only a number 2 pencil so the scoring machine can read your answers. Ask for a pencil if you do not have one.

Notice that the answers on your answer sheet GO ACROSS THE PAGE, not down.

In the top left corner of your answer sheet is a sample.

1. CHICAGO is

1-1 a country
1-2 a mountain
1-3 an island
1-4 a city
1-5 a state

The correct answer is city, and has been darkened in.

After you choose an answer to a question, find the number of the question on the answer sheet and fill in the space between the dotted lines after the number of your answer. Completely erase mistakes or changed answers so they will not be scored. Do not make any extra marks on the answer sheet.

ANSWER ALL QUESTIONS. If you are not sure about an answer, guess. There is no time limit, but work as rapidly as you can; the first answer that comes to you is often the best one. If you have a question after we begin, please raise your hand.

The questions begin on the next page.

A. How much thinking and planning have you done in the following areas? What kind of plans do you have? For each question below, choose one of the following answers to show what you have done.

(1) I have given very little thought to this.

(2) I have given some thought to this, but haven't made any plans yet.

(3) I have some plans, but am still not sure of them.

(4) I have made definite plans, but don't know how to carry them out.

(5) I have made definite plans, and know what to do to carry them out.

1. Finding out about educational and occupational possibilities by going to the library, sending away for information, or talking to somebody who knows about the possibilities.

2. Talking about career decisions with an adult who knows something about me.

3. Taking high school courses which will help me decide what line of work to go into when I leave school or college.

4. Taking high school courses which will help me in college, in job training, or on the job.

5. Taking part in school or out of school activities which will help me in college, in training, or on the job.

6. Taking part in school or after school activities (for example, science club, school newspaper, Sunday School teaching, volunteer nurse's aide) which will help me decide what kind of work to go into when I leave school.

7. Getting a part-time or summer job which will help me decide what kind of work I might go into.

8. Getting a part-time or summer job which will help me get the kind of job or training I want.

9. Getting money for college or training.

10. Dealing with things which might make it hard for me to get the kind of training or the kind of work I would like.

11. Getting the kind of training, education, or experience which I will need to get into the kind of work I want.

12. Getting a job once I've finished my education and training.

13. Doing the things one needs to do to become a valued employee who doesn't have to be afraid of losing his job or being laid off when times are hard.

14. Getting ahead (more money, promotions, etc.) in the kind of work I choose.

B. High School students differ greatly in the amount of time and thought they give to making choices. Use the statements below to compare yourself to the typical students of your sex in your grade on each of the following kinds of choices.

15. In the amount of time and thought I give to choosing high school courses, compared to my classmates, I am . . .

(1) much below average, not as good as most.
(2) a little below average.
(3) average.
(4) a little above average.
(5) much above average, better than most.

16. In the amount of time and thought I have to choosing high school activities, compared to my classmates, I am. . .

(1) much below average, not as good as most.
(2) a little below average.
(3) average.
(4) a little above average.
(5) much above average, better than most.

17. In the amount of time and thought I give to choosing out-of-school activities, compared to my classmates, I am. . .

(1) much below average, not as good as most.
(2) a little below average.
(3) average.
(4) a little above average.
(5) much above average, better than most.

18. In the amount of time and thought I give to choosing between college, junior college, business school, technical school, work, military service, marriage, homemaking, etc., compared to my classmates, I am . . .

(1) much below average, not as good as most.
(2) a little below average.
(3) average.
(4) a little above average.
(5) much above average, better than most.

19. In the amount of time and thought I give to choosing a college, branch of military service, wife or husband, etc., compared to my classmates, I am . . .

(1) much below average, not as good as most.
(2) a little below average.
(3) average.
(4) a little above average.
(5) much above average, better than most.

20. In the amount of time and thought I give to choosing an occupation for after high school, college, or job training, compared to my classmates, I am . . .

(1) much below average, not as good as most.
(2) a little below average.
(3) average.
(4) a little above average.
(5) much above average, better than most.

21. In the amount of time and thought I give to choosing a career in general, compared to my classmates, I am . . .

(1) much below average, not as good as most.
(2) a little below average.
(3) average.
(4) a little above average.
(5) much above average, better than most.

22. How would you rate your plans for "after high school"?

(1) Not at all clear or sure.

(2) Not very clear.

(3) Some not clear, some clear.

(4) Fairly clear.

(5) Very clear, all decided.

C. Below are five possible answers to use in answering questions 23 through 33, questions about how much you know about the occupation you said you like best on page two. Mark the number of your choice on the answer sheet.

I know. . .

(1) hardly anything

(2) a little

(3) an average amount

(4) a good deal

(5) a great deal

. . . about:

23. What people really do on the job.

24. Specialities in the occupations.

25. Different places where people might work in this occupation.

26. The abilities and traits needed in the occupation.

27. The physical working conditions.

28. The education or training needed to get into the occupation.

29. The courses offered in high school that are the best for the occupation.

30. The need for new people in the occupation.

31. Different ways of entering the occupation.

32. The starting pay in the occupation.

33. The chances for getting ahead in the occupation.

D. Here are five answers which can be used for questions 34 through 47. Use these answers to show whether or not you would go to the sources of information listed below for help in making your job or college plans.

I would . . .

(1) definitely not

(2) probably not

(3) not be sure whether to

(4) probably

(5) definitely

. . . go to.

34. Father or male guardian.

35. Mother or female guardian.

36. Brothers, sisters, or other relatives.

37. Friends.

38. Coaches of teams I have been on.

39. Minister, priest, or rabbi.

40. Teachers.

41. School counselors.

42. Private counselors, outside of school.

43. Books with the information I needed.

44. Audio or visual aids like tape recordings, movies, or computers.

45. College catalogues.

46. Persons in the occupation or at the college I am considering.

47. TV shows, movies, or magazines.

E. Here again are five answers which are to be used with the following items. This time use the statements to show which of the sources of information below have already given you information which has been helpful to you in making your job or college plans.

I have gotten. . .

(1) no useful information

(2) very little useful information

(3) some useful information

(4) a good deal of useful information

(5) a great deal of useful information

. . .from:

48. Father or male guardian.

49. Mother or female guardian.

50. Brothers, sisters, or other relatives.

51. Friends.

52. Coaches of teams I have been on.

53. Minister, priest, or rabbi.

54. Teachers.

55. School counselors.

56. Private counselors, outside of school.

57. Books with the information I needed.

58. Audio or visual aids like tape recordings, movies, or computers.

59. College catalogues.

60. Persons in the occupation or at the college I am considering.

61. TV shows, movies, or magazines.

F. Here, each question has its own set of possible answers.

62. Which one of the following is the best source of information about job duties and opportunities?

(1) The Encyclopedia Britannica

(2) World Almanac

(3) Scholastic Magazine

(4) The Occupational Index

(5) The Occupational Outlook Handbook

63. Which one of the following would be most useful for detailed information about getting into college?

(1) The World Book Encyclopedia

(2) Webster's Collegiate Dictionary

(3) Lovejoy's College Guide

(4) Reader's Digest

(5) The Education Index

64. Which one of the following pairs of occupations involves the same level of training and responsibility?

(1) Tailor, Sales Clerk

(2) Engineer, Banker

(3) Tailor, Engineer

(4) Banker, Sales Clerk

65. The occupational fields expected to grow most rapidly during the next ten years are:

(1) Professional and service.

(2) Sales and crafts.

(3) Crafts and clerical

(4) Labor and sales.

66. Between 1910 and 1970, the industry employing the greatest number of workers changed from:

    (1) Agriculture to wholesale and retail trade.

    (2) Manufacturing to agriculture.

    (3) Wholesale and retail trade to manufacturing.

    (4) Agriculture to manufacturing.

G. Occupations are different in the amount of education required for employment. Match the occupation in Column A with the amount of education usually required (Column B) by marking the number of the correct answer on the answer sheet:

COLUMN A Occupation	COLUMN B Education
67. Stenographer	(1) High School Graduation
68. Dental Technician	(2) Apprenticeship Training
69. Family Doctor (Physician)	(3) Technical School or Community College (2 year)
70. Mail Carrier	(4) College Degree (4 year)
71. Plumber	(5) Professional Degree Beyond College
72. Computer Operator	
73. Bank Clerk	
74. Social Worker	

H. Many occupations use special tools. Below is a list of special tools or equipment and a list of occupations. Match the occupation in Column A with its equipment (Column B).

COLUMN A Occupation	COLUMN B Education
75. Electrician	(1) Manikin
76. Bookkeeper	(2) Ammeter
77. Bricklayer	(3) Centrifuge
78. Dressmaker	(4) Trowel
79. Medical Technician	(5) Ledger

I. Here again, each question has its own set of answers.

80. In the 9th and 10th grades, plans about jobs and occupations should:

    (1) be clear.

    (2) not rule out any possibilities.

    (3) keep open the best possibilities.

    (4) not be something to think about.

81. Decisions about high school courses can have an effect on:

(1) the kind of diploma one gets.

(2) the kind of training or education one can get after high school.

(3) later occupational choices.

(4) how much one likes school.

(5) all of these.

82. Decisions about jobs should take into account:

(1) strengths, or what one is good at learning and doing.

(2) what one likes to do.

(3) the kind of person one is.

(4) the chances for getting ahead in that kind of job.

(5) all of these.

83. One of the things that great artists, musicians, and professional athletes have in common is the desire to:

(1) make money.

(2) have large audiences.

(3) be the best there is at what they do.

(4) teach others to do what they do.

84. J. D. might like to become a computer programmer, but knows little about computer programming, and is going to the library to find out more about it. The most important thing for J. D. to know now is:

(1) what the work is, what one does on the job.

(2) what the pay is.

(3) what the hours of work are.

(4) where one can get the right training.

85. H. S. likes [illegible] school biology and general science courses best. The student likes [illegible] schoolwork alone so as to concentrate. When beginning to [illegible] about a future occupation, such a person should consider:

(1) Accountant.

(2) Nurse.

(3) Medical Laboratory Technician.

(4) High School Science Teacher.

86. P. T. is the best speaker on the school debating team, described in the school yearbook as "our golden-tongued orator--a real nice person who can listen as well as talk--could sell refrigerators to the Eskimos." P.T. will probably graduate in the bottom half of the class, although test scores show superior ability. P.T.'s only good grades (mostly B's) are in business subjects, poorest grades are in English and social studies (mostly C's).

P.T.'s desire to become a trial lawyer is not very realistic because:

(1) with such grades one has difficulty getting into a four-year liberal arts college.

(2) the poor grades are in the subjects that are most important for law.

(3) there is much more to being a lawyer than being good at public speaking.

(4) all of the above are good reasons for thinking that P.T. will have a hard time becoming a trial lawyer.

87. The facts about P.T. suggest that this student should think about becoming:

(1) an accountant.

(2) a salesman.

(3) an actor.

(4) a school counselor.

(5) a lawyer.

88. E.R. took some tests which show some promise for clerical work. The student says, "I just can't see myself sitting behind a desk for the rest of my life. I'm the kind of person who likes variety. I think a traveling job would suit me fine." E.R. should:

(1) disregard the tests and do what he or she wants to do.

(2) do what the tests say since they know best.

(3) look for a job which requires clerical ability but does not pin one to a desk.

(4) ask to be tested with another test since the results of the first one are probably wrong.

89. A.H. is very good with skilled handwork and there isn't anybody in the class who has more mechanical aptitude or is better at art. Best grades are in math. A.H. likes all of these things.

What should A.H. do?

(1) Look for an occupation which will use as many of these interests and abilities as possible.

(2) Pick an occupation which uses meth since there is a better future in that than in art or in working with one's hands.

(3) Decide now on one of these activities because of ability or interest, and then pick an occupation which uses that kind of asset.

(4) Put off deciding about the future and wait until interest in some of these activities declines.

90. B.R. gets very good science grades but doesn't care too much about this subject. The subject liked best is art even though grades in it are only average. This student is most likely to do well in a future occupation if he or she:

(1) forgets about interest in art since achievement is so much better in science.

(2) doesn't worry about the achievement in art, because if you like something you can become good at it.

(3) looks for an occupation which uses both art and science, but more science than art.

(4) looks for an occupation which involves both science and art, but more art than science.

91. L.F. professes not to really care what kind of work is available on leaving school as long as it is working with people. If this is all this student cares about he or she is likely to make a bad choice because:

(1) this kind of work usually requires a college degree.

(2) employers usually hire people with definite interests and objectives.

(3) people look down on those who work with people because such work usually doesn't pay as well as technical work.

(4) occupations in which one works with people can be very different from each other in the abilities and interests which are needed.

The last fifteen (15) items are questions to find out if you have done certain things in school THIS YEAR that are related to learning about careers. If you have participated in the activity INDICATE "YES" BY DARKENING THE 1 BESIDE THE CORRESPONDING NUMBER on your answer sheet. If you have not participated in the activity INDICATE "NO" BY DARKENING THE 2 BESIDE THE CORRESPONDING NUMBER on your answer sheet. Remember to answer each question and that the items on the answer sheet go across the page.

		Darken 1 if	Darken 2 if
92.	Have you talked or done anything in school that helped you find out more about yourself?	YES	NO
93.	Have you talked or done anything in school that helped you find out more about workers?	YES	NO
94.	Have you talked or done anything in school that helped you find out about the education or training that workers need?	YES	NO
95.	Did your class walk to some place to see workers at their jobs in school or near school?	YES	NO
96.	Did your class take a field trip in cars or on a school bus to see workers doing their jobs?	YES	NO
97.	Have you gone on your own to see workers doing their jobs even when you were not told to do so?	YES	NO
98.	Did someone other than your teacher talk to your class about careers or jobs?	YES	NO
99.	Did a worker show your class things that he uses in his work?	YES	NO

	Darken 1 if	Darken 2 if
100. Did a worker come to your classroom to show you how he does something in his work?	YES	NO
101. Did members of yoru class act like you were workers and do things that workers do?	YES	NO
102. Did members of your class make things in school that a real worker would make?	YES	NO
103. Did some members of your class talk about real work that they did with a worker?	YES	NO
104. Did some members of your class use math in a project like a real worker would use math?	YES	NO
105. Did members of your class use speaking and writing of correct English like a real worker would?	YES	NO
106. Did members of your class use science in a way that real workers would use science?	YES	NO

Multiple Choice

DIRECTIONS: Each of the questions listed below is followed by several possible answers. Choose the item that best answers the question. Then on your separate answer sheet, darken the circle which has the same letter as the item you have chosen. Be sure to darken completely each circle you choose.

Sample Multiple Choice Item:

Read the sample item and darken the circle on your answer sheet that is the same letter as the answer you selected.

28. The name of the worker who uses a cash register in his job is a
    A. Farmer.
    B. Teacher.
    C. Sales Clerk.
    D. Carpenter.

You should have darkened the circle "C" for item 28 on your answer sheet. If there are no questions, begin answering the rest of the items. When you complete the test, close your test booklet and sit quietly in your seat until everyone finishes the test.

Choose the job that needs the most formal education or training.

29. A. Carpenter
    B. Teacher
    C. Licensed Practical Nurse

30. A. Tree Trimmer
    B. Plumber
    C. Laborer

31. A. Mechanical Engineer
    B. Licensed Practical Nurse
    C. Tool & Die Maker

32. A. Medical Secretary
    B. Department Store Clerk
    C. Meat Cutter

Choose the job that requires the least amount of education.

33. A. Teacher
    B. Lawyer
    C. Doctor

34. A. Insurance Agent
    B. Airline Stewardess
    C. Sales Clerk

35. A. Plumber
    B. Social Worker
    C. Auto Mechanic

36. A. Forest Ranger
    B. Cashier
    C. Welder

37. Which job has the greatest opportunity for advancement?
    A. Sales Clerk
    B. Manager Trainee
    C. Window Decorator

38. A person chooses a certain job because of
    A. how much money he earns.
    B. his status in the community.
    C. personal satisfaction.
    D. all of the above.

39. Which person must work as part of a team?
    A. School Counselor
    B. Surgeon
    C. Social Worker

40. Susan wants to become a Social Worker. Which course would best prepare her for this job?
    A. Mathematics
    B. Psychology
    C. Community Relations
    D. Public Health

41. The major reason people get fired from their jobs is
    A. appearance.
    B. attendance.
    C. not getting along with their co-workers.

42. Which job requires the greatest amount of special training?
    A. Photoengraver
    B. Biomedical Engineer
    C. Heart Surgeon
    D. Lawyer

43. Which of the following jobs requires the least amount of training?
    A. Astronaut
    B. Machine Tool Operator
    C. Teacher

44. In which of the following occupations does an Air Force Pilot work?
    A. Communications
    B. Recreation
    C. Public Service

45. Bob wants to become a Commercial Artist. What type of work might he like?
    A. Fashion Merchandiser
    B. Interior Design
    C. Newspaper Editor
    D. Copywriter

46. Betty would like to work with wildlife. What type of job should she select?
    A. Game Warden
    B. Veterinarian
    C. Horse Trainer

47. Chuck wants a weekly paycheck while working indoors. Which job might he choose?
    A. Construction Worker
    B. Artist
    C. Sales Clerk

48. In which one of the following jobs are you likely to find the fewest women workers?
    A. Natural Resource Occupations
    B. Sales Occupations
    C. Manufacturing Occupations

49. The job that is the most dangerous to a person's health is a
    A. Research Chemist.
    B. Welder.
    C. Coal Miner.
    D. Electrical Line Repairperson.

50. Which of the following jobs is not part of the transportation industry?
    A. Astronaut
    B. Airline Pilot
    C. Truck Driver
    D. Steamship Captain

51. Steve wants to become a Registered Male Nurse. How much education will he need?
    A. High school diploma
    B. High school diploma and one year of college
    C. Four years of college

52. If you want to find out how much money a Lawyer makes, you would probably
    A. talk to a Banker.
    B. read a book on law.
    C. talk to a Lawyer.

53. Susan can't find a job. Where could she go to get the most information about job openings?
    A. The newspaper
    B. Her parents
    C. The High School Counselor

54. Which job listed below would allow a worker to be the most creative?
    A. Jewelry Repairperson
    B. Silversmith
    C. Stonemason
    D. Electroplater

Name: _____ Teacher Code Number

Grade Level: K 1 2 3 (circle one) Sex: 1 Boy 2 Girl (circle one) Type School: 1E 2C (circle one)

School: _____ City: _____

Father Employed: 1 Yes 2 No (circle one) Mother Employed: 1 Yes 2 No (circle one)

PART I

A teacher will read the seven questions below to you. Answer the questions by coloring in the circle under the word "yes" or "no".

1. Do your mom and dad talk to you about your schoolwork?	YES ○	NO ○
2. Do your mom and dad talk to you about different jobs you might do when you grow up?	YES ○	NO ○
3. Do your mom and dad help you find books that tell about the kinds of work people do?	YES ○	NO ○
4. Can you talk to your parents about the kinds of work people do?	YES ○	NO ○
5. Have your mom and dad tried to show you different ways people earn a living?	YES ○	NO ○
6. Do you think that your mom and dad are interested in you finding a job you will like some day?	YES ○	NO ○
7. Can you ask your mom and dad questions about their jobs?	YES ○	NO ○

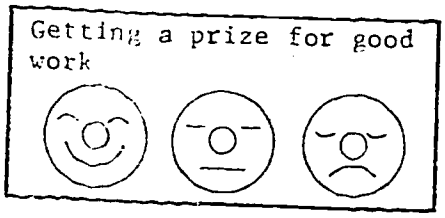
Sample Test Item

A teacher will read ideas about work to you. Think about each idea carefully. Does it make you feel happy, or sad, or don't you know how you feel about it?

a. If you feel happy about the idea, color in the nose on the smiling face.

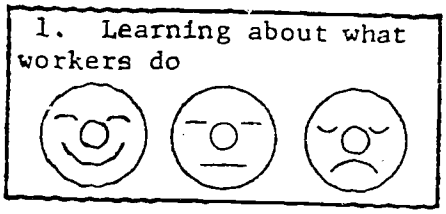
b. If you don't know how you feel about the idea, color in the nose on the middle face.

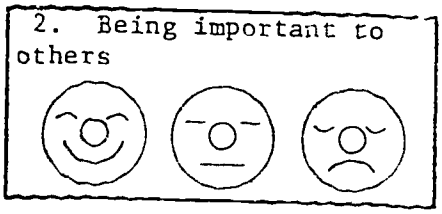
c. If you feel sad about the idea, color in the nose on the frowning face.

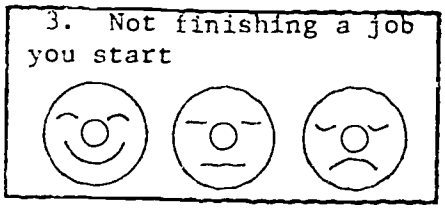


Sample

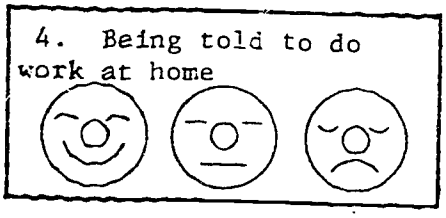
A

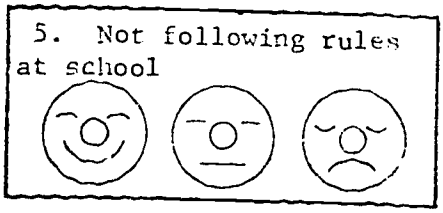


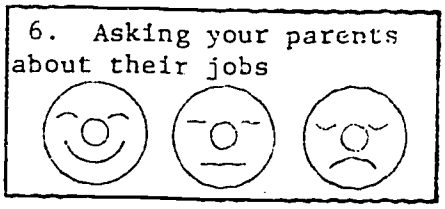




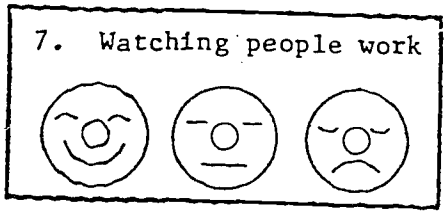
B

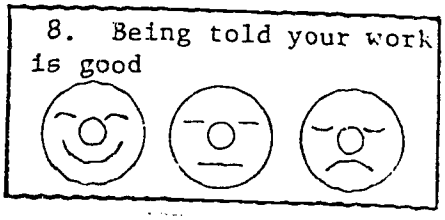


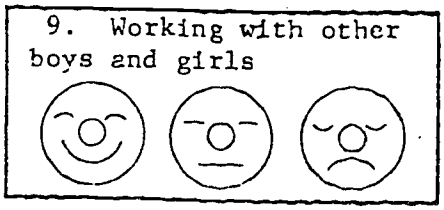




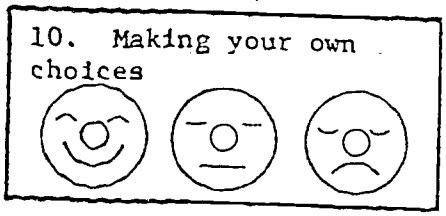
C

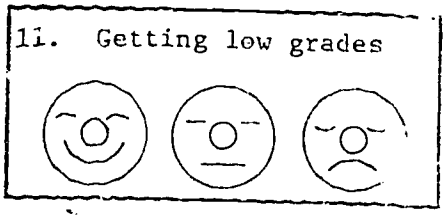


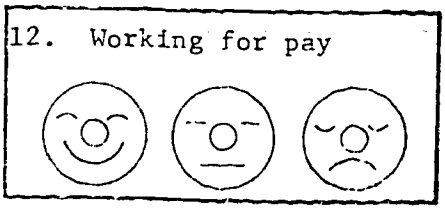




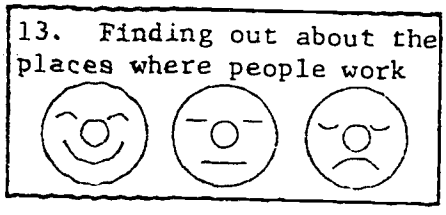
D

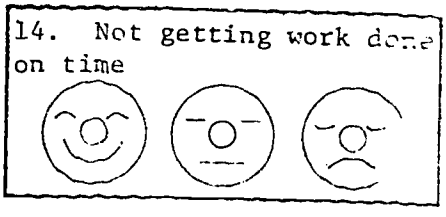


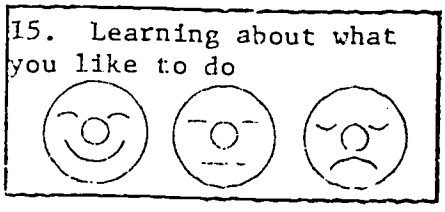




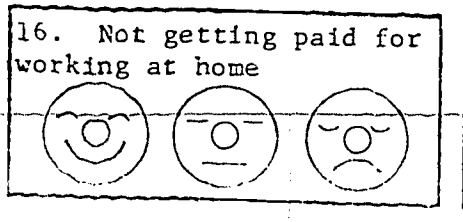
E

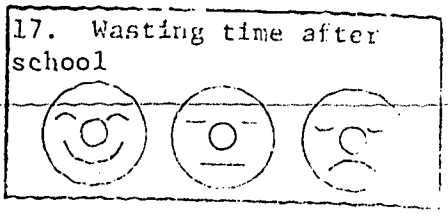


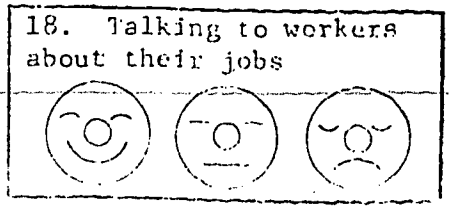




F





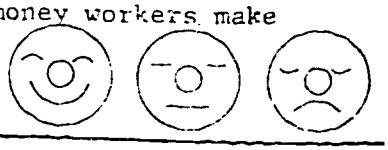


A

19. Having people make choices for you

20. Getting a star for good work

21. Finding out how much money workers make



B

22. Doing good work

23. Listening to people talk about their jobs

24. Finding out about things you can't do well

PART III

Sample Test Item

A teacher will read sentences about work to you. Again, think about each sentence carefully. Do you agree or disagree with the sentence, or don't you know how you feel about it ?

a. If you agree with or go along with the sentence, color in the circle under the word "yes".

b. If you don't know how you feel about the sentence, color in the circle under the question mark.

c. If you do not agree with or do not go along with the sentence, color in the circle under the word "no".

It's important for people to find jobs.

YES	?	NO
○	○	○

Sample

C

25. People need to have money to spend.

YES	?	NO
○	○	○

26. People should be told when they do a good job.

YES	?	NO
○	○	○

D

27. Some workers are more important than others.

YES	?	NO
○	○	○

28. People should go to work every day if they are not sick.

YES	?	NO
○	○	○

E

29. Both boys and girls need to think about the work they want to do when they are older.

YES	?	NO
○	○	○

30. Different jobs make different people happy.

YES	?	NO
○	○	○

F

31. People who disobey the boss should lose their jobs.

YES	?	NO
○	○	○

32. Comparing yourself with others helps you decide what work you can do best.

YES	?	NO
○	○	○

33. Students should talk about work at school.

YES ○ ? ○ NO ○

34. Only fathers should have to earn money.

YES ○ ? ○ NO ○

35. It's all right for people to waste time at work.

YES ○ ? ○ NO ○

36. Learning to do a job is part of growing up.

YES ○ ? ○ NO ○

37. Most workers need training for their jobs.

YES ○ ? ○ NO ○

38. People who work hard should be rewarded.

YES ○ ? ○ NO ○

39. Mothers should stay home and work.

YES ○ ? ○ NO ○

40. It's okay for workers to skip work if they want to.

YES ○ ? ○ NO ○

41. Thinking about what people do for a living may help you choose a job you like.

YES ○ ? ○ NO ○

42. Being the best person you can be is important when you grow up.

YES ○ ? ○ NO ○

43. It's okay if some people work and others don't.

YES ○ ? ○ NO ○

44. Planning for the work you want to do when you grow up is important to you.

YES ○ ? ○ NO ○

45. Workers should go to a different town to find a job they like.

YES ○ ? ○ NO ○

46. Both men and women can have good jobs.

YES ○ ? ○ NO ○

47. All workers are important.

YES ○ ? ○ NO ○

48. It's best for workers to be at work on time.

YES ○ ? ○ NO ○

49. Having a job is important when you're grown up.

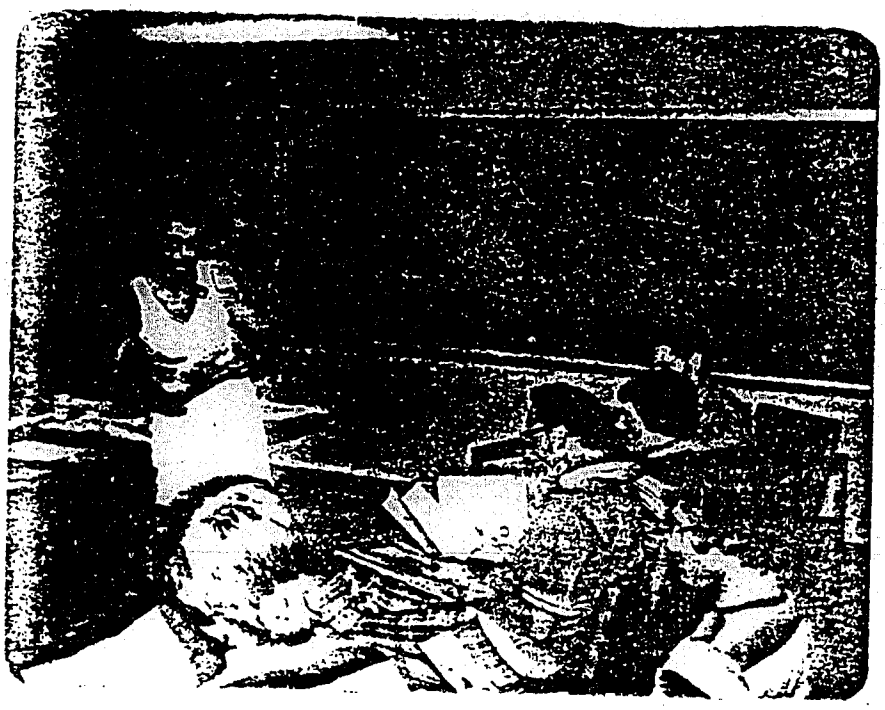
YES ○ ? ○ NO ○

50. Most people are happier when they have jobs.

YES ○ ? ○ NO ○

APPENDIX C

PROJECT PUBLICITY: SELECTED ILLUSTRATIONS



Adaline Cooper, a field representative in career education for the state of West Virginia presents an overview of career education for grades K-12 to graduate students at Edinboro State College, Edinboro, Pennsylvania on July 10, 1974.

Mrs. Mary Gramlich makes a presentation on career education to a county-wide in-service group. Mrs. Gramlich was a former participant of the Region V curriculum development classes.

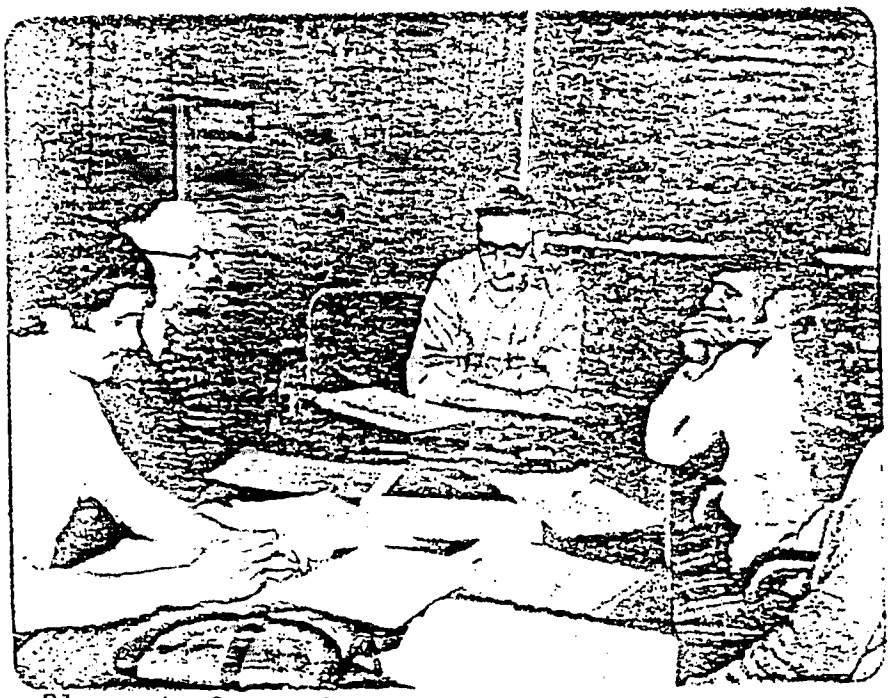
Dr. Samuel D. Bailey, Superintendent of Wood County Schools reaffirms his support for career education and career development from the administrator's point of view at a county-wide in-service meeting.

County-wide in-service meeting on career education held at Hamilton Junior High School initiated by administrators, counselors, and teachers in career education.

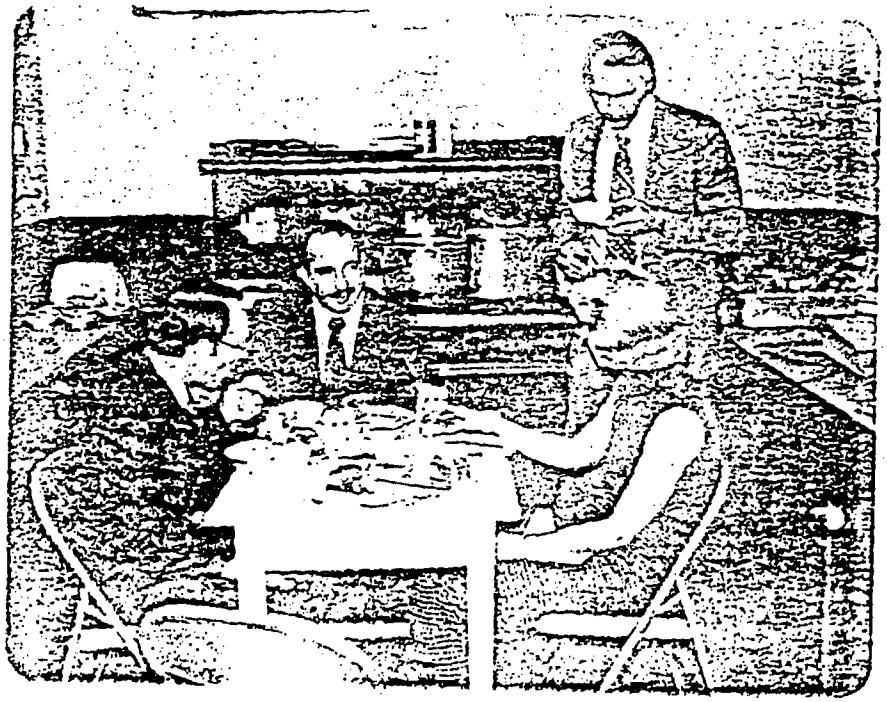
Activities of the Career Education Practicum VTE 579 at Parkersburg South High School October, 1974.

Curriculum In-service Meeting in Ohio County, WV

November 25, 1974



Pleasants County Task Force members (left to right) Jerry Cunningham, Otis Leggett, Bill Powers, Joe Izzo and Connie Dale work on resource list.



Dr. LeVene A. Olson, Mr. Earl Doddrill, Mr. Keith Smith, and Mrs. Mary Stickel enjoy lunch at the Ellenboro School in Ritchie County.

Ravenswood News
Fri., Aug. 9, 1974

MRS. BETTY Fleming [left], a language arts teacher at Spencer Junior High School, Roane County, and Mrs. Sharon Gouckenour, a second grade teacher at North Elementary, Ravenswood, were among teachers who participated in a career education workshop at North Bend State Park recently.

Region V Teachers Attend Career Education Workshop

Ten Teachers representing Roane, Jackson, Wirt, Wood, Tyler, Pleasants, and Ritchie Counties, spent one full week at North Bend State Park revising and editing career education curriculum units for use in Region V schools this coming year.

Career education is receiving a much closer look at the national, state and county level. This is being done partially as a result of a study done in West Virginia by Dr. LeVene Olson of Marshall University, showing that when the career education concepts are used in the classroom, significant gains are made by students in the academic areas of math, science and language arts. From the North Bend Workshop will come materials that the individual teachers can implement into the classroom, thus, making a direct impact upon the performance level of boys and girls at all educational levels.

The Region V Career Education Project responsible for producing the curriculum materials is funded through federal, state and local funds, with an emphasis upon preparing boys and girls in today's schools for a better understanding of self and the world of work. A great many educators feel that this is an important concept that will help boys and girls of today be better prepared to assume the many roles in the society of tomorrow.

Teachers participating in the workshop were: Ms. Paula Cottle and Mrs. Susan Armstrong from Tyler County; Lewis Cottrell, Mrs. Lois Marks and Mrs. Ann Langford from Ritchie County; Mrs. Mary Gramlich and Miss Grace Nucida, Wood County; Mrs. Sandra Hayes, Wirt County; Mrs. Sharon Gouckenour, Jackson County; and Mrs. Betty Fleming, Roane County.

ROANE COUNTY REPORTER

SEPTEMBER 10, 1974

Keefer Speaks To Rotarians

Charles Keefer, coordinator of Career Education in Roane and Jackson counties, was the guest speaker at this week's Rotary luncheon held Monday in Spencer.

Keefer spoke to the local Rotarians about the programs in the two counties which are making local educational endeavors more directly relevant to the careers which students might later choose to follow in life.

The program chairman for the meeting was Rotarian Lonnie Canterbury, Assistant Assistant Superintendent of Schools in Roane County.

This was the Rotary Club's first regular luncheon since August 19 and many items of business were taken up at the luncheon - meeting.

Plans were made concerning the exchange student program which Rotary participates in as it was mentioned that it is possible that a young man from this area will be selected to participate in the program as an exchange student to Austrialia, all expenses paid.

It was also noted that the local exchange student from the Rotary program, Miss Isabel Becht of Sweden, will be a regular guest at one Rotary meeting each month during her stay here.

Visiting the local club during the meeting was Rotarian Steve Miller, president of the Ripley Rotary Club.

It was announced that Rotarian Dr. Aaron Cottle will be in charge of the program at next week's luncheon-meeting.

CAREER EDUCATION — Approximately 125 Wood county educators attended a career education workshop held Wednesday at Hamilton Junior High School. Aimed at training the teacher to make his subject area relative to the job world, the workshop was organized by Hamilton faculty members with the help of the Regional Education Services Agency (RESA). The workshop followed a "Career Education Guide For Teachers" compiled by Elouise Hicks (seated top right) and introduced teachers to materials available for career education, community resources, and how to appraise the student's achievement, ability, interest and personality. (News Photo)

RAVENSWOOD NEWS

NOVEMBER 21, 1974

Career Day Observed at RHS

Ravenswood High held a Career Day Program Thursday to introduce career opportunities to the students. The program lasted from 9:30 a.m. until 11:05 a.m. All students were individually scheduled into four career presentations they selected.

Speakers came to RHS from all over the state to talk with the students about many different careers. Those people and their careers included in the program were: David Mandry, doctor; Nancy Tippens and Teresa Chechester, nursing; Helen McQuaid, X-Ray Technician; Gary Wright, accountant; Larry Boice, pharmacist; Dr. Charles Kelly, optometrist; Nancy Bird, fashion and modeling; Reva Chevalier, telephone operator; Ronald Adams, lawyer; J.A. Ross, chemist; Charles Harvey, banker; Sgt. Ferro, Army; Sgt. Nick Burkhart, Marines; Sgt. William Teets, Air National Guard; Russell Straight, mortician; P. R. Westenhaver, computer programmer; Wilmer Doss, teacher; Harold Ewing, music; Lois Nuckles, police woman; Trooper George Young, policeman; R.R. Ritchie and G.A. McGhee, Engineers; S/Sgt. Gary Hoover, Air Force; Chief Petty Officer and Bittner Ballard, Navy; Bill Grubbs, airline personnel; Phil Fourney, journalism; Dr. Nick Shalhoup, dentist; Kerryn Brannon, speech therapist; Karl Gattlieb, salesman; Marlene Johnson, medical techincian; Paul Moore, photographer; Dr. Jim Bitter, psychiatry and psychology; Paul Patton, social worker; Tally Simpson, TV announcer; Rex Osborne, radio; H.B. Cheuvront, welder; R. C. Sansbury, electrician; Sharry Roush, secretary; George Armstrong, game warden; Larry Smith, forestry; Barbara Pinder, beautician; Robert Pyatt, truck driver; Dr. Jim McCoy, veterinarian; Mike Williams, construction worker; Jack Good, auto and diesel mechanic; Larry Sturm, farmer; Leon Wilson, drafting; Sue Wood, art; and T.M. Shields, pipe fitter.

30 The Parkersburg News Friday, January 17, 1975

Career Education Plan Popular With Students

"There's a different world out there than what you think about."

"I think this makes learning more interesting."

"I think my chances of getting a job are better."

These observations are from students who are in Region V's career education project. And they are "turned on."

One of the reasons they are is due to the hard work of teachers and administrators in Region V's counties of Calhoun, Jackson, Pleasants, Ritchie, Roane, Tyler, Wirt, and Wood.

Just over a year ago, Ray Miller, Region V's career education project director, and his staff undertook the job of putting career education into practice in their counties.

The project is federally administered by RESA V and funded through the Department of Education's Bureau of Vocational, Technical, and Adult Education.

In just that short span, they have come to the point that Pleasants county, for example, has 85% of its schools involved in career education.

"I think the key to the success of this project has been the support of each county's administrative staff," relates Miller. "Without their support, we couldn't have organized the teachers and developed the materials."

To make it easier for Miller and his staff to reach people in the counties, they have divided up the Region's counties and are able to keep in constant touch with activities and provide assistance when needed.

"We spent time deciding on the best approach to getting educators comfortable with career education," comments Miller.

"We decided the best approach was to offer curriculum development classes, with Marshall University providing the instructors with career education expertise."

This past summer, teachers got together and worked on units which will be offered as a package to other teachers and schools in Region V. Miller's staff also held workshops for school principals.

"In the beginning, reactions were negative," says Miller. "Teachers were suspicious. They didn't know what it meant and we didn't say it would be easy."

But, as teachers became more involved, such comments were heard as, "This makes my job more interesting." Or, "Students are really involved and not in a passive role."

All the materials developed by those first teachers have gone through vigorous testing — more than most materials go through.

Miller and his staff helped counties set up special task force units, composed of laborers, administrators, teachers, business and industrial leaders, and students. These people are used as resource persons and help to keep the career education curriculum up to date.

"We have also been able to develop from these task forces, a list of valuable sources for field trips, speakers, and films," explains Miller.

Ripley Man Heads Career Education School Projects

Charleston, W. Va.—"There's a different world out there than what you think [illegible]."

"I think this makes learning more interesting."

"I think my chances of getting a job are better."

These observations are from students who are in Region V's career education project. And they are "turned on."

One of the reasons they are is due to the hard work of teachers and administrators in Region V's counties of Calhoun, Jackson, Pleasants, Ritchie, Roane, Tyler, Wirt, and Wood.

Just over a year ago, Ray Miller, who resides on Walters Street in Ripley and who is Region V's career education project director, with his staff undertook the job of putting career education into practice in their counties.

The project is federally administered by RESA V and funded through the Department of Education's Bureau of Vocational, Technical, and Adult Education.

"I think the key to the success of this project has been the support of each county's administrative staff," relates Miller. "Without their support, we couldn't have organized the teachers and developed the materials."

To make it easier for Miller and his staff to reach people in the counties, they have divided up the Region's counties and are able to keep in constant touch with activities and provide assistance when needed.

"We spent time deciding on the best approach to getting educators comfortable with career education," comments Miller.

"We decided the best approach was to offer curriculum development classes, with Marshall University providing the instructors with career education expertise."

This past summer, teachers got together and worked on units which will be offered as a package to other teachers and schools in Region V. Miller's staff also held workshops for school principals.

"In the beginning, reactions were negative," says Miller. "Teachers were suspicious. They didn't know what it meant and we didn't say it would be easy."

But, as teachers became more involved, such comments were heard as, "This makes my job more interesting." Or, "Students are really involved and not in a passive role."

All the materials developed by those first teachers have gone through vigorous testing—more than most materials go through.

Miller and his staff helped counties set up special task force units, composed of laborers, administrators, teachers, business and industrial leaders, and students. These people are used as resource persons and help to keep the career education curriculum up to date.

"We have also been able to develop from these task forces, a list of valuable sources for field trips, speakers, and films," explains Miller.

Sunday, February 9, 1975 The Parkersburg News 25

Out of the Classroom . . .

Career Education Moves Onto Job

By KATHYE THOMAS
(The News Staff

In a departure from the traditional round of job speakers, career education at Washington Junior High School this year is moving out of the classroom and into the workaday world.

After a month of intensive planning, approximately 40 field trips have been arranged with area business, industrial and professional people to provide each of the school's 200 ninth grade students a chance to see their potential careers in action.

Scheduled to begin this week, the trips will mean for some a behind - the - scenes look at a radio station, the police department or the telephone company. Others will talk with a truck driver from Borg - Warner, a beautician from Parkersburg Beauty College, or a paramedic at St. Joseph's Hospital.

Assistant principal Bill Butler, explained that the people in the area have been most cooperative. "We tell them we don't want the canned tour. We want the students to see what the person does on the job and have the opportunity, in an informal situation, to ask what it's like."

To insure that the tours will be as informal and personal as possible, the groups have been limited to 15 and in some cases seven or eight. Each student will select the places he would like to visit and in most instances he will receive his top two choices.

Although the trips were arranged by the school, they would never have materialized had it not been for county school bus drivers, Mr. and Mrs. Don Whitlatch and Adolph Welch who have volunteered their driving time to transport the students. Butler noted that otherwise the cost would have run several hundred dollars and effectively cancelled the trips.

New Approach

"We should have been doing this years ago," was the reaction of one faculty member to the new approach in career education. Her feelings seemed to characterize the general enthusiasm of the faculty over this year's career program.

For them, however, the trips are only one aspect of a wide - range program that begins down the ladder in seventh and eighth grades.

For all teachers, career education is considered an integral part of the teaching curriculum, and they make every effort to drive home the practical application of a particular course in relation to future jobs. Butler labels this the exploratory stage.

By ninth grade, that stage has been properly set. The student has been exposed to a number of possibilities and can hopefully zero in on two or three areas of interest which he will then be able to inspect for himself during the field trips.

Although the high point of the career unit, the field trips are not the whole story. English teachers see to it that students receive the necessary instruction in such basics as job application and interview, and even the speakers are not totally abandoned to the past.

Last week's kickoff for the trips included three speakers representing the various options open to the student: vocational education in high school, acadmic preparation, or technical school.

Guidance counselor Bill Niday said that the final phase of the program involves the evaluation of an extensive testing program that includes the Educational Development Series, a standard achievement test; the Kuder Personal Preferance, an interest test; and the GATBY aptitude test which indicates how aptitudes are related to specific job interests.

"It has really been a cooperative effort," concluded Niday, in a comment that 200 ninth graders, 40 career people, three volunteer bus drivers, and the entire staff and administration of Washington Junior High might well consider the understatement of the school year.

8 The Parkersburg News Wednesday, Feb. 12, 1975

POSTER WINNERS — Winners in the annual Blennerhassett Dental Society, Dental Hygienists and Dental Assistants - sponsored Poster Contest are shown (l-r) KNEELING: Jay Morris, 2d place 6th grade Lincoln School; Jeff Phillips, 2d place 5th grade Rayon School; Melody Jones, 1st place 4th grade McKinley School; John Miles, 1st place 5th grade Criss School; Lori VanMeter, 1st place 4th grade Belpre Stone School. Standing: Jennifer Andres, 2d prize 4th grade; Belpre; Anne Brewer, 2d place 4th grade Criss School; Susan Terlosky, 1st place 5th grade Belpre Middle School; Carolyn Zalupski, 1st place 6th Grade, Belpre Middle School; Beth Hackett, 1st place, 6th grade Park School. (Photo by Rich Lauer).

Career Interests of Students Aim of High School Program

By Betty L. Smith

That often asked question, "What do you want to be someday?" is being realistically explored at St. Marys High School by students of the eighth through the twelfth grades.

"All too often in dealing with young people or in counselling, in answer to the question, what do you plan to do five or six years from now, or what do you want to be, we hear the answer 'I don't know!'," stated St. Marys High School Principal Gary Ryan. "Basically, what we want the student to do is to take a close look at himself or herself, his or her interests and to recognize capabilities and aptitudes in certain areas of career potential

vation trips which are scheduled for Feb. 28, March 5 and March 12, approximately 50 seniors enrolled in the career education program meet in an orientation assembly Tuesday.

Prior to the actual experience of moving into the workaday world, a survey of interest was conducted among the students, who listed their first, second and third choice of occupations. Students will be given their first choice when possible or second if the first career field is unavailable in the area.

Some areas of interest indicated on the senior survey — besides the more widely known careers — are florist, specialized mechanics, commercial artist, video operator, furniture upholsterer, psychologist, travel agent, oil and gas well driller, detective, recreation director and therapist. Interest was indicated in the more traditional careers in the clerical, construction, mechanical, and health related fields and in the arts — music, singing and dancing.

Following three months of intensive planning, the dream will become reality when seniors leave the classroom for the "real" world of work — or at least, observation of work. The students will spend one-half day weekly over a nine-week period with a maximum of nine observations being made. Business and industry representatives and professional people have cooperated fully in the program, encouraging youth to come and observe, reported Principal Ryan.

The seniors will be evaluated on a nine-point check list on attitude, ability, dress, conduct, proper transportation approved by parent and school, etc., by the administrative staff and members and the persons conducting the training situation. The student will also evaluate the experience in terms of worth of the project and student interest.

Video tapes will be made during the seniors' career exploration experience to be used by tenth grade students as a unit in their American Studies II class during the fourth nine weeks.

Members of the administrative staff and staff members contacted professional people indicated in the survey to secure areas of on-the-job training for the interested student. Teachers who finalized placement plans for the training field trips and who worked out the forms and schedules used in planning were Mrs. Mae Lewis, Mrs. Marjorie Carnes, Harold Davis, Dan Allman, Roger Huffman, Lowell Kiser and Gary Bolyard.

A county industry and education committee, comprised of local representatives of industry and central office people has been meeting once a month and for the past three months has maintained communication to implement the program. Members are Supt. Larry Gainer; Asst. Supt. Gary Alfred; Dwight Dials, PRT director; Prin. Gary Ryan; Mrs. Adeline Cooper, RESA Field Consultant in Career Education; Robert Gessner, Union Carbide; F. G. Lamp, American Cyanamid; David Johnson, Quaker State; C. R. Berry, Monongahela Power Co.; and Phil Kincaid, Cabot Corporation, chairman.

"There is a big thrust in career education at the national level, with funds being made available for the program," said Ryan. "Mrs. Adeline Cooper, RESA Field Consultant in Career Education for this area, has conducted in-service meetings. Representatives from the state department of education are planning to be in the county Feb. 18 to observe the career education program in action."

The cooperative effort of many has culminated in a broad-based program of career education. The actual behind-the-scenes look at a chosen occupation at the senior level — while the high point of the career education unit — is only the target point of a program well grounded in the basics of self-awareness, testing, choice and preparation.

Likening the career education program to a triangle approach, Prin. Ryan said that, beginning with the young student in the eighth grade who will be given a wide over-view of the total job field, to finalizing a choice of occupation at the senior level, the idea is to foster career awareness in the early years.

Overall exposure to many particular areas as well as major ones in occupational clusters will acquaint the eighth grade student with many job opportunities not readily envisioned. As an example, Ryan cited an art teach who would list all the related occup tions in the field of art, designin interior decoration, illustrating, etc.

Each subject teacher will inco porate into his program a unit on ava able employment fields which requi the particular knowledge and skil offered in his class at the eighth gra level.

Going further, the ninth grader w be tested to point out strengths ar weaknesses of the student's attitude A private conference with the couns lor will inform the student of th results of the test to help him becom aware of his attitudes and how thes can help or hinder him on the jol During the ninth grade in Englis class, a unit on proper career value will be taught and at the end an evalu tion test will be given. All ninth grad students will participate in a two-da workshop which will emphasize prope career values.

The Armed Service Vocational Bat tery Test is given to all tenth grader to determine aptitudes and skills. Fron these results, this year's seniors were guided to their choice of career occupa tions and also placement at the PRT Vocational-Technical school. The PRT school, according to Ryan, is an asset to the total curriculum. This test, combined with the OVIS test which depicts the student's interest in career areas, serves as a two-dimensional picture of the student's interests and aptitudes.

With the stage properly set by exposure to several job possibilities and testing as to skills and aptitudes, the eleventh grade is ready to zero in on choosing a particular career to explore. The student is required to assemble a job profile, making an in-depth study of his particular area of interest as to training required, preparation needed, advantages and disadvantages. Included are an interview with a worker on the job of the student's choice and a resume including the student's evaluation of the choice of career in relation to suitability for him, how to proceed, and his certainty or uncertainty that this particular job is for him.

"The major point of the total program is to motivate the student to think in a realistic way of what he wants to do and to make him conscious of the many career choices at an early age. It is a very positive program and the results should make everything worth-while," concluded Principal Ryan.

Principal Gary Ryan reviewed plans for the career education program of St. Marys High School, explaining that a highlight of the plan calls for some 40 seniors to visit offices and plants and stores for direct observations of activities in fields of work in which they are interested.

Sentinel

Scene

Friday, Feb. 28, 1975 13

Students Tour

Core Road School third graders were given a tour of the Market Street C&P Telephone office Thursday by Bill Calhoun. Class teacher is Lana Turner. (Sentinel Photo)

28 The Parkersburg News Friday, March 7, 1975

PHS SPEAKER — Dana Corp. district manager Donald Price, (right), recently spoke to area auto mechanics students of Robert Sheppard.

Students Hear Mechanics Talk

Donald Price, district manager of the Dana Corp., Parts Craft Division, Columbus, O., spoke to Parkersburg High School auto mechanics students. Auto mechanics includes students from PHS, Parkersburg South, and Williamstown high schools. Dana Corp. is responsible for the sales and service of Perfect Circle, Spicer, and Victor engine and chassis replacement parts.

Price explained that his job as district manager includes providing basic knowledge of the automobile industry to vocational schools and dealer meetings. Price's program was concerned with the upper valve train consisting of the upper part of an engine. Upper valve train consists of valves, valve lifters, valve seats, valve guides, valve seals, valve springs, heads, head gaskets, and camshafts. Slides and movies were also shown.

Price presented the auto mechanics department with Doctor of Mechanics manuals. Students will study these manuals, "Prevention of Oil Loss Past Valve Guides," "For Better Diesel Engine Overhauls," and "For Better Gasoline Overhauls:" and then take tests, instructor Robert Sheppard explained. Tests will be forwarded to the Dana Corporation for grading. Those students passing the tests (70 percent accuracy)will be presented a Doctor of Motors student certificate by Sheppard.

Sentinel
Scene
Wednesday, April 2, 1975 19

Class Tours Fenton

Over 50 Franklin Junior High School students plus four advisors toured the Fenton Art Glass factory Tuesday as part of the school training program. The students were told about the history of glass, how it is colored, mixed and formed. The students made the trip via a school bus. John Laurenze of the Franklin faculty was in charge. (Sentinel Photo)

PARKERSBURG SENTINEL
SATURDAY, MAY 10, 1975

Assembly Line Work

Students Study Career Education

By BARBARA DYE
Accent Editor

Career Education is a big thing at Washington Junior High School as the freshman home economic students gained an insight into the manufactor's assembly line process.

Under the direction of Terry Foglesong, instructor, students designed their own patterns for a purse and a halter top. They then proceeded in an assembly line fashion to cut out and make the items.

"We posted the various department," Foglesong said. "We had departments from design, all the way through inspection and packaging."

Following the design department was the assembly department where material was cut to the pattern and made ready for sewing. Then there was the sewing and pressing departments where items were sewn together, seams pressed and a check of workmanship was made.

To finish the garment, items were sent to the top stitching department where the final touch was added.

To complete the process, final pressing was made and the items were inspected for quality and good workmanship. If they passed inspection, they were sent on to the packaging department.

Students were assigned to the various departments at the beginning of the project about two weeks ago, and each worked the same job just as if they were employed in an assembly line type of job.

Friday, the students held a "Red Geranium" Boutique during the lunch period and after school. The purses and halters made in the assembly line process were sold by the students to other students in the school. This gave the home economic students a look at the complete process of the designing, making and selling of any item to the public.

The students were responsible for the writing of receipts for merchandise sold, as well as the balancing of books following the close of the boutique.

"There are 25 girls in my two ninth grade home economics classes," Foglesong said. "They seem to have enjoyed learning about this phase of clothing occupations as they did the phase of menu planning last fall.

"Any monies received from the sale of the clothing garments will be used in the home economics department to further the study of career education," Foglesong said.

☆ ☆ ☆ ☆ ☆

Washington Junior High School home economics students have practiced and learned about an assembly line process of manufacturing during their study of career education and clothing occupations. The 25 ninth grade students of Terry Foglesong worked in the various phases of an assembly line from design to packaging and selling of the garments.

APPENDIX D

INDIVIDUAL GRADE LEVEL RESPONSES

FREQUENCY OF 12TH GRADERS RESPONDING YES OR NO
TO ITEMS 92 TO 106 ON CDI - CAREER ED. ACTIVITIES

Item #	% Yes	% No	Total No. Responding
# 92	73.938	26.062	353
# 93	81.375	18.625	349
# 94	29.661	70.339	354
# 95	37.931	62.069	348
# 96	52.857	47.143	350
# 97	80.791	19.209	354
# 98	47.863	52.137	351
# 99	40.936	59.064	342
# 100	73.938	26.062	353
# 101	32.658	67.342	395
# 102	42.317	57.683	397
# 103	49.740	50.260	384
# 104	50.000	50.000	382
# 105	59.796	40.204	393
# 106	46.875	53.125	416

FREQUENCY OF 9TH GRADES RESPONDING YES OR NO
TO ITEMS 92 TO 106 ON CDI - CAREER ED. ACTIVITIES

Item #	% Yes	% No	Total No. Respond (2 cum. freg.)
# 92	67.275	32.725	657
# 93	74.925	25.075	670
# 94	19.423	80.577	659
# 95	26.398	73.602	644
# 96	52.496	47.504	661
# 97	78.209	21.791	670
# 98	45.127	54.873	667
# 99	45.538	54.462	650
# 100	67.275	32.725	657
# 101	18.911	81.089	661
# 102	33.911	66.009	659
# 103	36.103	63.897	662
# 104	43.419	56.581	661
# 105	48.250	51.750	657
# 106	40.909	59.091	660

TEST FOR SIGNIFICANCE OF DIFFERENCE IN ITEMS 92-106 FOR CAREER ED. ACTIVITIES BETWEEN 9TH AND 12TH GRADES OF TOTAL POPULATION

Item	No. or 9th	No. or 12th	Mean 9th	Mean 12th	Level of Significance
92	643	339	1.225	1.221	.449
93	657	353	1.327	1.260	.012
94	670	349	1.250	1.186	.005
95	659	354	1.805	1.703	.0002
96	644	348	1.736	1.620	.0001
97	661	350	1.475	1.471	.456
98	670	354	1.217	1.192	.163
99	667	351	1.548	1.521	.202
100	650	342	1.544	1.590	.083
101	661	395	1.810	1.673	.0001
102	659	397	1.660	1.576	.003
103	662	384	1.638	1.502	.0001
104	661	382	1.565	1.500	.019
105	657	393	1.517	1.402	.0001
106	660	416	1.590	1.531	.027

TEST FOR SIGNIFICANT DIFFERENCE IN CAREER ED. ACTIVITIES ITEMS (ITEMS 92-106) BETWEEN 9TH AND 12TH GRADES OF STUDENTS WITH USABLE CDI

Item	No. of 9th	No. of 12th	Mean 9th	Mean 12th	Level of Significance
92	474	270	2.611	2.817	.013
93	474	270	1.061	1.114	.102
94	474	270	1.175	1.181	.438
95	474	270	1.128	1.117	.291
96	474	270	1.618	1.603	.379
97	474	270	1.510	1.515	.465
98	474	270	1.312	1.389	.050
99	474	270	1.120	1.141	.290
100	474	270	1.402	1.441	.211
101	474	270	1.371	1.478	.017
102	474	270	1.654	1.570	.046
103	474	270	1.518	1.470	.163
104	474	270	1.472	1.396	.058
105	474	270	1.417	1.426	.433
106	474	270	1.367	1.326	.192
TOTAL	474	270	1.075	1.188	.011

MEAN OF TEACHERS ON
CAREER EDUCATION OPINIONAIRE

Ques. No.	Total Prog.	3rd Grade High	3rd Grade Low	6th Grade High	6th Grade Low	9th Grade High	9th Grade Low	12th Grade High	12th Grade Low
A 1	2.40	2.12	3.16	2.53	2.86	2.04	2.58	1.84	2.52
A 2	3.05	2.75	3.58	3.30	2.43	2.95	3.03	2.69	2.96
A 3	2.85	2.53	3.62	2.80	2.54	2.50	2.83	2.59	2.88
A 4	2.85	2.40	3.62	2.82	3.47	2.47	2.79	2.69	2.90
A 5	2.80	2.60	3.37	2.85	3.59	2.31	3.00	2.43	2.73
A 6	3.02	2.78	3.53	3.21	3.81	2.75	3.03	2.55	2.93
A 7	3.06	3.12	3.62	3.31	3.56	2.85	3.09	2.41	3.03
A 8	2.97	2.93	3.44	3.10	3.08	2.80	3.14	2.62	2.93
A 9	3.04	2.69	3.51	3.38	3.67	2.75	3.09	2.77	2.85
A10	2.87	2.43	3.48	2.97	3.51	2.50	2.93	2.60	2.90
A11	1.99	2.18	2.24	2.04	1.89	1.95	1.95	1.84	1.98
A12	2.64	2.71	3.24	2.68	3.11	2.34	2.60	2.36	2.59
A13	2.95	2.93	3.10	2.93	3.05	2.95	3.18	2.68	2.82
A14	2.87	2.09	2.55	2.38	2.54	2.49	2.43	2.36	2.50
A15	2.61	2.29	2.71	2.50	2.71	2.55	2.76	2.68	2.53
A16	2.90	3.10	3.25	3.09	3.14	2.80	2.95	2.72	2.57
A17	2.69	2.40	2.67	2.52	2.80	2.61	2.87	2.65	2.78
A18	2.99	3.03	3.50	3.00	3.11	2.85	2.98	2.82	2.93
A19	2.90	2.74	3.07	2.95	2.85	2.95	2.84	2.86	2.93
A20	2.73	2.90	3.21	2.81	2.94	2.47	2.76	2.50	2.67
A21	2.42	2.45	2.82	2.34	2.65	2.21	2.50	2.26	2.42
A22	2.84	2.83	3.28	2.88	3.20	2.65	2.85	2.64	2.75
A23	2.75	2.74	3.10	2.79	3.00	2.65	2.78	2.47	2.75
A24	3.01	2.56	3.07	2.81	2.80	2.90	2.82	2.64	2.70
A25	2.50	1.96	2.76	2.44	2.77	2.34	2.56	2.55	2.55
A26	1.65	1.45	1.71	1.68	1.85	1.54	1.71	1.63	1.66
A27	2.14	2.16	2.58	2.31	2.62	1.88	2.09	1.85	2.07
A28	2.65	1.90	3.21	2.63	3.35	2.29	2.92	2.40	2.69
A29	2.50	1.96	3.21	2.31	3.41	2.14	2.60	2.19	2.57
A30	2.92	2.43	3.53	2.90	3.73	2.60	3.10	2.49	2.96
A31	3.10	2.50	3.46	3.22	3.79	2.90	3.29	2.80	3.03
B 1	2.63	2.81	2.68	2.69	2.76	2.52	2.49	2.54	2.69
B 2	2.39	2.71	2.44	2.52	2.25	2.39	2.16	2.49	2.36

MEAN OF TEACHERS ON
CAREER EDUCATION OPINIONAIRE (Cont.)

Ques. No.	Total Prog.	3rd Grade High	3rd Grade Low	6th Grade High	6th Grade Low	9th Grade High	9th Grade Low	12th Grade High	12th Grade Low
B 3	2.42	2.32	2.27	2.50	2.37	2.52	2.21	2.62	2.41
B 4	1.39	1.78	1.44	1.50	1.30	1.46	1.13	1.56	1.18
B 5	1.71	1.39	1.27	1.40	1.35	1.50	1.21	1.56	1.54
B 6	1.77	2.17	1.37	1.85	1.42	2.09	1.68	1.86	1.60
B 7	1.58	2.07	1.41	1.75	1.45	1.75	1.45	1.68	1.55
B 8	1.54	2.10	1.34	1.72	1.37	1.51	1.38	1.64	1.42
B 9	1.74	2.10	1.75	1.50	1.48	1.48	1.49	1.70	1.76
B10	1.69	1.81	1.44	1.55	1.54	1.63	1.63	1.90	1.87
B11	1.85	2.14	1.86	1.75	1.77	1.84	1.73	2.00	1.80
B12	1.83	2.14	1.71	1.85	1.94	1.68	1.68	1.86	1.89
B13	2.08	2.37	2.03	1.95	2.32	1.86	1.80	2.14	2.33
B14	1.72	2.03	1.86	1.90	1.90	1.47	1.60	1.61	1.72

ALL TEACHERS

Goal I	Percentage High	Percentage Low	Difference Between
Meeting with coordinator	30.05	7.88	+22.17
Curriculum materials	48.77	20.69	+28.08
Use of worksheets, tests, etc.	45.81	22.66	+23.15
Goal II, III, IV (Grades 3, 6, 9, 12)			
Conduction field trips	39.95	27.09	+12.86
Workers visiting class	61.58	37.93	+23.65
Use of A-V	62.52	37.44	+25.08
Teacher class discussion	76.85	63.55	+13.30
Small group discussion	50.25	28.57	+21.68
Student presentation	44.83	25.21	+19.62
Displays of posters	57.64	37.44	+25.20
Role playing & simulation	37.93	19.70	+18.23
Use of library	54.68	33.99	+20.69
Use of magazines & newspaper	51.23	26.60	+24.63
Use of special class projects	47.78	28.57	+19.21
Use of printed material	54.19	28.57	+25.62
Goal III (Grades 9 and 12)			
Exploratory work experience	45.81	33.99	+11.82
Intergration of basic skill	53.20	27.59	+25.61
Use of employment agencies	10.34	7.88	+ 2.46
Group Mean of all Educational Activities	48.52	28.35	+20.17

3RD GRADE RESPONSIVE

Goal I	Percentage High	Percentage Low	Difference Between
Meetings with coordinators	32.35	9.38	+22.97
urriculum materials	58.82	25.00	+33.82
Use of worksheets, tests, etc.	41.18	21.88	+19.30
Goal II			
Use of printed material RE: career ed.	55.88	21.88	+34.0
Use of special class, projects	50.00	34.38	+15.62
Use of newspapers & magazines	55.88	25.00	+30.88
Use of library resources	64.71	43.75	+20.96
Role playing & simulation	73.53	37.56	+35.97
Displays of posters	61.76	28.13	+33.63
Student presentations	44.12	31.25	+12.87
Small group discussion	55.88	37.50	+18.38
Teacher class discussion	82.35	65.63	+16.72
Use of A-V equipment	76.47	50.00	+26.47
Conduction of field trips	44.12	40.62	+ 3.5
Workers visiting class	76.47	28.13	+48.34
Goal III			
Integration with basic skills	61.76	31.25	+30.51
Exploratory work experience	50.00	28.13	+21.87
Goal IV			
Use of employment agencies	11.76	12.50	- .74

6TH GRADE RESPONSIVE

Goal I	Percentage High	Percentage Low	Difference Between
Meeting with coordinators	27.08	2.63	+24.45
Curriculum materials	37.50	10.53	+26.97
Use of worksheets, tests, etc.	45.83	10.53	+35.30
Goal II			
Use of printed material RE: career ed.	37.92	15.79	+32.13
Use of special class projects	45.83	21.05	+24.78
Use of newspapers & magazines	43.75	26.58	+17.17
Use of library resources	47.92	23.68	+24.24
Role playing & simulation	27.08	18.42	+ 8.66
Displays of posters	41.67	34.21	+ 7.46
Student presentations	35.42	23.68	+11.74
Small group discussion	50.00	36.84	+13.16
Teacher class discussion	64.58	68.42	- 3.84
Use of A-V equipment	64.58	31.58	+33.00
Conduction of field trips	25.00	15.79	+ 9.21
Workers visiting class	54.17	23.68	+30.49
Goal III			
Integration with basic skills	39.58	26.58	+13.00
Exploratory work experience	33.33	31.58	+ 1.75
Goal IV			
Use of employment agencies	6.25	10.53	-4.28

9TH GRADE RESPONSIVE

Goal I	Percentage High	Percentage Low	Difference Between
Meeting with coordinators	30.00	10.14	+19.86
Curriculum materials	50.00	24.64	+25.36
Use of worksheets, tests, etc.	46.67	30.43	16.24
Goal II			
Workers visiting class	56.67	39.13	+17.54
Use of A-V equipment	65.00	37.68	+18.32
Goal III			
Condition of field trips	31.67	20.29	+11.38
Exploratory work experience	51.67	39.13	+12.54
Teacher class discussion	83.33	63.77	+19.56
Small group discussion	41.67	31.88	+ 9.79
Student Presentation	50.00	28.99	+21.01
Display of posters	61.67	34.78	+26.89
Role playing and simulation	25.00	14.49	+10.51
Use of library resources	53.33	43.48	+ 9.85
Use of newspaper and magazines	50.00	27.54	+22.46
Integration of basic skills	56.67	27.54	+29.13
Use of special class projects	50.00	28.99	+21.01
Use of printed materials RE: career ed.	58.33	36.23	+22.10
Goal IV			
Use of special class projects	11.67	8.70	+ 2.97

12TH GRADE RESPONSIVE

Goal I	Percentage High	Percentage Low	Difference Between
Meeting with coordinators	31.15	6.25	+24.90
Curriculum materials	50.82	20.31	+30.51
Use of worksheets, tests, etc.	47.54	21.88	+25.66
Goal II			
Workers visiting class	63.93	50.00	+13.93
Use of A-V equipment	60.66	34.38	+26.28
Goal III			
Teacher class Discussion	77.05	57.81	+19.24
Small group discussion	55.74	15.63	+40.11
Goal IV			
Condition of field trips	47.54	34.38	+12.66
Exploratory work experience	47.54	32.81	+14.73
Student presentation	47.54	18.75	+28.79
Display of posters	63.93	46.88	+17.05
Role playing & simulation	39.34	17.19	+22.15
Use of library resources	55.74	25.00	+30.74
Use of newspaper & magazines	55.74	26.56	+29.18
Integration with basic skills	55.74	26.56	+29.18
Use of employment agencies	11.48	3.13	+ 8.35
Use of special class projects	45.90	29.69	+16.21
Use of printed materials RE: career ed.	54.10	31.25	+22.85

DIFFERENCE BETWEEN HIGH AND LOW PARTICIPATING TEACHERS REGARDING UNDERSTANDING OF CAREER ED. OBJECTIVES; DEGREE OF ASSISTENCE PROVIDED BY FIELD COORDINATORS: AND FREQUENCY OF CAREER ED. ACTIVITIES IN CLASSROOM

	No. of High	No. of Low	$\bar{x}$ of High	$\bar{x}$ of Low	Level of Significance
Understanding of Career Ed. Objectives $\bar{x}1$ Items 1-27					
3rd Grade	33	30	2.58612	3.14089	.0004
6th Grade	47	37	2.81512	3.06620	.0556
9th Grade	61	65	2.52395	2.75383	.0109
12th Grade	59	66	2.51642	2.66897	.0685
Degree of Assist. Provided by Field Coord. $\bar{x}2$ Items 28-31					
3rd Grade	30	28	2.20000	3.35714	.0001
6th Grade	45	34	2.77222	3.57352	.0004
9th Grade	61	65	2.48770	2.98076	.0007
12th Grade	57	63	2.46637	2.81878	.0059
Frequency of Career Ed. Activities in Classroom $\bar{x}3$ Last 14 Items					
3rd Grade	28	29	2.14514	1.77763	.0001
6th Grade	40	35	1.89727	1.82142	.2209
9th Grade	53	61	1.85442	1.69709	.0189
12th Grade	51	60	1.94381	1.89624	.2922