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ABSTRACT

Provided in this interim report is a summary of activities relating to the Pikeville, Kentucky career education project. With specific emphasis placed on career education for the elementary grades and on occupational placement for grades 7-12, the report provides information on: (1) Goals and Objectives, (2) Project Design and Procedures, (3) Results and Accomplishments, (4) Evaluation, and (5) Conclusions, Implications, and Recommendations. Accomplishments as perceived by the project staff occurred in the following areas: (1) installation of program in the elementary school, (2) examination of special education programs, (3) establishment of job placement service, and (4) attitude change of school personnel. An outside evaluation team noted that the teachers and project staff have produced a great deal of useful instructional materials and that considerable progress has been made toward achieving stated goals and objectives. (JS)

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INTERIM REPORT

Project Number: 0-361-0059

Contract Number: OEC-0-70-4754

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Pikeville, Kentucky, in Conjunction with the  
Pikeville Model Cities Program

Exemplary Project in Vocational Education  
conducted under  
Part D of Public Law 90-576

John D. Jenkins

Eastern Kentucky University  
Richmond, Kentucky 40475

October 30, 1971

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## SUMMARY OF REPORT

Time Period: July 1, 1970 to June 30, 1971

Goals and Objectives: The following are the goals of the project for the first year of activities (July 1, 1970 to June 30, 1971). Several objectives, which are related to each of the goals, are included in the text of the report.

1. There will be an observable improvement in student interest level toward school.
2. The regular classroom subject matter (math, English, social studies, etc.) will become more relevant to the students.
3. The students will have an increased knowledge of occupations and/or occupational families which are within their frame of reference.
4. The students will have a knowledge of self that will lead them to effective career decision making.
5. The students will recognize consistent patterns to follow in career planning and job selection.
6. The students will receive more assistance as a result of the cooperation and increased involvement of the school staff, parents, and resource people within the school.
7. Teacher attitude toward teaching techniques, toward abilities of students to actively participate in the learning experience, and toward the worth of all occupations will change.

The above goals pertain to the elementary career education program. This was the primary area of emphasis during the first year of the project.

Occupational placement was another program which was initiated during the first year of the project. The following are the major tasks which were to have been accomplished by the placement service.

1. Establish a system for collecting information from students (grades 7-12), out-of-school youth, and adults which would be pertinent to placing students in part-time and full-time jobs.
2. Develop a clearinghouse for the job opportunities and educational opportunities.
3. Assist students in securing both part-time and full-time employment.
4. Develop procedures for a follow-up program.

5. Conduct guidance programs (both group and individual) regarding employment problems.

Procedures: The major tasks were to plan, organize, and implement a program of career education in the elementary school and to establish a job placement program in grades 7-12. There is only one elementary school in the city of Pikeville and it housed about 650 students in grades 1-6. There were 23 regular classroom teachers and 11 professional support staff in the school. The project staff included 6 professional staff and 3 clerical people.

Several delays prevented initiation of project activities until mid-October. An in-service program was the first activity to be established with teachers and school staff. The early meetings dealt with orientation to career education, because none of the teachers had backgrounds which would aid in their participation in a career education program. The project staff prepared broad content outlines for each of the grade levels in the school to provide a frame of reference for the teachers to follow in planning their lessons. The outlines were reviewed with the teachers and revised on the basis of their suggestions. A basic format was prepared for preparing lesson plans. The teachers, as part of their in-service program, prepared the lesson plans. During the month of June, some of the teachers continued the preparation of lesson plans. Approximately two-thirds of the total plans have been prepared.

The initial strategy used to insert career education in the curriculum was to ask for 20 minutes each day. The teachers, like teachers in most elementary schools, were concerned about their already full schedule but most agreed to find the time. The teachers were encouraged to relate the career education content to the most appropriate subject matter area but most of the teachers perceived career education as being another subject to teach or tried to include it as part of the social studies portion of their class. As the program progressed, many of the teachers saw the need to blend the concepts of career education with the other subject matter areas.

The nature of the program in the first three grades was somewhat different from the program in the upper three grades. The first grade focused on broad economic, sociological, and world of work concepts related to the home and school. The frame of reference for the second grade was the neighborhood. In the third grade the students related concepts to the community and to the basic need of life. The upper three grades used career clusters as the method of orienting students to careers.

Results and Accomplishments: In addition to the accomplishments listed below, the reader should consult the evaluation section of the main report. The accomplishments as perceived by the project staff are:

1. Installation of Program in Elementary School: Much of the time during the year was devoted to planning and preparation of lesson plans. The actual classroom activities were not initiated in the classroom until the last two months of the school year. Teacher participation was not uniform among all grade levels and there was variance among teachers in terms of quality and quantity of work.

2. Examination of Special Education Programs: Numerous problems were encountered with the special education program. The major problem was found to be that students had not been accurately placed. An evaluation program was established and all students were re-evaluated to provide the teachers with adequate information about student problems. While the students did engage in several new and exciting world of work relate activities, no program recommendations resulted from the evaluations.

3. Establishment of Job Placement Service: The job placement program was established to serve the secondary school. A survey of local businesses was completed and data were collected from students regarding several questions pertaining to their job status and career preference. The major placements centered around part-time employment.

4. Attitude Change of School Personnel: Prior to the initiation of project activities in Pikeville, nearly all of the education was devoted to preparing children for the next educational obstacle. The project provided the opportunity for the educational program to focus on realistic societal models as the main educational goal.

5. Govenor's Merit Award: The project efforts were evaluated by a team of people appointed by the office of Govenor Louie B. Nunn. The award was granted for Outstanding Educational Innovation. Mr. Charles Spears accepted the award on behalf of the elementary school because of the career education efforts. The award provided a rewarding climax to the year of activities.

Evaluation: For a more complete and candid report of project evaluation the reader should examine the "third-party" evaluation report included in the main body of the report. The evaluation was done by the Bureau of Educational Research, University of Illinois, Urbana, Illinois under the direction of Dr. Rupert N. Evans.

Because of the lack of objective data regarding the accomplishments of the project objectives, it is difficult to determine whether the goals were in any way accomplished. It is doubtful, however, that the project activities were implemented for a long enough period of time to cause any measurable change in student behavior. In terms of process, most of the objectives were at least partially attained.

Conclusions and Recommendations: The conclusions which follow are based on observations by project staff and relate to the situation in Pikeville.

1. School personnel, including teachers, counselors, supervisors, and administratiors are generally not adequately prepared to cope with the problems associated with diffusing career education in the schools. If the same situation exists in other school systems, new career education programs will require massive in-service education programs until a large enough group of teachers can be prepared on a pre-service basis.

This certainly has strong implications for teacher education programs.

2. The situation in Pikeville was such that teachers were reluctant to introduce career education in the classroom. The teachers had received positive reinforcement for past performance which was usually directed toward helping children prepare to go to college. Career education has not yet attained the degree of stature which has been given to conventional education. The content and some methods which are fundamental to career education are foreign or uncomfortable to the teachers.
3. Once the teachers attempt career education activities they tend to be more interested in initiating other activities.
4. Progress was inhibited because lack of detailed teaching materials. Several related materials were available but the teachers had to do the organizing to make full utilization of the materials.
5. The higher the grade level, the more difficult it was for teachers to cope with the technical problems related to the content of the course.
6. Credibility of program effectiveness needs to be established and possibly the best way to achieve the task is to secure objective data that provides an adequate comparison between career education programs and conventional programs.
7. It is important that career education programs be characterized by activities which are student centered.
8. When projects are initiated, such as the career education program in Pikeville, it often forces the school to look at other phases of the program. When the examination reveals strength in the system, positive attitudes result, but when ills are revealed, antagonism toward the new effort can result. Many times the ills which are revealed must be corrected before much progress can be made toward implementing the new program.
9. Limited results might be expected when change is directed at only one portion of the total school. That is, little change could be expected from the introduction of new math if the reading program was weak because the performance of the students in math might be restricted by the weak communication skills. The same analogy might apply to the introduction of career education.
10. The mere passage of time could affect the attitude of people involved in the change process. The teachers, after a few weeks, and after they found that they could cope with the problems, developed a much more positive attitude toward career education than in the initial stages of the project.



## PROBLEM

As documented in the original proposal, the product of our educational system can be evidenced in the high number of youth who are unemployed. Only a small portion of the students are prepared to meet the challenges which will face them once they leave the protected walls of the school. Society has placed such a high degree of importance on a college degree that many students, often motivated by parents, are led to believe that the only path to economic security and social acceptability is to have a minimum of a bachelors degree. The result is that we can observe a system of schools which place primary emphasis on preparing children to enter college. This inordinate emphasis on college preparatory programs, when combined with parental obsession to see that their children receive a college education, has created a substantial imbalance in the labor force of our nation. We have many college graduates who either cannot find a job or must take a job which is far below their expectations. In fact, many employers hesitate to hire persons with educational preparation which is far beyond that required for the job. The dilemma is not entirely a problem of over education, but one of education for the wrong vocational objective.

Rhodes placed a challenge to the schools of our nation when he stated:

"Annually, our educational system turns out millions of unskilled and untrained graduates, and dropouts, into a work force that has no place for them. For most of our youth, the secondary school is their last chance for full-time education; consequently, their preparation for a job must come during high school. Education must be made relevant, with deep concern for the total student body; it must prepare each youth to graduate with a diploma in one hand and a job in the other. The alternative is clear, we either provide him with a job or fight him in the street." (Rhodes, page 5)

Actually, the content in many courses is planned to prepare the student for the next grade in school with the ultimate goal being graduate school. This would be quite appropriate if all students wanted to and were capable of pursuing such course in life. Such a situation should not be surprising to most people because those who make educational decisions are people who are products of a college education and their primary associations are with professionals. The fact that schools emphasize on programs which prepare children to go to college is not bad because there will always be societal demands for college graduates. But, if the priority placed on college preparatory programs is so great that other programs are neglected, the school is clearly not meeting the needs of all of the children or of society.

The schools in the Pikeville area have several unique problems for which this project is designed to reduce. While the problems within the schools in the city of Pikeville are not of the same magnitude of the schools in the surrounding counties, many do exist and will require some creative planning to solve.

Pike County is in the heart of Appalachia and is representative of many communities in the region. There is a high degree of unemployment and a large number of families with incomes below the national poverty standard. The primary economic activity in the area is coal mining with almost no other industry. Recent mechanization of the coal industry has created a negative relationship between production and employment. That is, as coal production increases, the actual number of employees reduces. Pikeville is fortunate to be a major service center for the area, there are few world of work examples available to the students.

The population of Pike County reduces yearly and most of the out-migration occurs in the young people. The young people, who are the most active and well educated, move to major cities where they can secure work. This has created a situation in which the population consists of a high number of older people with poorer qualifications for societal and economic success.

Pike County, like many mountain areas, has been extremely confined. It is very remote and transportation in and out of the area prevents people from making frequent visits to the area. The result is that the people have learned to be quite self-sufficient (often called rugged individuals). In addition, exploitation of the residents and natural resources has caused the local people to be reluctant to trust people and ideas from the outside.

The schools tend to have an extremely large number of female teachers and a large number of the teachers are long time residents of the region. Major contributions to this situation are the relatively low salaries and the remoteness of the area.

Pikeville has been designated as one of the Model Cities and is working to change many of the problems described above. They are concerned with improving the physical appearance of the city, diversifying the economic base by attempting to attract new business and industry into the area, and improving the social aspects of the community. The project is one of the activities which has been planned to contribute to the overall plan of the Model Cities program. It is expected to change in the schools because the results of the project efforts should make the schools more attractive to people associated with new business which will come to Pikeville. Additionally, the project should produce people to fill the new labor force demands.

The major problem of the project is to improve the education program in Pikeville so all children will be able to find a career, secure training, which will permit the students to pursue the careers, and help the students (including adults) obtain employment which closely approximates their career desires. As the original proposal stated, the solution to the problem was to be accomplished over a three year period. Each year specific programs were to be introduced to work toward particular phases of the total program. The portions of the total program which were of primary concern during the first year of the project were the (1) elementary instructional program, (2) elementary guidance program, and (3) occupational placement program. While each of the three programs are treated independently in this report, and to a certain extent they were treated independently while being implemented, they will eventually function as part of the total program and will compliment each other.

## GOALS AND OBJECTIVES

The broad goals of the project are very nearly the same as those which Evans presents as the goals for vocational education. He places them in order of their importance as follows:

- (1) meeting the manpower needs of society
- (2) increasing the individual options available to each student
- (3) serving as a motivating force to enhance all types of learning

He elaborates by stating that, "It seems reasonable to assume that teachers who strive to achieve all three goals are more likely to reach all of them than teachers who strive for only one or two."  
(Evans pp. 2&3)

When the total three-year plan of the project is considered, the above objectives become quite important, and are applicable in the order of importance stated by Evans. But when the various components are considered independently, the order of importance is somewhat different. For example, the elementary instructional program certainly places more emphasis on increasing student options and helping to motivate students to learn than on meeting the manpower demands of society.

Goals and objectives which are more specific and apply to the programs which were initiated during the first year of the project have been prepared. The list is not exhaustive of the goals and objectives which might be of concern and in some cases have direct application to future programs. The limitations which are presented below were considered when the goals and objectives were prepared:

1. They are limited to the programs established during the first year of the project. Many of the goals and several of the objectives will be equally applicable to future programs established by the project.
2. Because of the limitations of the project staff, the goals and objectives are probably not inclusive of all possibilities.
3. Levels of achievement or accomplishment have not been included. These will be included when there is a more accurate base from which to make these judgements. In many cases, the current base could be established at "0" because most of the programs are entirely new to the children and the school system.
4. An attempt was made to focus on goals and objectives which were the most significant to the project.
5. Consideration was given to attempting to measure those factors which were feasible and reasonable in terms of project resources. Certainly the limited quantity of useable measurements will prevent accurate measurement of most of the goals and objectives.

6. The goals stated below are revised and modified from those stated in the original proposal.
7. Paper and pencil information will be extremely difficult to collect from students in the lower elementary grades (grades 1-3) because of the limited communicative skill development.

The following list identifies the objectives which the project will attempt to measure for the programs established during the first year of the project. Broad goals are stated first and are followed by more specific observable objectives which will help determine whether the goals have been accomplished. Each of the objectives are followed by the grade levels at which the objective will be examined.

#### Elementary School Program

1. There will be an observable improvement in the student interest level school.
  - a. Student attendance will increase. (1-6)
  - b. A positive change will occur in the student interest level toward school. (3-6)
  - c. The teachers will observe fewer classroom behavior problems. (1-6)
  - d. There will be an increased discussion of curriculum related experiences within the home. (1-6)
2. The regular classroom subject matter (math, English, social studies, etc.) will become more relevant to the students.
  - a. The students will be able to enumerate life applications of the school subject matter. (4-6)
  - b. The students will be able to make value judgements regarding the importance of school subjects. (3-6)
  - c. There will be an increased involvement of students with people and resources outside the school setting. (1-6)
  - d. There will be an increase in participation within the school setting with people and resources from outside the school setting. (1-6)
3. The students will have an increased knowledge of occupations and/or occupational families which are within their frame of reference.
  - a. The students will be able to describe the practices performed by people in several specific jobs which are related to topics being studied in the classroom. (1-6)

- b. The students will be able to identify occupations related to topics being studied in the classroom. (1-6)
  - c. The students will be able to name and describe the occupations of those people in their immediate family. (1-6)
4. The students will have a knowledge of self that will lead them to effective career decision making.
- a. There will be an improvement in the students ability to cope with interpersonal relationships. (1-6)
  - b. The students will have a better knowledge of their abilities, interests, and limitations by using self-analysis techniques. (4-6)
  - c. The students will be able to express the need for and dignity of work in today's society. (1-6)
  - d. The students will make career decisions based on their current interests and knowledge of self. (4-6)
5. The students will recognize consistent patterns to follow in career planning and job selection.
- a. The students will be able to demonstrate that career planning is dynamic. (4-6)
  - b. The students will be able to identify sources of occupational opportunities. (4-6)
6. The students will receive more assistance as a result of the cooperation and increased involvement of the school staff, parents, and resource people with the school process.
- a. There will be a more adequate description of student characteristics due to the establishment and organization of the guidance information system.
  - b. There will be an increase participation of parents in school related activities.
  - c. The parents will be able to more completely describe the educational program being offered to their children.
  - d. There will be an increased involvement in the learning process by utilizing resource people within and without the school setting.
7. Teacher attitude toward teaching techniques, toward abilities of students to actively participate in the learning experience, and toward the worth of all occupations will change.
- a. The number of different teaching techniques used will increase from year to year.

- b. The responsibility for planning and implementing learning experiences will gradually shift from the teacher to the student with the responsibility for guiding the children remaining with the teacher.
- c. The activities within a classroom, which focus on occupations, will shift from activities which emphasize the professions and white collar occupations to activities which examine all areas of occupation in an occupational family.

The placement program will apply primarily to secondary students (grades 7-12) and will therefore be one of the programs which will contribute to the achievement of the objectives established for the secondary school. Because there has been no directed effort in the secondary school to work with the task of occupational placement, all work done will represent gains over previous years. The following are program goals which should be accomplished during the first year of the project.

1. Establish a system for collecting information from students (grades 7-12), out-of-school youth, and adults which would be pertinent to placing students in part-time and full-time jobs.
2. Develop a clearinghouse for job opportunities and educational opportunities.
3. Assist students in securing both part-time and full-time employment.
4. Develop procedures for a follow-up program.
5. Conduct guidance programs (both group and individual) regarding employment problems.

## PROJECT DESIGN AND PROCEDURES

### Description

The project was designed to be a cooperative effort between Eastern Kentucky University (EKU), the Pikeville Independent School District, and the Pikeville Model Cities Agency. The project was planned so that the schools in Pikeville could utilize the resources and expertise of the university. Such an arrangement has at least two distinct advantages. The first is that the university can provide many resources to the schools which would otherwise not be readily available. The second is that the university can gain invaluable experience by having the opportunity to put some of their theories into practice in an actual situation.

Project activities have been planned to spread over a three-year period with the primary focus of the project at a different portion of the school system each year. During the first year of the project major efforts were devoted at the elementary school program and at the development of an occupational placement program. The elementary program can be divided into (1) elementary instructional program and (2) elementary guidance program. The placement program functions in the secondary school with emphasis on part-time placement for in-school youth, terminal placement for students leaving school (before or after graduation), assisting students in securing post-secondary occupational education, and follow-up of students.

All personnel associated with the project are employed by EKU to work with the staff and students in Pikeville. Project headquarters are located both at EKU and in the schools of Pikeville. The primary activity is conducted in Pikeville and the majority of staff are located in the Pikeville office. The Richmond office is concerned with administrative and budgetary matters and with securing resources for the project not available in Pikeville. The project staff in the Pikeville office consisted of a project co-director, a resources specialist, a placement coordinator, an elementary guidance counselor, and two secretaries. The project director, guidance coordinator, secretary, and two graduate students were located in the EKU office.

While the project staff was not officially under the supervision of the school board, the staff worked closely with the teachers and administration to bring about the changes in the school. The placement coordinator and elementary guidance counselor worked directly with the students. Attempts were made to have the project staff function as though they were employees of the school system so that there would be a feeling that the program was an integral part of the total school program. Such a task is difficult when the staff consists of new people to the school (not necessarily to the community). For example, salaries of the staff housed in Pikeville were kept to a level that closely approximated the salary schedule of the local board, staff members attended meetings and school functions, decisions and actions were reviewed and in most cases endorsed by the administration prior to initiation of the activity, and when possible, staff members were employed from the local area.

The project director was directly responsible for the overall direction of the project and spent time nearly each week in the community of Pikeville. The project co-director was responsible for the overall program activities in Pikeville and devoted most of her time to the preparation and initiation of the elementary instructional program. The guidance coordinator worked with the personnel who had responsibilities for guidance and counseling activities.

To be consistent with the intent of the legislation, programs which have been planned by the project were done with the intent that they would continue when the project funding terminates on June 30, 1973. Two operational priorities have been adopted to give greater assurance that these programs will be enduring changes within the school. They are:

1. The primary efforts of the project staff have directed toward preparing the school personnel that will remain after the project, so that they will have the expertise to continue the project.
2. No funds will be devoted to programs unless there is some indication that financial resources will be available for the programs at the end of the project.

#### Student Population

The project was concerned only with the Pikeville Independent School District. The district serves the residents of the city of Pikeville and a few students from the county who pay tuition to attend the schools. There were about 650 students in grades 1-6, and about 600 students in the grades 7-12. The school population has been decreasing in size for the past several years. Much of this trend can be attributed to the out-migration of young people from the community, leaving behind only older people who have raised their children. While the children in the schools come from a wide variety of socio-economic backgrounds, the school is nearly representative of Pike County. About 50% of the people in Pike County are classified at or below the poverty level.

The structure in which the elementary students are housed is four years old and is located at the edge of town. All of the students are transported to and from the school and remain in the school for the entire day.

#### SCHOOL STAFF

A total of 35 professionals devoted all, or a substantial portion of their time, to activities in the elementary school. These professionals included 23 regular classroom teachers (four teachers at grades 1, 2, 3, 4, and 6 and three teachers in grade 5), two special education teachers, one art teacher, one music teacher, one physical education teacher, one remedial reading teacher, one librarian, one school nurse, one curriculum coordinator, one guidance counselor, one pupil personnel coordinator, and one principal. The art teacher, music teacher, pupil personnel coordinator and nurse spent a portion of this time with duties other than in the elementary school. The curriculum coordinator had coordination responsibility for Title I activities as well as curriculum change at the elementary,



junior high, and high schools. The elementary guidance counselor was not employed until the beginning of the second semester.

All of the classroom teachers were certified by the Commonwealth of Kentucky to teach elementary education and all had completed the bachelor's degree. Three had completed the masters degree. The average age of the elementary teachers was in excess of 45 years and the average years of teaching experience was greater than 19 years. All of the professionals except the principal, pupil personnel coordinator, and curriculum coordinator were female. Most of the professionals were born, raised, and went to school (public and collegiate) in the Pike County area.

The regular school staff was supplemented by the project staff previously described. The project staff attempted to work as consultants and resource people and tried to provide the motivation for the changes. These roles were somewhat inhibited by the situation in Pikeville. While it is difficult to identify all of the inhibiting factors, it can easily be documented that nearly all of them were due to human misunderstanding (both Pikeville staff and project staff). Many of the difficulties are representative of problems which could be encountered in any typical school throughout the nation.

A main problem, which probably had many sub-problems, was that there seemed to be a sharp distinction between school staff and project staff. Elements which might have contributed to the situation are (1) lack of involvement of teachers in the early planning (proposal stage), (2) numerous other federal projects which failed to make change but created internal hardships, (3) Administrative arrangement of the project, (4) lack of local administrative involvement or support, (5) inability to provide early credibility for the change, and (6) the establishment of such a relationship as a defense mechanism to avoid change. The situation brought comments which almost always started with "your", "they" or "their". One of the greatest achievements of the project during the first year was to reduce gap toward the establishment of an "our" relationship.

Certainly another human problem which existed centered around a credibility gap. No matter how one attacks such a change, it requires the teacher to eliminate something from the curriculum and add something in its place. It is difficult to encourage teachers, with long years of success in teaching, to accept something new in place of something that they have done for years. In many cases the teachers have been substantially rewarded for their past practices. It was not until after the teachers had tried some of the activities suggested by the project that they began to see the real value of their efforts. While some teachers will never admit the viability of the change, a large portion now see the potential of the program for helping all of their children.

Closely related to the previous problem is the fact that whenever educational change is suggested, there is a natural human resistance. Any normal person has a certain degree of insecurity when venturing into the unknown. If for no other reason than most of the teachers lacked any knowledge of the subject matter they were being asked to teach, there

was a natural resistance. It is adequately documented in professional literature that teachers tend to have middle class values and usually are most oriented to occupations which relate to education (teaching) or other professions. Pikeville's remote location in Appalachia, with coal mining, education, and professional and governmental services as the primary economic activities, reduces the number of examples of work roles which require less than a college degree. This problem is perpetuated because of the high percentage of professionals in the school who have had their entire societal experiences in the Pikeville area.

To ensure that the professional staff would be able to carry on the project activities after June 30, 1973, it was decided that it would be necessary for the teachers to do much of the planning and preparation of materials for the activities. Because their entire day was consumed by teaching, the only time that was available for them to work on the materials was after school hours. While the teachers were paid a nominal fee (3.50 per hour) for their time, several teachers resented the extra time which they were asked to spend preparing materials. Many of the above problems probably contributed to the situation. But, in all fairness to the teachers, it does seem unreasonable to expect teachers to be stimulating classroom teachers all day and then to spend an additional hour or two creating exciting activities for children. That is, teachers are human beings and they are emotionally and physically tired at the end of a day. Implementation would have been much easier if there had been prepared materials for the teachers to use.

There was considerable variation in relation to teacher involvement with the project. The original intent of the project staff was to work with the entire teaching staff but it became apparent that such a plan was not possible. Those teachers which did not want to be involved required an inordinate amount of the project staff's time and apathetic or hostile attitudes often caused the project staff to assume a defensive feeling which seriously inhibited their effectiveness with the cooperative teachers. An alternate plan was adopted late in the year which called for the project staff to spend the majority of their time with those teachers who displayed enthusiasm toward project activities.

It is clear that the project will be a success and will become an integral part of the program in the Pikeville schools only if the professional staff are able to assume the responsibilities. This pattern has not been clearly established at this time. Professional staff involvement must move from passive to active in the next two years or the activities which have been implemented will fail at the closure of federal involvement. It is doubtful that the school system will be able to provide the leadership necessary for program perpetuation unless the current professional staff devotes more of their time to building an adequate background or unless additional staff is employed to guide the activities.

#### METHODS

Conventional, but sometimes seldom used, methods were employed for the project activities. Nearly all efforts were directed at moving from

passive student involvement to active student involvement. While no systematic analysis was made of student classroom interaction, it could easily be seen that many classrooms relied on student-teacher exchange for student involvement.

No specific teaching methods were imposed on the teachers in their preparation of classroom activities. That is, there was no attempt to require that each unit include such methods as films, field trips, role playing, etc. It was decided that teacher creativity would be substantially reduced if such requirements were placed on them. The following are some of the methods which can be found in the various activities when they were appropriate:

1. Films, filmstrips, etc.
2. Records, tapes
3. Group role playing
4. Group and individual psychomotor projects
5. Field trips
6. Guest speakers
7. Student interviews
8. Games

In all cases, emphasis was placed on utilizing learning methods which placed the student in a position which required him to become involved with people or things in his environment. This was done to encourage students to identify societal questions, find solutions to questions, and make decisions regarding the problems.

The original approach taken with the teachers was to try to devote the equivalent of twenty minutes per day to career education activities. The plans for the activities were prepared in unit form and usually taught each day like math, science, reading, etc. After the teachers began to introduce the career education materials, most of them quickly found that it would be more meaningful to integrate the activities with other learning activities.

## MATERIALS

An extensive search was made for materials which pertained to career education and more specifically the activities used in the classrooms. Numerous materials were identified to supplement and reinforce the activities planned by the teachers. The materials consisted essentially of books, games, transparencies, slides, film strips, charts, films, pamphlets, magazines, tools, tapes, and records. When economically feasible, the materials were secured for use in the school. Expensive materials and materials which were judged to have limited value were listed for future consideration.

An extensive bibliography of all materials secured for use by the teacher was compiled. In addition, a list of community resources was prepared for each teacher. The resource list consisted of people and business that indicated they were willing to assist with the project activities.

Numerous materials dealing with the conceptual framework and for suggested activities for elementary career education programs were

identified. The materials served as valuable resources for the teachers when they were preparing their activities but, none of the materials were (1) appropriate for the situation in Pikeville, (2) lacked certain qualities which the project felt were essential, and (3) did not have enough detail to be of much aid to the teachers. The result was that the teachers utilized outlines to prepare lesson plans for the activities. This technique provided a written record which could be useful to evaluate and revise the materials based on the success of the activity.

#### INSTRUMENTS

Several instruments regarding evaluation, data collection, and follow-up have been prepared and are ready for submission. These instruments have been prepared by the project staff and represent a significant amount of staff time. It has been found by this project staff that examples of instruments which facilitate examination of project activities are in short supply. If much is to be learned about change resulting from career education, extensive work must be done to develop instruments to measure the change. Most projects, including this project, are ill equipped to develop such instruments and most commercial instruments have been prepared to measure changes which have little relationship to the objectives of career education.

## PROJECT RESULTS AND ACCOMPLISHMENTS

The results and accomplishments of the project during the first year will be more candidly characterized in the "Evaluation" section of this report. Briefly stated, the project attempted to install career education programs in the elementary school and to establish a job placement program in the secondary school. As could be expected from nearly any project, this project had limited success with each effort.

The results of each effort will be briefly described below:

1. Instructional Program in Regular Elementary Classrooms: Initial efforts were devoted to teacher orientation to career education. The orientation was followed by preparation of instructional plans. By the time sufficient plans were prepared, there was time for only about four to eight weeks of implementation before the end of the school year. Teacher participation and quality of results were not uniform among all grade levels.
2. Examination of Special Education Problems: Numerous problems were encountered in attempting to improve the special education programs. Initial difficulty centered around securing professional assistance. The major problem was found to be that students had not been accurately placed in the special education classes. The only result which was accomplished with the special education program was a re-evaluation of the students within the classes. It is unfortunate to report that the personnel in Pikeville were not prepared to make subsequent evaluations and that no programs were prescribed for the students within the classes.
3. Establishment of the Job Placement Service: The job placement service was established to serve the secondary school (grades 7-12). The main accomplishments of the placement coordinator were to complete a survey of local businesses, collect data from students in grades 7-12 regarding several questions pertinent to job placement, and to place several students in specific jobs. Tasks such as establishing a follow-up system, providing group and individual guidance with students, and establishing a selection criteria were not accomplished. The majority of actual placements were in part-time situations and little progress was accomplished to assist students with finding post-graduation jobs or identifying post-secondary education systems.
4. Attitude Change of School Personnel: Prior to the initiation of project activities in Pikeville, nearly all of the education in the school system was directed toward preparing children to meet the next educational obstacle. The ultimate goal was to see that all children went to college. Such a program was acceptable to the parents of many of the 65 to 70 percent of students that completed the twelfth grade and the school

personnel were rewarded for their progress although they knew that the program was unacceptable to a large portion of the students. The project has given some face validity to making changes in the educational program which focus on societal models as the main goal of the education program.

5. Governor's Merit Award: The elementary school in Pikeville received the Governor's Merit Award for Outstanding Educational Innovation from the office of Governor Louis B. Nunn. The award was presented to Mr. Charles Spears, Superintendent, Pikeville Independent School District in recognition for the career education efforts in the elementary school. It is expected that the award will give visibility to the program on a state wide basis.

Certainly other accomplishments such as the completion of program lesson plans could be mentioned but most of these kinds of efforts are dynamic or are in the early stages of development. The most important change is that the people, at least those in the school, have found a new purpose for the existence of schools.

## EVALUATION

The evaluation which follows is the report made by the "third-party" evaluation team. The team was organized by the Bureau of Educational Research, University of Illinois, Urbana, Illinois under the direction of Dr. Rupert N. Evans. Under the conditions of the subcontract, the project was charged with the task of securing objective data regarding the progress of the project activities. The evaluation team was supposed to verify whether appropriate procedures had been used to obtain the data.

It will be obvious that the report is void of objective data. Such data were not collected because (1) all project personnel resources were devoted to initiating project activities and (2) the project activities were implemented so late in the school year that it was decided that little information could be obtained. Instruments and methods for obtaining data which could give indications of student behavior change resulting from the project activities have been prepared. These devices are simple and in some cases are rather crude in terms of more refined instruments commonly used to measure student behavior change. Certainly much more accurate data could be obtained if more precise instruments were available.

Report of Third Party Evaluation Team  
Bureau of Educational Research  
University of Illinois, Urbana

**"UNIVERSE MODEL" OF OCCUPATIONAL EDUCATION**

**Pikeville, Kentucky**

**Project No. O-361-0059**

**Contract No. OEC-O-70-4754**

**Exemplary Project in Vocational Education  
Part D, Public Law 90-576  
Eastern Kentucky University  
Richmond, Kentucky**

**June 1, 1971**

**Evaluation Team Members**

**Rupert N. Evans, Chairman, University of Illinois, Urbana  
Bessie Hackett, Illinois State University, Normal  
Mary K. Klaurens, University of Minnesota, Minneapolis  
Jerry Streichler, Bowling Green State University, Ohio**



### Description of the Project

This is a three-phase project, the first phase of which was scheduled to be completed by June 30, 1971, exactly one year after the notice of award of the contract. During this first phase, there were three principal goals:

- a. Develop instructional materials emphasizing world of work knowledge and attitudes and install these materials in grades 1-6 of the Pikeville, Kentucky schools.
- b. Initiate a guidance program in these same grades.
- c. Initiate a placement program to serve the Pikeville schools.

### Description of the Third-Party Evaluation Process

The contract for the evaluation of the first phase of this project was awarded to the Bureau of Educational Research, University of Illinois, Urbana. This agency employed a team consisting of Dr. Rupert N. Evans, Chairman, University of Illinois; Dr. Bessie Hackett, Illinois State University; Dr. Mary K. Klaurens, University of Minnesota; and Dr. Jerry Streichler, Bowling Green State University. All are experienced vocational educators.

The chairman of the team visited Pikeville on March 31, April 1 and 2, 1971, and the team spent May 18-21 at the project site, after studying written materials relating to the project. Data for the evaluation were gathered from this reading, and from interviews

and observations at the project site and in the surrounding community. Interviews were conducted with: the city mayor; Model Cities director, deputy director, evaluation director; and evaluation citizens group; superintendent of schools, principal, curriculum director, 14 teachers, 12 parents, 7 students, president of the school board; manager of a local radio station; assistant manager of the local employment security office; plus six project staff members. Class sessions, counseling sessions, and a meeting of parents were observed. The report of evaluation of the project by Model Cities was reviewed. Our report is organized in six parts: Project Setting, Community Setting, Project Administration, Instruction and Curriculum Materials, Summary of Observations, and Summary Evaluation.

### Project Setting

Circumstances beyond the control of the project initiators, interfered with the introduction and implementation of the occupational education program in Pikeville Elementary School. The Universe Model Exemplary Program was proposed in December, 1969 but its funding was not announced until the last day of fiscal 1970. Because of previous commitments, the project director could not assume his duties until September 1, 1970. After this date the remainder of the staff was employed. As a consequence it was impossible to conduct the planned orientation program for teachers prior to the beginning of the school

year. Moreover, the project began at a time when the school was preparing for its first attempt to secure regional accreditation from the Southern Association. The success of the application for accreditation undoubtedly was due in part to the presence of the Universe project, but the time required for the self-study and tensions occasioned by the accreditation visit and by a change of the upper grades from a departmental to a self-contained classroom structure delayed effective teacher participation in developing curriculum materials until January 1971. Consequently, at the time of the evaluation visit, project staff had been on board for periods of from 5 to 8 months, but teachers had been preparing materials for only about 5 months.

Although the elementary teachers were aware of the presence of the project staff in their building, it was several weeks after the start of the school year before they began to appreciate fully their own role in the development of a career education program. It is apparent that as the weekly workshops began to function, most teachers became cooperative.

Appraisals of teachers' attitudes toward the project were based chiefly upon reactions given in informal personal interviews. Approximately half of the faculty from each of the grade levels were interviewed by the project evaluators. All of these teachers voiced enthusiastic support for career education in their elementary school,

though some at the fourth, fifth, and sixth grade levels felt that other types of education useful for college preparation should receive first priority. The teachers, particularly at the first, second, and third grade levels, tended to view the time spent in curriculum-writing workshops as a helpful though tiring addition to their heavy schedules. The concern of all teachers for providing quality education for their pupils clearly was coupled with a deep-seated pride in the community. Nearly all of these teachers were frank in expressing dissatisfaction with the absence of a preliminary orientation to the project. "We felt as if it had been dumped in our laps," was a typical comment. However, they were grateful for guidance in developing curricula and for the variety of resources made available by project funds.

#### Community Setting

The project obviously has strong support from influential elements of the community. The mayor, model cities staff, assistant manager of the employment service office, and manager of the local radio station all were aware of project goals and saw these as supporting community goals and having potential for significant help to youth in the community. Similar views were expressed by the president of the school board and the superintendent of schools. These latter two individuals are also well aware of the impending retirement of the elementary school principal and the importance of replacing him with another competent individual, one who is supportive of innovation.

During the visit of the evaluation team the Governor announced that this project had received his award for an outstanding innovative educational program. It was the only occupational education program so honored.

Pikeville, Kentucky is a thriving city of 5,000 plus inhabitants in the heart of Appalachia. It has one of the most imaginative and competent mayors in this country. Under his leadership a wide variety of federal, state, and local programs are coordinated in ways which take advantage of their interrelationships and enhance their effectiveness.

#### Project Administration

The staff effort is comprised of three parts: (1) Eastern Kentucky University Campus effort, (2) Pikeville High School effort--principally a placement operation, and (3) Pikeville Elementary School effort. Although each "effort" is directed toward accomplishment of project goals and objectives, problems of coordination, logistics, communication, and administration do exist. With the exception of the Placement Coordinator, who is stationed in Pikeville High School, the Pikeville staff is housed in the elementary school. This elementary school group, including the Co-Director, Resource Center Librarian, the Elementary Guidance Counselor, and two secretaries, is functioning as an effective team. Continuous and open communication, consultation, and internal criticism is obviously encouraged by the office

arrangement and enhanced by the personalities of the individuals involved. Their relationship with the Project Director and the Guidance Coordinator seems to be excellent. Although both are stationed at the University, they spend a portion of each week in Pikeville. While intra-staff cooperation is high, much work still needs to be done to improve relations between project staff and school staff, in spite of considerable recent progress.

The placement effort at Pikeville High School seems to be suffering from the absence of those elements which make the elementary school staff a successful operating group. The fault may lie, in part, in the fact that the Placement Coordinator is alone in the high school in representing the innovative project effort. Placement activities cannot be described as dynamic. A number of important prerequisite and integral placement program tasks have not been performed as of this date. They are not likely to be performed this school year.

The Project Director and Guidance Coordinator, supported by three graduate assistants and a secretary, are headquartered at Eastern Kentucky University. The kinds of support that the university can and does provide for the project make this arrangement desirable. There are, however, accompanying negative dimensions. The Project Director has expended extraordinary amounts of time and physical effort in Pikeville. He has gained the confidence and respect of school administrators, teachers, project staff members, and public officials. The Project Guidance Coordinator has been successful

particularly in establishing the elementary guidance program and with identifying Special Education problems. His influence with the Placement Coordinator has been limited, but he has had some success in working with the high school guidance counselor.

#### Instruction and Curriculum Materials

Evidences of work-education activities were conspicuous in most of the classrooms of the Pikeville elementary school. Among the child-developed products of learning were job-related drawings, bulletin boards, models, posters, charts, graphs, maps, collections of literature, newspapers, and video tapes. Children were eager to tell about their field trips and to explain their job investigations. A highlight of sixth grade activities, observed by project evaluators, was a television program for parents, entirely produced and engineered by students. Earlier, another sixth grade class had prepared a newspaper following a study of printing and field trips to a printing establishment. It is difficult to tell how much of this display was due to the fact that the date of the evaluation visit was known in advance. There were a few unguarded comments by parents, teachers, and administrators of the type: "We are glad to see this program in the school so that we will have something to offer the slow learners and troublemakers." Obviously this reflects a basic misunderstanding of the purpose of the program.

Two approaches were taken by project evaluators in attempts to assess parental reaction to the occupational education

program: (1) somewhat limited personal contacts with parents and (2) a tally of responses taken from a random sample of parent questionnaires which had been returned in a recent survey. At the present time, it appears that generally parents are unaware of the existence of the occupational education project although they are enthusiastic in approval of the new activities in which their children are engaged.

Although leaders in the community are well informed, the appraisal of reactions toward the career education program suggests the need for improving communication with other groups. Special efforts are in order for administrators at all levels to promote program visibility and to give teachers praise and recognition for their input. Avenues of communication might be strengthened so that teachers are kept informed and involved at the level of decision-making. It is evident that steps need to be taken to increase parent awareness of changes in the curriculum. Perhaps the organization of an advisory committee would contribute, not only to increased awareness, but also involvement by parents in the career program. Consideration also might be given to making it possible for teachers to have a work break during the school day. At present they all have direct responsibility for pupil supervision for every moment from the start to the end of the school day.

In view of the short period of time since the teachers began working on the curriculum materials, and the manner in which



they became involved in the project, the materials show a strong commitment and sincere effort on the part of many of the teachers. The units developed for levels K-3 appear to have a relatively smooth and relevant integration with the social studies framework which was used in organizing the materials. The materials for levels 4-5-6 seem to be less well integrated with the geographic framework which was proposed originally for these grade levels. The occupational clusters framework as exemplified by the "Communication" materials used in the sixth grade seems to be relevant to the interests and developmental tasks of boys and girls in the upper elementary grades and the clusters can be integrated relatively easily with the so-called "academic" subjects already in the curriculum (e.g., Communications with Language Arts, and Health Occupations with Science).

The basic format for the materials seems to be adequate. It takes time to create the kinds of innovative activities that were envisioned for the project, however. There is evidence that many of the teachers were able to do this type of creative work. The others may need to have a more direct exposure to work environments and workers in a variety of occupations and to methods of exploring the world of work in order to plan meaningful learning activities for the children. A fair amount of attention is given to the occupations which do not require a college degree; however, the jobs which require less formal education are not mentioned as frequently or explored in the same depth as are the professions.

The objectives and learning activities do not appear to reflect significant attention to some of the following aspects of occupations and work:

1. Intrinsic satisfactions and rewards of work
2. Changing roles of women and men
3. Importance of interpersonal relations
4. Workers' perceptions of their careers

The resource materials gathered to date are excellent, and the identification of resource people among the parents in the community is a valuable part of the resources available. There is a good bibliography of the materials. However, the teachers appear to have difficulty in finding time to use the resources laboratory in view of their continuous contact with the children during the school day. Many of the materials should be where they are more accessible to children--possibly in the library or in the elementary guidance counselor's room. The person responsible for the collection of materials has done a good job and seems eager to assist the teachers. However, there is some question about whether the teachers have made the maximum use of her assistance.

#### Summary of Observations

The following statements can be viewed as a more specific treatment of some of the preceding general observations:

1. The staff office in the elementary school also serves as the Resource Library, which has been developed by the Resource

Librarian, an extremely cooperative individual. Alternate methods of encouraging teachers to use the resources in the center should be explored, e.g., planning coffee or tea hours in the office, circulation of acquisition lists with viewing hours, and possibly inviting teachers to eat lunch in the office.

2. The elementary school has an excellent library. Every effort should be made to establish in the library a resource center for occupational education to underline the fact that there is no basic distinction between these and other categories of educational resource material. Also the school librarian needs to be more deeply involved in the project effort to insure lasting project impact.

3. A media specialist, to be appointed in project Phase II, should likewise be encouraged to develop activities cooperatively with the project Resource Librarian, the elementary school librarian, and others in the school system who are concerned with media development, acquisition, storage, and utilization. This may be considered a seed effort in the establishment of a comprehensive educational media and resource unit to serve the school district.

4. It is evident that a spirit of cooperation, mutual trust, and respect between project staff and the elementary teachers is developing. Additional efforts should be undertaken to further encourage this trend. Activities for consideration include:

a) Adding to the staff or retaining an additional qualified consultant in career development and elementary curriculum

with experience in the upper elementary grades. The teachers have accepted the project staff members' authority particularly as they function within their areas of specialization, but greater credibility can be established, with consequent improvement of receptivity through the agency of the recommended staff or consultant addition.

b) Strengthening teacher receptivity and commitment by improving their knowledge of results. The Guidance Coordinator may be helpful in developing instruments to accomplish this. Possibly an individual with evaluation competencies needs to be placed at the project site.

c) Providing access to a variety of support personnel and specialists--these are usually available in larger school systems but simply are not available in the Pikeville schools. Some services (e.g., in the field of mental health) are available in the community. The success of the project may hinge upon the ability of the project staff to provide or acquire certain specialized support--and the availability of such support undoubtedly will contribute to the children's and community's welfare. Requirements for various kinds of psychological, mental health, speech, hearing, visual, reading, etc., specialists are being dramatized as project work progresses. The project staff should disseminate information about those services which are available, and inform community leaders of unmet needs.

d) Developing active support from the school administration. Support from the school district administration

appears to have been largely passive. There may at times have been a lack of support from the office of the elementary school principal. The principal himself is retiring this summer, and the key importance of this position is recognized by community leaders

5. Efforts to improve communications among project staff members and between project staff and other agency staff are recommended.

a) Intra project staff communications are presently acceptable with the exception of communications with the placement coordinator. As the staff is enlarged, scheduled periodic meetings of the entire staff or some viable alternative may be vital to project success. A lengthy treatment of the values of such action seems unnecessary, except to emphasize those benefits derived from participation, involvement, sharing of ideas, etc.

b) The Model Cities Agency may be the appropriate agency to implement a small clearing house function to enhance activities of this and other projects in Pikeville and its environs. As an example, there is a possibility for mutual help and ultimate aid to children through communication and cooperation between project staff and the mental health services staff located in the local hospital.

c) Pikeville's remote location has made it difficult for the project staff to conduct visits to demonstration sites for Pikeville teachers. Efforts should be made to arrange for such

visits for teachers on all levels as the project progresses. If this cannot be accomplished, staff members should seek a viable alternative such as well-produced video tapes of on-site demonstrations with teachers from demonstration centers--ideally, those on tape--invited to meet Pikeville teachers at the time they view the tapes.

6. The Guidance Coordinator has made a positive impact upon the guidance effort in Pikeville Public Schools. This is desirable and should be continued. His functions in career development and vocational guidance activities more closely related to the project remain vague. A number of proposed Guidance Coordinator tasks, enumerated in project Quarterly reports, have not been performed. Many could not be accomplished because required data were not available. Instruments need to be developed, and data collected, for pertinent base-line data will become more difficult to obtain as the project progresses. The development or acquisition of instruments and data gathering are logical activities for the Guidance Coordinator and should be undertaken immediately.

7. A decision concerning improvement of the placement activity should be made as soon as possible. Present efforts are inadequate in data gathering regarding short and long range manpower requirements. Improvement is also desirable in counseling and interviewing techniques. The available evidence reveals sincere but somewhat inept attempts in these areas. Improvement might be accomplished if the Guidance Coordinator were to provide the

Placement Coordinator with a significant amount of inservice training and upgrading immediately. The major focus of placement seems to be on short-term summer or holiday jobs, which appears to overlap the functions of the Youth Employment Service of the Model Cities Project. The long-run objective of the Placement Coordinator should be placement of graduates (and dropouts) in full-time continuing employment or in advanced preparation for employment.

8. There should be greater utilization of the Pikeville community resources to relate learning experiences to the real world. Data have been collected on the availability of these resources.

9. It is clear that there is a need for improved communications with parents, community agencies and business and industry about the total career education project.

10. A broadly representative advisory committee should be established to provide two-way communication between the school and groups in the community and to facilitate use of community resources.

11. A career resource center should be provided for students and teachers to use during their library period or some unstructured time. There is a need for continued inservice training to expand the career information possessed by all teachers and to further stimulate creative teaching on the part of certain teachers. One part of this inservice education could include opportunities for the teachers to interact with workers and employers in a variety of occupations and kinds of work settings.

12. Attempts should be made to secure recognition for the teachers and the program by the school administration, the parents, and by local industry. Recognition afforded by the State award should be helpful.

13. More data and information are needed on manpower and career opportunities in the Pikeville area, and on current and anticipated mobility patterns of school leavers (both dropouts and graduates). Follow-up studies are needed greatly.

14. More attention should be paid to the non-professional occupations in which the majority of students are likely to be employed.

#### Summary Evaluation

In spite of difficulties, the teachers and the project staff have produced a great deal of useful instructional material in a short time. Progress in achieving the three principal project goals (noted on page one of this report) is clearly evident. These project goals are worth-while, and are achievable, and a climate exists which should allow the project to move even more rapidly during its second phase. We agree unanimously that funding should be continued for the second year.



## CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The conclusions, implications, and recommendations which follow are based on direct observation of events which have occurred at the project in Pikeville, Kentucky. The reader should be aware of this restriction before making broad generalizations.

### Conclusions

1. School personnel, including teachers, counselors, supervisors, and administrators are generally not adequately prepared to cope with the problems encountered in attempting to diffuse career education in the schools. That is, most school personnel have been prepared, and usually do a very good job, to help children learn "academic skills." While career education is also concerned with children attaining a high degree of skill in academic areas, most teachers often lack the technical knowledge required to be knowledgeable about careers other than some of the professions. If teachers are the only source of knowledge for the development of content in elementary career programs, the programs will probably be superficial and will usually tend to emphasize the professions. This is especially true of the teachers in Pikeville because of the lack of career models in the community.
2. Teachers are reluctant to attempt to introduce career education activities for a variety of reasons. Some of those reasons observed in Pikeville were:
  - a. Teachers have received positive reinforcement for their classroom behavior. This behavior usually has as its model the person who will be going to college.
  - b. Career education has not yet attained the degree of national credibility that has historically been given to conventional education.
  - c. The content and methods which are fundamental to a quality career education program are often foreign and uncomfortable to the teachers.
3. Once teachers have attempted career education activities they tend to be more interested in continuing the activities and initiating new activities.
4. There are numerous materials available regarding career education but very few materials are available to help the teachers. The materials give suggested activities and usually additional resources but many elementary teachers are oriented to a textbook-teacher's guide approach to teaching and often have a difficult time organizing materials from several sources.

5. The higher the grade level, the more difficult it is for teachers to cope with the technical problems relating to preparing career education materials, This appears to be because the content becomes more technical at the upper levels of the elementary school.
6. One way to establish credibility is to secure objective data regarding the changes resulting from the program. Examples of factors which impeded data collection in Pikeville were:
  - a. Evaluation devices, other than those of an individual nature which are extremely time consuming, for the lower elementary grades are difficult to construct, administer, and evaluate because of the problem of limited communication skills development.
  - b. Many of the objectives of career education are long-term goals and will probably not show much gain after short-term involvement.
  - c. There are very few accurate devices available for measuring change.
7. Career education programs must be activity centered. In addition to the fact that most career programs are best characterized by activity (involving students with manipulative experiences and interpersonal involvement), student interest level in school appears to be substantially increased.
8. When projects are initiated, such as the career education program in Pikeville, it often forces the school to look at other phases of their program. If the total examination reveals primarily strengths, positive attitudes usually result. When ills are revealed, the reaction is often antagonism toward the new program.
9. It might be futile to introduce new activities which are directed at only a portion of the total school program. For example little change could be expected to occur from the introduction of a new math program if the reading program is weak because, the students' performance in math might be restricted because of weak communication skill. The same analogy might apply to career education programs. It would appear that the optimum situation would be to blend career education with other areas of the school to provide motivation and relevance to the total school program.
10. Projects such as the career education project often produce internal personality problems. The following are some which seem to have emerged in Pikeville.
  - a. Some regular employees might feel that the efforts of the project staff are receiving more attention and thus feel threatened.

- b. Projects often reveal weaknesses for which other people are responsible.
  - c. Programs often require extra work on the part of the staff.
  - d. Project staff roles are misinterpreted by regular staff. To be more specific, work done by project staff is not always readily observable by the regular staff and are often perceived as having a "soft job".
11. The mere passage of time could affect the attitude of the people involved in the change. In the Pikeville situation, the teachers are much more positive toward the project efforts this year than they were during the first year of the project. The main difference in the situation this year from last year is the fact that the teachers have had "time" to think about the problem.

#### Implications

The conclusions above suggest several implications for the project in Pikeville. To the extent that the project is representative of situations in eastern Kentucky or Appalachia, the implication might have a broader interpretation than Pikeville.

1. Programs are necessary to help prepare school personnel to maintain, and perpetuate career education programs. While the immediate problem is working on an in-service basis, the future of career education programs might well depend on the establishment of collegiate programs.
2. Effective evaluative instruments and techniques must be developed to show that career education is causing meaningful change in students. Both short and long-term evaluation appears to be necessary.
3. It is extremely important that detailed instructional materials be developed that teachers will be able to use in their classroom. The materials need to be specific enough to provide guidance for teachers but flexible enough to be adoptable to several situations. It would also be useful to have alternative approaches.
4. School administration must provide support for activity type career education programs. Such programs will create more movement and noise in the classroom and will require more expense for tools, material, and supplies.
5. Career education programs could and possibly should serve as the mechanism to motivate a comprehensive examination of educational programs.
6. Evaluation affects people in many different ways. Educational

personnel should be helped to develop constructive attitudes toward evaluation.

7. When programs are activity centered, the students have the opportunity to test abstract principles, concepts and theories against real or simulated life situations. It is this application of knowledge that permit a child to internalize the knowledge. Students often stimulated by activity to the extent that they want to learn much more about a topic than might be required by the teacher.
8. There is some indication that it might be important to make provision for enough time to lapse for the staff to begin to fully accept the change. Initial introduction of new concepts and the personal commitment which is required of the staff can be overwhelming. When the staff has the opportunity to internalize the concepts and come to grips with how to cope with the change.

#### Recommendations

1. Make provision for "tooling-up" of projects like those initiated under Part D funds. While the leadership is usually well acquainted with the broad conceptual framework, other staff must do a huge amount of work to attain a level where they are able to function at an efficient level. This is especially true when there are few instructional materials available.
2. An attempt must be made to develop effective evaluation devices which will help projects measure their effectiveness.
3. Effective career education materials must be developed. The materials need to go far beyond making suggestions about what broad concepts should be. The need appears to be much more critical at the elementary school level than at the junior high or senior high school levels.
4. Much more emphasis needs to be placed on changing the personnel. The major problem with this task is to find the time to free teachers and other personnel from routine duties to accomplish the changes which are required. This problem is especially acute when the content is new and different to the teachers.
5. Career education must be an integrated part of the total school system. The current segregation of vocational education and academic education creates a system in which neither provides the most benefits to all children.
6. Educational programs, including these known as vocational education, must be planned and implemented on the basis of the student gaining a certain degree of skill or competence.

7. State departments of education (including vocational education) must make commitments to projects to ensure that programs, which require extra funding, receive support after the three year funding period. Most school boards, especially those in Kentucky where a great portion of funding comes from the state, would be hard pressed to arrange for the support of many of the programs which require additional personnel and equipment. It would seem like a waste to abandon programs without giving them more time to operate than is provided for by the federal funds.
  
8. Provision should be made for all forms of dissemination of project materials. Numerous materials are being developed by projects and when possible are disseminated. But most project budgets do not provide for wide distribution.

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