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ABSTRACT

The DILENOWISCO Educational Cooperative designed the Four I's Project (intervention, introduction, investigation, and involvement) and the K-12 Career Education Program for Norton City in an effort to assist in solving some of the educational problems existing in this isolated central Appalachian area of Virginia. The two projects are discussed extensively in both summary and body reports in terms of: program objectives; procedures; evaluation methods; problems; evaluation instruments; project results and accomplishments; a third party evaluation; conclusions, implications, and recommendations; information dissemination; and a geographical description of the area served by the projects. The Four I's Project was designed to serve older students who were potential dropouts from the school districts of Dickenson and Wise Counties. The K-12 Career Education Project was designed to serve all the children in the Norton City Schools with the ultimate objective of leading seniors toward realistic career plans and self concepts. Both projects were considered to be successful and therefore will be continued. Achievements are reported in the areas of: guidance, work placement programs, changes in self-concept, changed teacher attitudes, parental awareness, and occupational knowledge. (BP)

FINAL REPORT

Project Number 0-361-0050
Contract Number OEG-0-70-4753 (361)

DILENOWISCO Educational Cooperative
"DILENOWISCO Four I's Project"

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

Wayne Wheatley, Director
James Hurt, Coordinator
Carl Deskins, Coordinator
DILENOWISCO Educational Cooperative
1032 Virginia Avenue
Norton, Virginia 24273

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The project reported herein was performed pursuant to a
with the Bureau of Adult, Vocational, and Technical Ed
Office of Education, U.S. Department of Health, Educat
Welfare. Contractors undertaking such projects under
sponsorship are encouraged to express freely their pr
judgment in the conduct of the project. Points of v
opinions stated do not, therefore, necessarily repre
Office of Education position or policy.

Wayne Wheatley, Director
Carl Deskins, Coordinator
James Hurt, Coordinator
DILENOWISCO Educational Cooperative
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I. SUMMARY OF THE REPORT

A. The Four I's Project

1. Time Period Covered by the Report 1 August 1970 to 30 June 1973

2. Objectives

The objective of this program was to significantly intervene (Intervention) in the lives of a group of youths by introducing (Introduction) them to a broad range of occupational information, by allowing them to manipulatively investigate (Investigation) several occupational areas, and by enabling them to become involved (Involvement) in actual work and learning experiences.

Current occupational information was presented to the students via modern media and materials. Manipulative skills were provided with a cycling system which included masonry, carpentry, small engines, electricity, food services, commercial and domestic sewing, health occupations, and cosmetics. Intensive guidance and counseling was provided through group and individual counseling, guest speakers from the working community, and on-the-job visitations.

The type of child selected to participate in this program was the potential dropout who in the past has dropped out of school without any job entry level or manipulative skills, usually becoming a burden on society or, at best, a low income earner. The ages of the children were 14-19, grades 5-10.

It is hoped that this program will reverse the student's downward spiral in a manner that has wide-spread adaptability, thus making a contribution to education and society. The specific objective of the academic component (Group A) was seven months growth in reading and mathematics for 90% of the students with IQ's of 75 or above.

3. Procedures

Group A (Dickenson County)

Group A (130 boys and girls) was divided into seven prevocational shop areas according to the skills the students wanted to learn. These were electricity, carpentry, masonry, and small engine repair for the boys and cosmetics, health occupations, and commercial sewing for the girls. Manipulative skills are provided with a "cycling" system. First year students have an opportunity to investigate the seven areas for nine week periods. Second year students spent eighteen weeks in the occupational area of their choice. At the end of the first semester, they choose another area for the remainder of the school year.

The students in the Dickenson County program remain at the vocational school for the academic component. They receive a half day of instruction in vocationally-related academics. Skills related to the vocational programs are taught by the academic teachers.

Group B (Wise County)

Sixty-eight girls were divided into four skill areas: food services, cosmetics, domestic and commercial sewing, and health occupations. The first year girls investigated each of the four skill areas for nine weeks. The second year girls investigated two areas of their choice for eighteen weeks each. One hundred twenty-six boys were divided into three prevocational areas: building trades, metals, and electricity.

A program relating the academic subjects with the prevocational areas was partially accomplished during the first two years. Visitation with home school principals, guidance counselors, and academic teachers, and the sharing of daily lesson outlines resulted in a greater coordination between the programs. This procedure was still awkward, however, and for the third year of the project, an academic component similar to the one in the Dickenson County program was added.

Both Groups - Broad Occupational Orientation

Several field trips, including all students, were made by both groups. Numerous guest speakers participated in the program.

Materials Used:

The guidance counselor used the following materials in individual and group situations: filmstrips ("How to Study Occupations", "World of Work", "Careers Unlimited"), "Our Working World kit, and S.R.A. "World of Work" kit. The Reader-Printer was used with the Appalachia Educational Laboratory View Deck. The Interest Check List, Chronicle Occupational Library, Turner Guidance Series, and Dictionary of Occupational Titles were used.

Discussions regarding employment, interview techniques, employment application, and employment responsibilities were held with all students.

4. Results

Summary of Compiled Results of Testing, Questionnaires, and Other Findings

After gathering, compiling, and analyzing the data from standardized tests in reading, mathematics, personality, and vocational maturity and from staff-developed questionnaires for obtaining the attitudes of students, teachers, principals, and parents concerning the success of the program, it appears that the students made progress in some areas while faltering in others. The students, parents, and principals were appreciative of the program for its intervention into and modification of school experiences.

5. Evaluation

The V.P.I. evaluation team's final report is included in Section 5 of the body of the report.

6. Conclusions and Recommendations

A. Test Results

1. In the academic components of the program, there was some success shown by the test results in each subtest area.

2. On the average the students' scores improved on the California Test of Personality. This may be indicative of an improvement in self-concept and general personality.

3. The Wise County students showed better gains in reading and mathematics with the new academic component.

B. Results of Students, Teachers, Principals, and Parents Questionnaires

1. The students approve of the program as it has been functioning during the past year.

2. On the average, the teachers in the Dickenson County program gave more negative responses on the questionnaire than did the Wise County teachers.

3. The principals expressed positive attitudes toward the program.

4. The parents of the Four I's students reported that they were satisfied with the program.

C. Other Tabulated Findings

1. The withdrawal information collected shows that a large number of girls drop out of school because of marriage or health problems.

2. A disproportionate number of the students who withdrew from the program are reported as unemployed and staying at home.

D. Recommendations

1. Realizing the importance of reading, it is recommended that more time and effort be expended in discovering reading problems of the students and helping them to improve their reading skills.

2. The testing program should be changed to a diagnostic program.

3. Because the student's self-concept is influenced so greatly by his teacher, school personnel should agree to a humanistic approach to teaching before they are hired.

4. Weekly faculty meetings should be held to discuss the progress of the program and to give the teachers an opportunity to exchange teaching techniques.

5. More field trips, guest speakers, and other types of occupational orientation experiences should be provided.

6. Information about marriage and family living should continue to be taught.

7. More effort should be made to help those students who drop out of school.

8. Home visits should be made in order to help determine the causes for students dropping out of school. Students should then be aided in adjusting to out-of-school life.

9. The job placement program should increase the number of students being placed.

E. V.P.I. Evaluation Report

The final evaluation report offered many commendations for the progress in the Four I's Program. Some of the commendations were: positive personal growth of the students was shown, equipment recommended was acquired, able leadership of the supervising teachers and interest and enthusiasm of the teaching assistants was noted, and assistance was given to dropouts.

Some of the recommendations of the evaluation team were. the employment of teacher aides for both locations, the provision of more library and individual study space, the addition of a special education class for the more academically limited students, increased job placement, and an improved program of broad occupational orientation.

F. Local Plans for Continuation after the Termination of Federal Funding

Wise and Dickenson County Public Schools have shown a tremendous interest in the Four I's Project. Because the program does seem to be meeting a need which exists in the area, the administration of Wise and Dickenson County Schools will continue the project after the termination of USOE funding.

For the 1972-73 project year, Wise County expanded the program by adding a program for boys which was financed by the local school system with some services shared between federal and local funds. The boy's program at Wise was

previously discontinued (on the recommendation of U. S. Office of Education and the V.P.I. evaluation team) in the spring of 1971 due to inadequate facilities and other administrative-program difficulties. By the 1972-73 school year, Wise County had adequate facilities for the boy's program and the other difficulties had been eliminated. It was felt by all parties, including the V.P.I. evaluation team, that the boy's program would have a high chance for success. (All of the prevocational instructors and prevocational materials and supplies for the boy's program were purchased by Wise County Schools.)

In addition to adding a boy's prevocational program, Wise County also added vocationally-related academic classes similar to the program in Dickenson County. This change was also in agreement with the recommendations of the V.P.I. evaluation team. One teacher was employed from Four I's project funds and two were employed by Wise County. $1,000 of academic materials and supplies were purchased through project funds and the remainder was purchased by Wise County.

B. Career Education for Norton City Schools

Time Period Covered by the Report: 10 December 1971 - 30 June 1973

Norton City Schools is a small school system located in an isolated part of Central Appalachia. About 50% of the children drop out of school before completing grade 12. The high school sends approximately 65% of its graduates to college and very few to vocational-technical programs. Career Education was seen as a possible answer to some problems of children in the school system.

1. Objectives

a. In order to help the student acquire an adequate background of vocational information, the program had the following general objectives:

1) To increase the students' background of information about occupations in their geographical area, the world of work at large, and the requirements necessary to enter certain occupations.

2) To assist students in matching abilities and training

3) To assist students in understanding the significance of occupational choice in terms of personal and psychological growth.

4) To help students understand the economic implications of their occupational choice.

5) To provide students with information concerning job placement services, available training centers, and sources of financial assistance for training.

b. In order to assist the student in developing a positive realistic self-concept the staff strove for achievement of the following objectives

1) To provide the students with successful first grade school experiences.

2) To provide students with opportunities to explore their areas of interest to the greatest extent of their capabilities thus establishing a realistic understanding of their abilities and limitations.

3) To assist students in achieving a better understanding of individual interests and the roles these play in selecting a career.

c. One product of the program was to be the development of a continuous, sequential Career Education Curriculum (K-12) to be integrated with the standard curriculum of schools.

2. Procedures

During the first half-year, a planning-operational program was attempted at the elementary level. The high school staff spent its time in planning for a 1972-73 implementation of the quarter system.

A unit approach to Career Education utilizing learning centers was used at Norton Elementary. The high school used a fusing approach with a new quarter system for increased flexibility.

3. Evaluation Instruments Used

Parent attitudes toward the program, results of the work-stud program at the high school, and gains in occupational information were assessed using staff-prepared evaluation instruments.

4. Test Results

a. Test results revealed a slight gain in occupational information.

b. Employer response to the work-study program was extremely favorable.

c. The vast majority of the parents felt that their children were enjoying school more and learning as much as in the traditional school program.

5. Conclusions and Program Accomplishments

The Career Education project has had a significant impact on the curriculum and instructional program in the Norton City Schools. The guidance counselors have become much more service-oriented to non-college bound students. Parental and community awareness and acceptance of the program has been excellent. Small but statistically significant increases were recorded in occupational awareness.

6. Third Party Evaluation Report

The VPI evaluation report indicated that the overall effort made by the project staff and the staff of Norton City Schools was commendable. The report also indicated that the Career Education program was much more effective at the elementary than at the secondary level.

7. Problems

Developing a viable secondary level Career Education program has been the most difficult problem faced by project staff.

8. Continuation

The project will be continued by Norton City Schools.

II. BODY OF THE REPORTS

The DILENOWISCO Educational Cooperative serves the four county area of Dickenson, Lee, Scott, and Wise and the City of Norton. Located in the southwest tip of Virginia, this area is a mountainous, isolated, coal producing region which shares most of the social and economic characteristics of that thirteen state region known as "Appalachia". In fact, Southwest Virginia lies in that part of the Appalachian Province often called "Central Appalachia". Isolated both physically and culturally, the area is literally cut off from the rest of the state, lying closer to seven other state capitals than it does to Richmond.

Situated almost entirely within the Great Valley of the Tennessee River Basin, Southwest Virginia is characterized by long continuous ridges, running northeast to southwest, separated by medium to wide valleys containing lesser ridges and hills. The area is bordered by large mountain ranges which serve both as physical and economic barriers. Clinch Mountain, the southern boundary of the district, has only one major break in its towering ridge, the Moccasin Gap at Gate City in Scott County bordering Tennessee. The area is cut off from Eastern Kentucky on the northern boundary by the Cumberland, Stone, and Black Mountain chains, and to the west, the only significant transportation route is the Cumberland Gap, located at the eastern tip of Lee County, near Middlesboro, Kentucky.

By the most direct highway route, it is approximately 120 miles from Breaks Interstate Park, the northernmost tip of Dickenson County, to Cumberland Gap, located at the southwestern tip of Lee County and the state of Tennessee. Again, using the Breaks as the northernmost part of the area, by the most direct highway route it is approximately 67 miles to Weber City in Scott County, the southeasternmost point, bordering Tennessee. In terms of modern travel, these distances seem insignificant, but it should be pointed out that these distances, for the most part, require traveling over twisting mountainous roads, which have caused even the most experienced traveler to grow pale at their sight.

There are 693.77 miles of primary highways and 1943.23 miles of secondary roads in Southwest Virginia, maintained by the State Highway Department. At present there are three primary and five secondary projects under construction. Plans for more highways in the area are now being considered; this should help alleviate both interstate and inter-regional isolation.

Bituminous coal is the most vast mineral resource shared by the counties of Southwest Virginia; it accounts for most of the income of the region. Deep-mining is still the largest coal producing method, but it is being replaced by a fast-growing method called "strip mining". Due to the deep v-shaped valleys and steep slopes characteristic of the region, most coal beds crop out on hillsides. With the heavy machinery, this slight overburden can be removed, exposing the coal seam. This type of mining has resulted in significant conservation problems. There has also arisen a highly publicized, often bitter, controversy over the values of strip mining.

In addition to coal, there are small supplies of natural gas, oil, and limestone which contribute to the area's economy, but now only the empty shells of the fire-breathing ovens remain.

Nearly four-fifths of Southwest Virginia is wooded. The Jefferson National Forest, which runs through the four counties and touches Letcher and Pike Counties in Kentucky, contains 85,000 acres of public lands. Most of the saw timber of the region was depleted during the 1930's by large outside lumbering companies and it has taken the intervening years for the forests to recover.

Only about 25% of the total area is in farms; these are usually small part-time ventures, operated more for home consumption than for sales. Tobacco, apples, cattle, hogs, and poultry account for the greatest portion of farm income.

The climate of the area is temperate, averaging 36° in January and 74° in July, with a high percentage of days with cloud cover. Rainfall is one of the lowest in the Tennessee Valley, but still among the highest in the United States, averaging 49 inches yearly. Surface runoff is drained through numerous mountain streams and fast flowing rivers, the principal ones being the Clinch, Powell, and Holston Rivers, flowing southwestward into Tennessee.

The terrain, rivers, and soil of this region have been a great influence on its economic and social organization. The terrain is the foe to development, the barrier to road building and communication, and often the source of natural disaster.

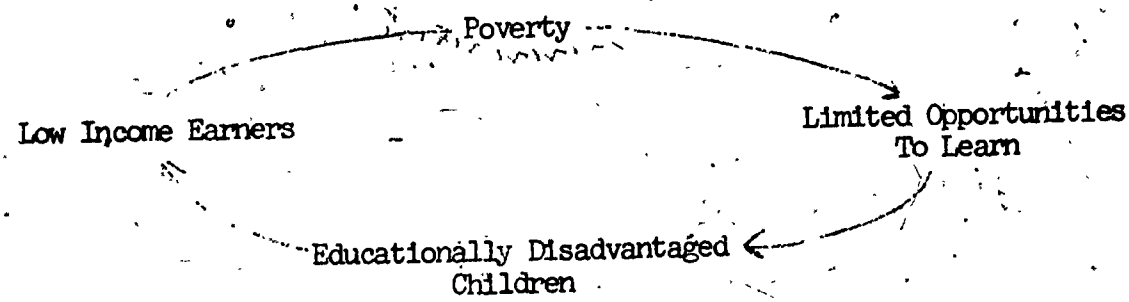
The population of the DILENOWISCO area has been declining since 1950; this is usually explained by the replacement of unskilled mine labor with the massive growth in mechanization. The 1970 census age distribution graph shows only a small percentage of the population in the prime working age group of 20 - 34 years. Large numbers of people leave the area at the age of 18 or 19. This represents a large outmigration of recently graduated high school students, amounting to a loss of the young, the talented, and the ambitious and placing a serious drain on the future economic and social potential of the area. Area schools are spending great amounts of money to educate young people, but this investment is being lost when they leave. Other than coal, there is simply no industry to supply jobs for the people.

Of the remaining population, it has been estimated that one out of five needs some sort of public assistance. The median school years completed by adults 25 years and older is 8.6 grades, as compared with 11.5 grades completed by average urban Virginians. Five percent of the school age population would be classified as mentally retarded, while a great many more have varying degrees of learning handicaps. In this area of Central Appalachia, about fifty percent of the youth who turn 18 each year have not reached a level of adequate employability, compared with the twenty-five percent national average. Only one out of two entering the first grade remains in school until formal graduation.

Although only 28% of those entering first grade ever go to college, and no more than 14% of these get degrees, the offerings in the school are by and large for the 14%.

All of these facts and statistics cannot possibly represent the inestimable loss of human talents and resources.

Nationally, nearly 25 percent of the young men and women who turn 18 each year have not reached a level of adequate employability. In this area of Central Appalachia, this is true for about 50 percent of the youth; only about one out of every two students entering first grade remains in school until formal graduation. This is a tremendous waste of money as well as human resources. The nation supports numerous remedial programs, some of which cost as much as $12,000 for every man or woman placed on the job. Those who remain unemployed may cost as much as $4,000 per year in welfare support for themselves and their children, who continue the cycle of poverty.



Based on a report by the National Advisory Council on Vocational Education, the number of jobs which the unskilled can fill is declining rapidly. The number requiring a liberal arts college education is also decreasing, while the number demanding a technical skill is increasing rapidly.

Existing vocational programs fail to reach many students, who drop out of school before they are old enough to qualify for the vocational training programs available in the area. In most cases, these are students who are two or more years behind their age group in grade placement; paradoxically, they are also the ones who are most in need of assistance in planning for an occupation. Educational requirements in all occupations are increasing; the rate of increase is greatest in those occupations with the lowest qualifications. Accordingly, the chances for a student with less than a high school education and no vocational training to qualify for and succeed in many occupations are dim and growing dimmer.

A long-range solution to this problem requires, among other things, that vocational training begin at an earlier age for all students. This is the problem that the Four-I's Program has attempted to solve.

Solutions to Existing Educational Problems.

In an effort to assist the localities in the solution of some of the educational problems existing within the area, DILENOWISCO designed two intervention projects. One (the Four I's Project) was designed to serve older students who were potential dropouts from the school divisions of Dickenson, Wise, and the City of Norton. The other project was a K-12 Career Education program designed to serve all the children in the Norton City School District.

A. THE FOUR I'S PROJECT.

In an effort to alleviate the large dropout problem existing in the area, the Four I's Project was developed (See Program Description, Appendix G).

The program was based on the Four I's:

1. Intervention is needed in the lives of a group of children who appear to be in a vicious cycle of failure and frustration. The cycle can ultimately lead to discontinuance of formal schooling and premature entry into the world of work. Intervention is designed to demonstrate that a modified curriculum and special supportive instruction and guidance can cause these children to have heightened aspirations and a real desire for additional vocational training. It can provide them with minimum entry level skills into the world of semi-skilled work.

2. Introduction into the complex and rapidly changing world of work is an integral part of the Four I's Project. Since these children are potential dropouts, it is the purpose of this program to introduce a number of skill occupations to them and to give them minimum entry level skills in one or two specific jobs. The program will hopefully encourage and stimulate the participants to continue their formal schooling, to graduate from high school, and to take a two- or three-year skilled trade course in a vocational school after completion of this program.

3. Investigation and inquiry by the students into occupational skills and opportunities are needed. Information is not enough. These children need to see, hear, feel, taste, and smell; they need to manipulate.

4. Involvement of the children into the world of work is seen as a necessity. It is to be accomplished by providing them with on-the-job experiences on a work-study basis. Once again, information is not enough. These students learn best by actually applying for, getting, and holding a real job, even though it may be a part-time job.

It has been the intention of this program to intervene into the lives of the participants in order to break the cycle of failure and frustration, to introduce them to a number of skilled occupations, to allow them to investigate the world of work to achieve success in gaining manipulative skills, and to actively involve them in actual work experiences.

1. Goals and Objectives of the Project

Due to difficulties encountered in the program, it is impossible to assess the extent to which the original objectives were met. The project itself changed in several ways during the three years of operation. At the conclusion of the first year of operation, the boy's program in Wise was discontinued on the basis of recommendations of both the VPI Evaluation Team and the U. S. Office of Education. The control group was also dropped because no data had been obtained on the control subjects during the first year of operation. Significant problems between project staff and school personnel existed in the first year of operation of the project. At the end of the second year of the project, the boy's program was reinstated through the use of state-local and Title I funds. The constant change in the make-up of the student body being served made it impossible to evaluate the full impact of the project.

The objectives listed below differ from the original objectives only in the increased number of students being served.

Objective 1.

To provide a three year program of broad occupational orientation (covering two hundred occupational fields available in the DILENOWISCO-area) to two selected groups totaling about three hundred twenty-seven elementary and secondary students who are, due to various academic, socioeconomic, and other handicaps, two or more years behind their normal grade level, in order to enhance their vocational maturity and increase their chances for making sound vocational decisions.

Objective 2.

To provide work experience to about thirty students (out of the three hundred twenty-seven elementary and secondary students. in the project with a wide variety of offerings in many occupational areas based on the aptitudes and interests of the participants.

Objective 3.

To provide the two groups, totaling about three hundred twenty-seven students who have not previously been enrolled in vocational programs, with specific prevocational training in job entry skills in at least two occupational areas prior to the time they leave school and to provide them with the opportunity to continue their vocational development by attending the regular vocational-technical programs at the conclusion of this program.

Objective 4.

To provide the students in Dickenson County with vocationally-related academic training in order to increase basic skills (especially in reading and mathematics) and in order to experiment with an alternate method of presenting related academic training to the participants.

Objective 5.

To provide intensive occupational guidance and counseling during the three year program and to provide initial placement of all students at the completion of the program. (Placement in this sense means placement in a job or in the regular vocational-technical programs for senior high youth.)

2. Description of General Project Design and Procedures

a. Prevocational Component

Wise County

First year Wise County Four I's girls have an opportunity to investigate four occupational areas: food services, commercial and domestic sewing, health occupations, and cosmetics. The students spend nine weeks in each of the listed occupational areas.

Second year girls spend eighteen weeks in one of the occupational areas of their choice. At the end of the first semester, they choose another area for the remainder of the school year.

First year boys rotate through three prevocational areas (twelve weeks each): building trades, metals, and electricity. A similar rotation system is used for the second and third years of the program.

Third year girls and second year boys choose one of the areas in which they are most interested and remain in that area for the entire year.

(Originally the boys operated on the system presently used by the girls; however, the cancellation of the boy's component at the end of the first year and its reinstatement for the third year changed the boy's program somewhat.)

Dickenson County

The first year Dickenson County Four I's girls have an opportunity to investigate three occupational areas: health occupations, commercial sewing, and cosmetics. The students spend twelve weeks in each of the listed occupational areas. Food services will be added as a fourth area in the near future.

The second and third year girls in the Dickenson County program are in a "cycling" system similar to that of the Wise program.

The first year Dickenson County Four I's boys investigate four occupational areas: carpentry, electricity, masonry, and small engines. The students spend nine weeks in each of the listed occupational areas.

Second and third year boys are in a "cycling" system similar to the one used in the Wise program.

It is hoped that many of the students will enter the regional vocational-technical program provided at the County Vocational Schools at the beginning of or following the third year.

Curriculum guides have been completed in all the prevocational areas in Dickenson County (See Appendix A for sample guides). Dr. Lester Duenk of V.P.I. & S.U. worked with the coordinator in July, 1972, on the revision of these guides. The Coordinator conducted a workshop in August for the teaching assistants that worked in the boy's program.

Curriculum guides have been completed in the Wise program and will be further revised during future years.

b. Academic Program

During the first, second, and third years in the Dickenson County program, academic instruction was offered in the vocational school in a half-day block of time as an integral part of the program. Students were presented with academic material on their level of ability and in line with their vocational interests. Efforts were made to relate a variety of academic materials to the prevocational area of study.

During the first two years of the program at Wise, the academic program for the Four I's students was offered in the home school in an effort to keep the student with his peer group and avoid setting him apart as different. Coordination of the Four I's program and the academic program in the home school became so difficult that an academic component similar to that used in Dickenson County was added to the Wise County program for the third year of operation.

c. Guidance and Counseling

The guidance and counseling program has changed tremendously each year the project has been in operation. During the first of the project, one guidance counselor was employed to work 3/5 time with the 192 Wise County and City of Norton students and 2/5 time with the 60 Dickenson County students.

For the second year of the project, the guidance program changed. Due to the increased enrollment in the Dickenson County program and the cancellation of the boy's section of the Wise County program, the guidance counselor worked three days a week in Dickenson County and two days a week in Wise County. Further scheduling was accomplished by meeting with the students in groups for the first two periods in Wise County and the first three periods in Dickenson County and reserving the last period of the morning and the afternoon sessions for individual counseling. In Dickenson County, students were taken from the academic class; since there were no academics taught in Wise, the students had to interrupt their trade skill classes for the counseling sessions.

During the third year of the project, the boy's program at Wise was reinstated. At this point, it was decided to combine the roles of guidance counselor and work adjustment coordinator and to assign one person full-time to each location. Prior to this time, each of these roles had been separate, with each person serving part-time in each of the two programs. It was felt that by combining the two roles, more flexible use could be made of the guidance counselor-work adjustment coordinator's time since he would always be available to his assigned program to perform either counseling or placement services as needed.

The activities of the two programs were planned with the same objectives in mind, and the counselor's time was spent in working with students and teachers. Because the students in both programs characteristically display what is interpreted to be a poor or low self-concept, the first group meetings were held solely to alleviate their fear of speaking out in a group and to employ their ideas in the guidance activities.

Although occupational guidance was the main thrust of the guidance portion of the project, the social problems of many students had to be reconciled before a concentrated effort could begin on occupational guidance. The teaching assistants and supervising teachers were instrumental in bringing many of the social problems to the attention of the guidance counselor.

The occupational counseling plan included activities (See Appendix B) to help the students discover how their interests could lead to a particular kind of work and to help them gain information about various occupations, job interviews and job applications, taxes, social security, and methods of succeeding on the job.

1) Personal Counseling

All of the students in the program spent some time in individual and group counseling. The chronological and mental age level of the students was condusive to social conflicts and misunderstandings at school, in the home, and in the community. Therefore two periods each day, one in the morning and one in the afternoon, were reserved for personal counseling sessions.

Personal counseling sessions were participated in by the students of both programs and the guidance counselor. Some examples of problems discussed include friction between student and peers, unmarried girls who became pregnant, and the desire of some students to leave home.

2) Occupational Counseling

Students were usually counseled in small groups, with from eight to twelve (and sometimes fewer) students in each group. At the beginning of the school year, all students completed the "Interest Check List" from the U. S. Department of Labor. The next step was to discuss each student's list with him, using the Dictionary of Occupational Titles along with the "Interest Check List". After each student had some understanding of his occupational interests, he became part of a counseling group. In these groups, students were provided with an opportunity to obtain more information about a particular occupation. Following the initial introduction to specific job information, the sessions became more informal, with discussions centering around "World of Work" filmstrips and recordings, social security information, job interview information, job applications, the tax system, and marriage and family living.

d. Occupational Placement and Work Adjustment

Occupational placement and cooperative work-study provisions were not available to students during the first year of the project. The addition of a work adjustment coordinator during the second and third years of the project greatly strengthened the program.

1) Selection of Students for Occupational Placement

The guidance counselor-work adjustment coordinator received a list of students who were chosen for placement by teachers and the supervising teacher. To be chosen for placement, a student had to meet the following requirements:

-The student must have shown academic success in both his vocational and academic classes.

-The student must show acceptable social behavior to classmates and teachers.

-The student must cooperate with school personnel.

-The student must have the desire to work.

-The student should have the economic need to work.

2) Method of Securing Placement

Whenever possible, a student was placed in a business which would develop his work skills in his chosen prevocational area. In some cases, however, such a placement was not possible because of the scarcity of available jobs. If a student indicated an interest in a job outside of his chosen vocational area, placement on such a job was made since project staff felt the development of personal and social skills was equally as important as the development of vocational skills. Such skills as the ability to work with others, to accept responsibility, and to work under varying degrees of supervision are invaluable.

a) Approach Used

The guidance counselor-work adjustment coordinator called on local businesses in Dickenson and Wise Counties and introduced the employers to the Four I's program. Each employer was given a copy of the bulletin "DILENOWISCO's Four-I's Project" and a handout concerning the responsibilities of the guidance counselor-work adjustment coordinator. The coordinator them explained in detail the objectives of the Four I's Program and the benefits the job opportunity could have for both employer and student.

The student obtained vocational training in his classes which he could relate to his actual on-the-job experiences. Close supervision was provided for the student by the guidance counselor-work adjustment coordinator. Feed-back from employer evaluations allowed the teachers and the coordinator to work with each student individually if he needed further development of skills.

If the employer was hesitant but promising, the guidance counselor-work adjustment coordinator called back later, after giving the employer time to read the handout and reconsider all information.

b) Cooperation with Other Agencies

Close cooperation has been established with the Wise and Dickenson County Neighborhood Youth Corps. Whenever possible, the coordinator tried to "upgrade" the level of the jobs of Four I's students working with the Neighborhood Youth Corps. For example, some students worked at the Dickenson County Bus Maintenance but were paid by the Neighborhood Youth Corps. These positions were acquired through the efforts of the guidance counselor-work adjustment coordinator, who felt that auto mechanics would be more in line with the student's interests than the janitorial duties they were performing.

The only stipulation in placing N.Y.C. students is that the business must be a non-profit organization and must be approved by the director of the N.Y.C. program.

Virginia Vocational Rehabilitation and the guidance counselor-work adjustment coordinator have worked together with the dropouts from the Four I's program. Extended training or job placement was obtained for interested students.

c) Number of Student Placements

During the second year, there was a total of forty-nine students under the supervision of the guidance counselor-work adjustment coordinator. Thirty-five of the students were placed in local businesses for on-the-job training. Fourteen of these students worked through the Neighborhood Youth Corps program under the supervision of the guidance counselor-work adjustment coordinator.

At the conclusion of the second year, there was a total of thirty-one students under the direct supervision of the guidance counselor-work adjustment coordinator; seventeen of these students had summer jobs in local businesses.

At the conclusion of the Wise County program, there was a total of thirty-two students under the direct supervision of the guidance counselor-work adjustment coordinator; seventeen of these students had summer jobs in the local businesses.

At the conclusion of the project in Dickenson County, there had been a total of fifty-six students under the supervision of guidance counselor-work adjustment coordinator. Thirty-five of the students were placed in local businesses for on-the-job training. Twenty-one of these students worked through the Neighborhood Youth Corps program under the supervision of the guidance counselor-work adjustment coordinator.

At the conclusion of the project, there was a total of thirty-two students under direct supervision of the guidance counselor-work adjustment coordinator; eleven of these students had summer jobs in local businesses.

d) Types of Placements

Of the thirty-five students placed in actual businesses in the community during the second year of the project, 50% worked in public service organizations, 20% in building trades, 20% in retail businesses, 8.5% in mechanical establishments, and 1.5% in manufacturing units.

During the third year of the project in Wise County, of the thirty-two students placed in actual businesses in the community, 53% worked in public service organizations, 38% in retail businesses, and 9% in mechanical establishments.

In the third year of the Dickenson County program, of the thirty-two students placed in actual businesses in the community, 66% worked in public service organizations, 12% in retail businesses, and 22% in construction trades. (See Appendix C).

e) Follow-Up Procedures

One of the most important responsibilities of the guidance counselor-work adjustment coordinator was the follow-up of the student who had been placed in an actual job situation. At least two times per month, the coordinator visited the place of employment; at the end of each month an evaluation of the student's progress was completed by an employer.

Through the feed-back of the employer's evaluation, the coordinator was able to work on the individual student's problem areas. There was also a closer coordination between the student's vocational classes and his job experiences.

3. Instruments Used in Evaluation

a. Developmental Reading - Lyons and Carnahan

b. California Achievement Test - mathematics

c. Peabody Picture Vocabulary Test (PPVT) - IQ

d. California Test of Personality

e. Vocational Development Inventory

4. Results and Accomplishments of the Project

a. Discussion of Test Results (Group A - Wise County; Group B - Dickenson County)

The results of the third year testing program were as follows (from Table 5): The 38 students in the academic component (Group A) who had IQ scores of 75 or above on the PPVT improved an average of one grade level in reading vocabulary and an average of one year eight months in reading comprehension. In mathematics, the same group scored an average gain of one year seven months.

The students' scores were further divided and studied according to the amount of time they had spent in the program. It was found that in reading vocabulary (See Table 1), the first year students in Group A (Ss 75) progressed an average of four months. In comprehension there was an increase of two years one month. In comparison, Group B (Ss 15) increased an average of six months in vocabulary and one year one month in comprehension. In mathematics, Group A showed a gain of two months, while Group B gained six months.

For the second year students, Group A (Ss 13), (Table 2) students showed an increase of five months in vocabulary and six months in comprehension. In Group B (Ss 36), the second year students showed an increase of six months in vocabulary and seven months in comprehension. In mathematics, Group A (Ss 11) gained an average of one year, while Group B (Ss 36) advanced one year two months.

Those students who have spent three years in the program in both Groups A and B (Ss 9 Group A and Ss 32 Group B) (See Table 3) showed a vocabulary improvement of one month and a three month advance in comprehension. The third year students of Group A advanced one year in mathematics, while Group B students advanced two months. Overall, in Group A (Ss 52) an increase of six months was observed in vocabulary with an increase of one year in comprehension. In mathematics, Group A saw a one year two month gain (See Table 4). The Group B (Ss 111) students increased seven months in vocabulary and eleven months in comprehension. In mathematics, Group B increased seven months overall.

Also reported in Table 4 are the results of the California Test of Personality. Group A (Ss 59) had an average increase of five percentile points (six points in personal adjustment, one point in social adjustment, and five points in total adjustment). The students in Group B (Ss 111) advanced six points in their personal adjustment and ten points in social adjustment, to give them a total gain of eight percentile points.

This is the first time that boys (Ss 53) have been permitted in the Wise County program since the first year of operation. The results of their testing is an increase of eight months in vocabulary and seven months in comprehension. In mathematics they advanced one year four months (See Table 6).

b. Impact of Guidance Program

1) Every student spent some time in individual counseling.

2) The students gained understandings about the world of work.

3) As a result of home visits by the guidance counselor-work adjustment coordinator, there are better parent-school and parent-child relationships for those homes visited.

4) Formal individual counseling sessions were participated in by the students of both programs.

5) Group sessions involving all students were held during the year.

6) Every teacher took part in teacher-counselor consultations.

7) As a result of having a guidance counselor-work adjustment coordinator at each location, the students had the opportunity to discuss their problems whenever the need arose.

8) The guidance counselor-work adjustment coordinator did a more efficient job in dealing with the day-to-day problems of the students.

9) The teachers were able to use the services of the guidance counselor-work adjustment coordinator more often.

c. Success of Work Placement Program

In the Four I's Project Addendum, a goal was set to provide work experience to about thirty (out of the three hundred twenty-seven) elementary and secondary students in the project, with a wide variety of offerings in many occupational areas based on the aptitudes and interests of the participants.

Over the two year period, a total of one hundred two students worked. At the present time sixty-four students are working. Thirty-nine of these students are working in public service concerns, fifteen in retail businesses, three in mechanical establishments, two in manufacturing, and five in building trades. Employers rated students' total performance as follows: 24% outstanding, 27% above average, 41% average, and 8% below average (See Appendix C).

The job placement program has not only allowed students to obtain job experience but has also developed good work habits and job responsibility. The students seem more "well-rounded" at home, at school, and at social events.

d. Changes in Self-Concept

The only standardized device for attempting to determine effects of the program on the students' self-concept was the California Test of Personality. According to the results of this test, there was an overall increase in each type of adjustment with the exception of the personal adjustment score for the girls in the Wise County program.

A self-concept test was administered by Dr. Douglas Howard, Associate Professor of Special Education at the University of Virginia, in order to compare the self-concept of Four I's students with a similar group of non-Four I's students. The results of this test can be found in Appendix D. The test showed very little change in the self-concept of students during the period studied. The results provide the stimuli for further investigations in future years.

Other than tests, the best indications of growth in self-concept are teacher comments and direct observation by the guidance counselor-work adjustment coordinator. These methods showed that the students have become progressively more open and relaxed in their social interactions. They talk more with their teachers, tend to be more at ease in both the academic and trade skill classes, and volunteer their ideas for and concern about the program. At the beginning of the school year, there was an obvious behavioral difference between the first and second year students, but by the end of the year the students were a more homogeneous group.

e. Other Tabulated Findings

This program is directed at the potential dropout; therefore, a follow-up study was made in order to determine why some students withdrew from the program and in what activities they are currently engaged.

In the Dickenson County program, seventeen students withdrew from the program (See Appendix E). Of these seventeen, three were expelled because of discipline problems, four were married, four had personal problems, three moved out of the district, two joined the army, and one quit school to work.

The present activity status of these students is as follows: one is in the military service, one is employed outside of school, three were suspended (their present status is unknown), and four are married and housekeeping. The rest are unknown.

Sixty-four students have withdrawn from the Wise County program (see Appendix E). Of these sixty-four students, fifty-five are out of school. The reasons for their withdrawal are as follows: three students had family problems, thirteen were married during the year, six had health problems, four became disillusioned with the program and returned to their regular school, nineteen dropped out of school due to age after trying the program for its new interests, three moved from the state, twelve are employed, and four are presently in the military service.

The current status of these students is: thirteen are married and housekeeping, two are enrolled in other schools outside the state, four are in the army, six are attending regular schools, eleven are working, and eight are unemployed and staying home. The status of twenty students is unknown (See Appendix E).

f. Results of Student, Teacher, Principal, and Parent Questionnaires

During the last month of the current school year, the students, teachers, principals, and parents who were directly involved in the program were asked to respond to a staff-developed questionnaire. The purpose of this questionnaire was to determine the attitudes of these groups toward the program. The results of the questionnaire showed that a majority of the students in both the Dickenson (Ss 98) and Wise (Ss 108) County programs who responded have positive feelings toward the program (See Appendix F).

The suggested changes to be made from the students' point of view include:

Dickenson County: A physical education program, driver education program, longer lunch period, a place for students who pack their own lunch to eat, more materials in the shops, and a cafeteria.

Wise County: Keep the supervising teacher, lounge breaks, a cafeteria, shorter classes, and more materials in shop.

From the results of the teacher attitude questionnaire, it can be concluded that those teachers in the Dickenson County program who responded were evenly divided as to positive and negative feelings, while the Wise County teachers have positive feelings about the total program (See Appendix F).

Responses to the principal attitude questionnaire show that the majority of the principals have positive feelings toward the program with one suggestion for change. They would like to have more information about the progress of the pupils from their particular school (See Appendix F).

Those parents of the Four-I's students who returned the questionnaire were in almost 100% agreement in their positive feelings toward the program (See Appendix F). Their comments include the following:

1) Skill training with an opportunity to explore several areas is the best thing about the program.

2) Three suggestions for change were given:

-Different arrangements should be made about lunch and busing.

-More materials should be supplied.

-More work experience is needed.

5. Evaluation of the Project

The final V.P.I. evaluation report is attached.

6. Conclusions, Implications, and Recommendations

a. Student Placements

1) Student placement is difficult in communities already faced with a vast unemployment rate of adults.

2) Distance over difficult roads created a time and scheduling problem for working hours for the students.

3) Transportation was a major problem for most students due to the fact that few students or their parents owned cars.

4) Many students perform at such a low level initially that employers can hardly be expected to pay minimum wages.

5) Students have continued to have difficulty in completing application forms when applying for a job due to their low reading and writing ability.

6) A driver's education program could be very helpful in later employment and in the school work placement program.

b. Recommendations for the Work Placement Program

1) A reasonable budget should be provided for travel expenses to take students to and from their jobs.

2) A minimum wage reimbursement should be provided to employers. This would partially support wages for students whose initial production does not meet reasonable levels. Any arrangement made with employers should be in terms of a sliding scale in which the employer agrees to assume a greater portion of the wage after a designated period.

3) Increased attention should be given to the placement of a greater number of students in appropriate jobs.

4) More of the guidance counselor-work adjustment coordinator's time should be directed to adequate job placement and closer follow-up of students who are working.

5) More actual practice in the completion of application forms should be stressed. This is essential due to the first impression that an employer gets from the application form and the difficulty students encounter in completing the forms.

c. Field Trips and Guest Speakers

1) Field trips proved to be a valuable segment of the student's education of the world of work because most students had never had the opportunity to visit such places as the telephone company, clinics, factories, etc.

2) Field trips were limited in Dickenson County because Clinchco is very remote from most businesses and the round trip could not be made during the five hour school day.

3) Since most of the guest speakers were local businessmen located several miles from the vocational school in Dickenson County, it was difficult for them to break away from their responsibilities to visit the vocational school and give a speech during the day.

d. Guidance Counselor-Work Adjustment Coordinator

1) The reading level for a majority of the students is too low for them to gain occupational information from printed materials.

2) The students exhibit behaviors that are indicative of a lack of social and sexual understandings.

3) Academic classes are too crowded and the work is overly structured.

4) Most of the students become anxious when they are confronted with a testing situation. This accounts for some regression scores.

e. General Program Recommendations

1) More pupil-time should be used in field trips, visiting work sites and business places.

2) More speakers representing the various types of work found in the area should be encouraged to participate in the program.

3) Pupil attendance should be improved.

4) An additional teacher should be employed to work with the lower level academic students.

5) A physical education teacher, qualified to teach driver education, should be employed in order to provide a complete educational program for the students.

6) More intensive efforts should be made to provide job placements and a training for program dropouts.

7) All teaching assistants should be certified by the State Department of Education and courses set up to allow them to retain their certificates.

8) Better facilities for the boys' shop should be provided.

9) More equipment and supplies should be provided to the boys' program.

7. Dissemination

Information about the project has been disseminated to the following areas:

East Detroit, Michigan
Lancaster, South Carolina
Chautauqua, New York
Hattisburg, Mississippi
Beckley, West Virginia
New York, New York
Petersburg, Virginia
Vineland, New Jersey
Rochester, Michigan
Salt Lake City, Utah
Immokallee, Florida
Cumberland, Rhode Island
Sand Springs, Oklahoma
Pittsburgh, Pennsylvania
Lawrenceville, Georgia
Rockville, Maryland
Vienna, Virginia
Los Angeles, California
Newton, Massachusetts
Ephrata, Washington
Peterborough, N. H.
Pawtucket, R. I.
Hamlin, West Virginia
Cheyenne, Wyoming

In addition, the project staff has supplied information for three studies and participated in one regional and one national Career Education conference.

The project director and Career Education Coordinator also wrote an article, "Career Education: An Exploratory Program", for The Intermediary (See Appendix I).

8. Local Continuation

Perhaps the best evaluation of the program's success lies in the local school divisions decision to continue the project through state-local and other federal funds.

B. Career Education for Norton City Schools

Time Period covered by the Report: 10 December 1971 - 30 June 1973

1. Goals and Objectives of the Project

The Career Education Program has as its ultimate objective the task of leading graduating seniors toward making realistic career plans (including post-school job placement or post graduate training) based on an adequate background of vocational information and a positive, realistic self concept.

a. In order to help the student acquire an adequate background of vocational information, the program will have the following general objectives:

1) To increase the students' background of information about occupations in their geographical area, the world of work at large, and the requirements necessary to enter certain occupations.

2) To assist students in matching abilities and training with occupational requirements.

3) To assist students in understanding the significance of occupational choice in terms of personal psychological growth.

4) To help students understand the economic implications of their occupational choice.

5) To provide students with information concerning job placement services, available training centers, and sources of financial assistance for training.

b. In order to assist the student in developing a positive, realistic self-concept the staff will strive for achievement of the following objectives:

1) To provide students with successful first grade school experiences.

2) To provide students with opportunities to explore their areas of interest to the greatest extent of their capabilities, thus establishing a realistic understanding of their abilities and limitations.

3) To assist students in achieving a better understanding of thier individual interests and the roles these play in selecting a career.

c. One product of the program was to be the development of a continuous, sequential Career Education Curriculum (K-12) which would be integrated with the standard curriculum of the schools.

The evaluation of the project was based on an assessment of the degree of accomplishment of the general objectives. The evaluation involved identification of behavioral objectives related to each of the general objectives listed above.

Since it was apparent that all of the aforementioned objectives are not necessary in equal proportions for all grade levels, these objectives receive varying degrees of emphasis in the different phases of the Career Education Program.

[redacted] behavioral objectives were broken down according to grade levels as follows:

LEVEL I:	First three years - Phase I - Awareness Years 4 to 6 - Phase II - Intermediate Phase
LEVEL II:	Years 7 and 8 - Career Exploration
LEVEL III:	Years 9 and 10 - Career Exploration in Depth
LEVEL IV:	Years 11 and 12 - Career Specialization

2. Description of the General Project Design and Procedures

A brief inservice was conducted on August 23 and 24, 1971, by Dr. Dean Hummel of Virginia Polytechnic Institute and State University. Topics discussed included "Career Education-The Concept and the Need", and "Examples of Career Education Activities". In this manner, teachers in the Norton City School System received a general introduction to Career Education in advance of the funding of the project.

A relatively long delay in receiving confirmation of funding dealt the project a very severe blow. The project was finally funded December 10, 1971. The staff originally interviewed for the project in July, August, and September had long since taken other positions. Notices concerning the position of Project Coordinator were sent out to colleges and universities. Efforts were also made to determine the degree of teacher involvement at both the elementary and secondary level. It was decided that only those teachers interested in and dedicated to the goals of the project would be involved in its implementation. Trips were taken by school personnel and the project administration to see other exemplary projects in Career Education.

At the conclusion of the meetings, trips, and explanations of the program, the Career Education Coordinator, Mr. James Hurt, was employed. The vast majority of the teachers at the elementary school and the high schools chose to participate in the project. Work toward implementation of the program began on February 1, 1972. With only four months left in the first project-school year, the activities of the first project year were restricted mainly to planning with minimal program operation.

The elementary school faculty began operations by dividing into teams to work out implementation strategies and exercises for specific clusters. In addition to this planning component, the elementary school began almost immediate operations with a "Career Interest Day" program which attempted to provide students with a career awareness program. The Career Interest Day was intended to stimulate the children's interest in the various occupational clusters. The program at the elementary school never progressed satisfactorily, primarily due to the lack of planning and the failure of the faculty teams to work out implementation strategies for the various clusters. This was due in part to the short period of operational time, related to the late funding date. Also responsible was the overwhelming task faced by the teachers in adjusting to the new nongraded, open-space elementary school.

Regardless of cause, adequate planning was not done at the elementary level during the Spring of 1972, resulting in Career Interest Day becoming more "busy work" than anything else with little emphasis on related field trips, guest speakers, occupational information, and subject matter tie-ins.

In an effort to produce a more effective Career Education program during the 1972-73 school year, the project staff and the staff of Norton City Schools spent much of the summer planning for the next year of operation.

In the 1972-73 project year, several changes were to be made in the program as full scale operation began.

At the elementary level, learning centers composed of Career Development Units were the vehicle for transmitting Career Education to the students. The faculty was divided into seven teams of four teachers each. Each team had 120 students. The students in each learning center had two blocks of time each day for basic skills instruction)language arts and mathematics). Very little Career Education was integrated into these two periods. These academic skill blocks were short and intensive. After leaving the academic skill periods, learning centers were used for the remainder of the day. In the learning center, the teacher became a facilitator of learning rather than an imparter of knowledge. The student received an instruction sheet which helped him go independently through his learning center, using the teacher primarily as a resource person.

The learning centers consisted o occupationally oriented units which provided integrated academics, role playing, field trips, guest speakers, hands-on activities, and occupational information.

A one-week inservice training workshop was conducted during the month of August for the faculty at the elementary school. Dr. Gary Ubbins from the University of Tennessee discussed the establishment of learning centers, while Joel Smith, Director of Career Development for Cobb County Georgia, and five members of his staff discussed the unit plan and assisted teachers in developing units for their classrooms. The workshop was judged to be excellent by the teachers. All teachers participated. The inservice training program was cooperatively financed through Vocational Education Part D and ESEA Title III funds.

At the elementary school, units have been developed by each teacher. Some of the units utilize a fusing approach and integrate Career Education into the subject area curriculum. Other teachers have used an interlocking approach, taking a Career Education theme and weaving into it the total curriculum (i.e., mathematics, reading, and/or science being taught in units on transportation). A variety of units were produced involving careers in fourteen of the fifteen USOE occupational clusters.

J. I. Burton High School

During the Spring of 1971, the faculty and administration at the high school spent more time planning for the coming school year than they spent in actual program implementation. Permission was secured from the State Board of Education to move to a quarter system in order to offer more courses, many of which were to have a strong career orientation.

The high school approached Career Education in a different manner than did the elementary school. At the elementary school, the academic subject areas were integrated into an occupationally oriented unit. At the hign school, Career Education units were incorporated as a part of the program of study in each subject area (e.g. Career Mathematics). The guidance program was also modified to include courses in occupational information and career selection. Counseling, cooperative work placement, field trips, guest speakers, and occupational information were included wherever possible.

At the secondary level, Mr. Smith's staff returned for a two-day workshop, during which time they provide the high school faculty with an orientation to Career Development and assisted each faculty member in developing a one quarter curriculum guide for classroom use.

The following is a list of new courses and new activities in previously existing courses offered at J. I. Burton High School:

a. Slide Rule Class

Students made scale drawings of buildings. Some students went to the bank to investigate the possibility of securing a loan on that particular building. The students called various businesses to get bids on building materials and construction costs.

b. Physical Education and Driver's Education

The students did research on careers in recreation. City policemen and state policemen came into the driver's education classes to discuss their occupations and safety. Several students went to Radford to participate in a recreation day.

c. Business Classes

Individual student research was done on business and clerical occupations. Banks were visited in the Banking and Finance Class. The Bureau of Mines office, Pennington Gap Tobacco Warehouse, Clinch Valley College Business Department, the Coalfield Progress, and DILENOWISCO offices were visited. Several people were sent to the Future Business Leaders Convention in Roanoke and did well in the testing. Several business students have been on part-time jobs prior to graduation.

d. Introduction to Forestry

In this class, an overview of careers in Forestry was presented. Wildlife and game management were also discussed. Guest speakers included representatives from the Virginia Division of Forestry, the U. S. Department of Forestry, the Fire Warden of Wise County, and U. S. Forest Service Smoke Jumpers. Field trips were made to the fish hatchery in Marion and the Jefferson National Forest, where the Forest Service arranged for student participation in a simulated fire fight.

e. Public Speaking

The speech class wrote and directed a play which was presented to the elementary school. The students discussed the various jobs involved in theatrical production.

f. Art

The art class prepared bulletin boards on careers in art. Considerable research on art careers was conducted by students in the information center in the guidance office. Field trips were made to arts and crafts projects.

g. Industrial Arts for Girls

Bachelorette Know-How included teaching such skills as upholstering and interior design. A field trip was made to a trailer sales to study various interior designs. Metal work and carpentry were also introduced.

h. Consumer Economics

This course covered the fields of business and economics as they affect the lives of the consumer.

i. Introduction to the World of Work

This course is a study of occupations and occupational information using class discussions, workbooks, research projects, field trips, filmstrips, movies, taped interviews, and guest speakers.

j. Curriculum Guides

Curriculum guides have been developed at the elementary and secondary levels. Approximately 75 guides have been developed to date.

k. Cooperative Work-Study Program

During the last few weeks of the project, a cooperative work-study program was developed for improving the occupational orientation program at the high school. On a voluntary basis, students were able to work up to twenty hours in a variety of businesses within the community.

3. Instruments Used in Evaluation

No satisfactory commercially prepared evaluation instruments could be located for use in evaluating the project. Therefore the staff designed an evaluation instrument for the purpose of assessing student gains in occupational information. Since there was no validity or reliability information on the testing instruments, it is doubtful that they accurately evaluated the students occupational knowledge (See Appendix I for Evaluation Instruments). A form was also designed to assess parental attitudes toward the program.

The VPI Evaluation Team also performed a third party on-site evaluation of this project (See Section 5, Four-I's Report).

4. Test Results

a. Parent Attitudes

A form was designed to assess parental attitudes toward the program. Questionnaires were sent out to a random sample of parents at the elementary and high schools.

The results at the high school revealed that 92 percent of the parents approved of the new quarter system. Sixty-nine percent felt that they understood the program fully. One hundred percent were aware of the Career Education Program and 76 percent felt that their child seemed to be enjoying school more than in previous years. Twenty-three percent reported that their child's school attendance had improved.

At the elementary school level 50 percent of the parents like the new program and 42 percent believed that their children liked it better. Eighty-five percent felt that their child had learned as much or more with the Career Education Program than in previous years. One hundred percent wanted more emphasis on college preparation and 100 percent wanted more emphasis on vocational education.

b. Work-Study Program

Twenty-six students were employed in a variety of jobs during the best two months of the project. One hundred percent of the students were rated by their employers (See Appendix K) as performing "average" to "above average" on their respective jobs. Six students were employed part-time by their employers at the conclusion of the twenty hour exploratory experience.

5. Conclusions and Accomplishments of This Project

a. Changes in Teacher Attitudes

Perhaps one of the most important changes to occur from this program was the change in teacher attitudes. A reluctance to change was initially encountered at the high school. Now faculties at both schools are working enthusiastically in making the curricular changes necessary to implement the program.

b. Inservice

Continuing inservice education has produced significant curricular and instructional changes as evidenced by curriculum guides produced by the project's teachers.

c. Guidance

Guidance counselors at both the elementary and secondary levels have become much more oriented to total occupational counseling rather than just the operation of a college placement service.

d. Parental Awareness

As evidenced by responses on the parent evaluation forms, most of the parents were aware of the changes that had ocurred in the program and felt that their children seemed to be enjoying school more than in previous years while learning as much or more academically.

e. Work-Study

The work-study program proved to be successful for one hundred per cent of the students placed.

f. Occupational Information

Small but statistically insignificant increases were recorded in occupational awareness.

6. Third Party Evaluation Report

The VPI Evaluation report is attached.

7. Problems

a. Difficulty has been encountered in finding satisfactory objective instruments for the evaluation of this program component.

b. The high school program has been difficult to implement because of the rural nature of the area and the traditional tendencies of the faculty.

c. A broad occupational orientation is difficult to attain in a rural area unless vicarious experiences are used.

8. Continuation of the Program

The administration of Norton City Schools will continue the Career Education effort as an integral part of their program. Mr. James Hurt, the Career Education Coordinator, has been employed as assistant principal of the secondary program.