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FINAL
IOWA CAREER EDUCATION PROJECT
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STATE OF IOWA
DEPARTMENT OF PUBLIC INSTRUCTION

FINAL
EVALUATION OF THE
IOWA CAREER EDUCATION PROJECT

July 1, 1975

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THE IOWA CAREER EDUCATION PROGRAM

This initial section of the final third-party evaluation report will serve to describe the broad philosophy and general methodology utilized in arriving at the evaluative conclusions drawn throughout ICEP operation.

Although this description is brief, it is hoped that it will provide the reader with a clearer picture of third-party efforts and the veracity of the results of those efforts.

Basic Assumption Regarding the Decision-Making Model and Its Relationship to Evaluation

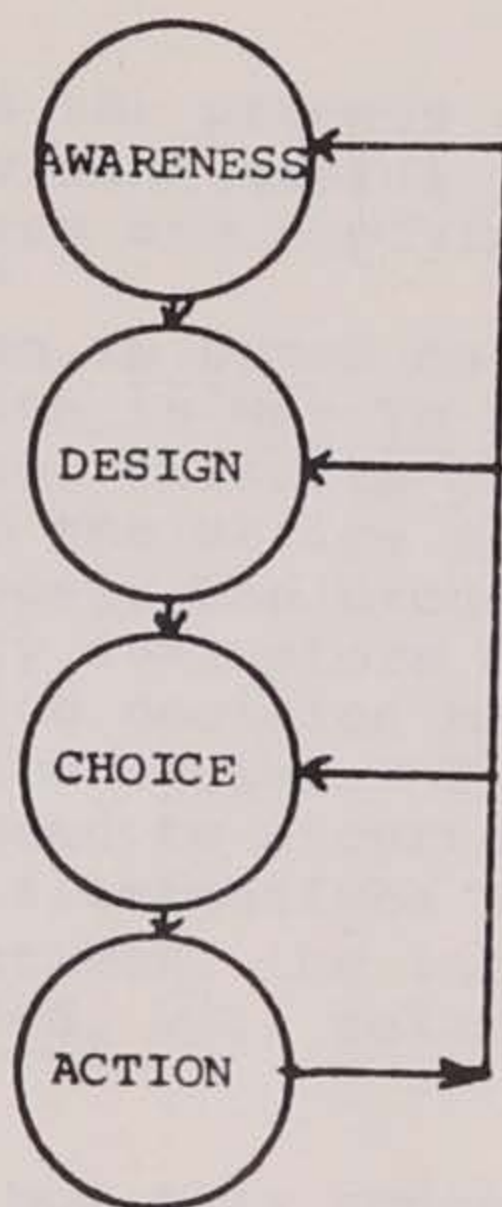
The basic assumptions underlie the evaluation model utilized in this evaluation effort:

- 1) The purpose of evaluation is not to prove but to improve, and
- 2) Evaluation is the process of delineating, obtaining, and providing¹ useful information for judging decision alternatives.

The decision-making process to be served by this evaluation was conceptualized into four stages.² In the Awareness stage, the existing program decisions, unmet needs, unresolved problems and opportunities are specified. Design questions are answered in the second stage. Authority and Responsibility are specified, Decision Alternatives are listed, Decision Rules stated and Criteria are specified in the program design

¹ Educational Evaluation & Decision Making, Stufflebeam, D., Foley, W., et al, F. E. Peacock Publishers Inc., Itasca, Ill., 1971, p. 1.

² Op cit, p. 53.



evaluation. During the Choice Stage, the Efficacy of Decisions and Criterion Data are matched for Recycling purposes. The fourth stage, Action, relates to the evaluation of the Project's Ability to Fix Responsibility, Operationalize Choices and Execute the operationalized Choice.

Evaluation therefore, becomes a continuous on-going element of program operation. That is, at the point that evaluation reaches the end of a cycle, the decision alternatives are recycled into what appears as a new and unique operational program from that which has preceded it. In this manner, evaluation is not summative in the traditional sense but introductory and growth-producing.

A more general definition of evaluation as it is approached here might then become:

"Evaluation is the process of delineating, obtaining, and providing useful information for judging decision alternatives and applying them to operations for re-evaluation."

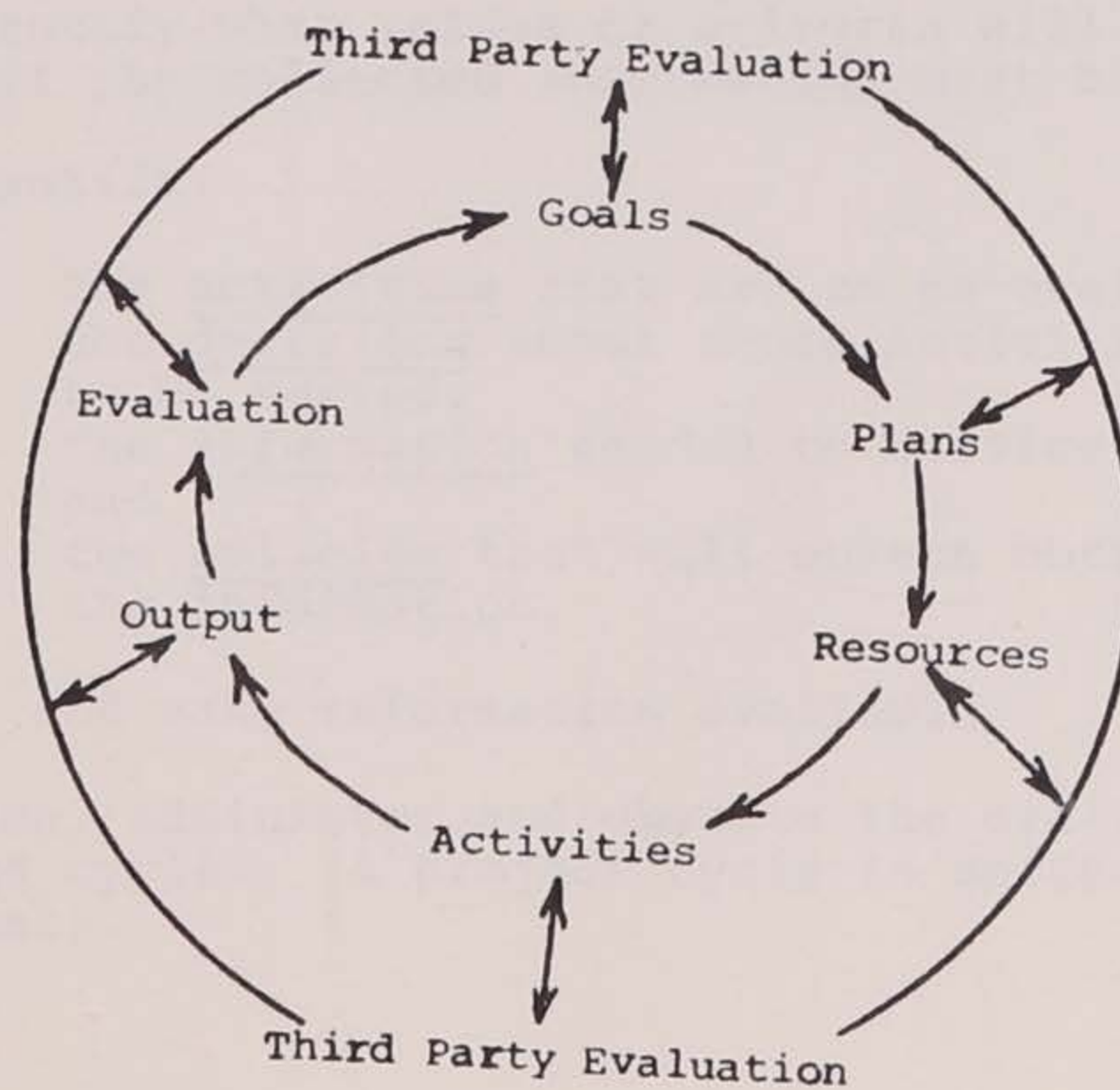
This definition is based on the idea that the purpose of evaluation is Not To Prove But To Improve educational practice. Efforts to improve may be made in relation to the entire system which includes context, input, process and product.

The third party evaluators attempted to furnish information useful to decision makers as they attempt to improve the entire system. Since decision makers within the system need to ascertain the relative value of competing alternatives and to decide among those alternatives, the information delineated, obtained and provided, will relate directly to this function.

A consideration of how this conceptualization applies to Career Education follows.

Career Education Evaluation: Specifics

Each career education program and the relationship of the third party evaluation to the program can be thought of as going through the following cycle:



First, Goals for the program are established. Their Plans to meet these goals are formulated. Resources are allocated to the program and Activities are designed and implemented. This results in Output (or Product) from the system. The Whole System Is Evaluated and based on the evaluation, hopefully, modifications in the system are made before the new cycle; the goals, plans, resources, activities, product, and evaluation.

The tasks of the third party evaluators in this context were analyzed as follows in the CIPP model.

CIPP Conceptualization: Third Party

1. Jointly identify and delineate with the decision makers the most useful information. Decision makers include project staff and Department of Public Instruction.
 - a. Identify what decision alternatives are to be considered (for it is about these alternatives that the information must be obtained).
 - b. Identify what values or criteria will be applied (for the collected information must bear on these).
 - c. Identify:
 1. the activities that are to be evaluated.
 2. the decisions about those activities that are to be served.
 3. the information needed to service those decisions, and
 4. the policies that will govern obtaining and providing the information.
2. Obtain and make information available
 - a. Plan, administer and execute the evaluation activities and cycles, (a project cycle is defined as an academic year).

1. design instruments
 2. develop and employ techniques for data collection, handling and analysis
- b. Meet the criterion for utility:
1. meet scientific criteria
 - a. internal and external validity
 - b. reliability
 - c. objectivity
 2. meet the practical criteria
 - a. relevance
 - b. importance
 - c. scope
 - d. credibility
 - e. timeliness
 - f. pervasiveness
 3. meet the prudential criteria: efficiency
 4. see that the information pertains to the values and criteria the evaluator and decision makers have jointly identified as the basis to make the decision.
3. Provide information to the users of evaluative data
- a. fit information together into systems or sub-systems that best serve the purposes of the evaluation in light of the decision needs, options, and criteria identified in Step 1.
 - b. order and highlight the evaluative data into reports that best illuminate those options within the framework of explicated criteria.
 1. standard research format
 2. lay format
 3. format differentiating decision alternatives
 - c. provide an interface between the program staff and the field personnel to facilitate information exchanges relative to evaluation information.
 - d. provide leadership so that evaluation process is a team effort.

4. Determine whether the alternative chosen by the decision makers met the expectations for it. An example of this decision structure in relation to evaluation information is shown as Plate I.

This project will include evaluation of four parts of career education in Iowa. These parts are shown below:

	Elementary	Secondary
State		
Local		

As can be seen from this four-square design, one dimension is the state effort as it is undertaken by Iowa State University and the other is the local effort being carried out by the participating school districts.

Each of these program components will be evaluated as unique entities, then again as a whole program. The following chart will describe basic elements of the process, while consideration of the table as an entire graphic description of the process presents essentially a "photograph" of the evaluation system based on the assumption that the "whole is greater than the sum of its parts."

Plate I.

EVALUATION INFORMATION MATRIX

Dimension	Type I (what should be)	Type II (how to get what should be)
<u>Context</u> (state of affairs at start of project)	Knowledge of value system and of desired state of affairs.	Knowledge of purposes, needs, problems opportunities as related to value system.
<u>Input</u> (things necessary to maintain or produce a desired state of affairs)	Knowledge of actual state of affairs.	Knowledge of resources and procedures required to make adjustments indicated
<u>Process</u> (what has to be done with the inputs)	Comparison of ideal with actual state of affairs.	Knowledge of actual process and their congruence with intended process
<u>Product</u> (what you get when you've done with the input what you set out to do)	Knowledge of any discrepancy between ideal and actual states of affairs.	Knowledge of actual results and the congruence between them and intended results.

SUMMARY

The specifications for evaluation of the Iowa Career Education Programs called for Context, Input, Process, and Product evaluation. The product can be viewed at two levels - the Iowa State University level and the local school district level. At the Iowa State Career Education project level, the product of their efforts is the fifteen local career education programs. Therefore, evaluation of the product of the Iowa State Career Education program involved evaluation of the fifteen local programs which are the product of Iowa State's efforts. At the local level, the product of each local program is students who have experienced changes consistent with the career education model.

It was the responsibility of the third party evaluators to evaluate the product of Iowa State's efforts - the 15 local career education programs. In order to do this, the objectives, plans, activities, resources, and evaluation methods of each of the 15 local programs will be evaluated. This does not involve direct evaluation of the product of the local programs - the students - but, rather, involves evaluation of the evaluation methods used locally.

However, it is essential that the product of the local programs - student performance - be properly evaluated. Specific performance objectives and activities varied widely from district to district. The most appropriate

evaluation of student performance was done by the career education teachers using methods tailored to the objectives and activities of each program. However, not all teachers involved in the local career education programs possessed the knowledge and skills necessary for evaluation. Theoretically, the primary responsibilities for product evaluation of the local programs should lie with the local personnel with training and leadership furnished by Iowa State University and evaluation of the evaluation methods used made by the third party evaluators.

Thus, the primary responsibilities for student evaluation are: 1) the local schools are primarily responsible for student evaluation; 2) Iowa State University will furnish training and leadership for the local schools in developing student evaluation methods, in the same way they provide training and leadership in developing objectives, activities, etc; 3) the third party evaluators shall be primarily responsible for evaluating the local evaluation effects. However, the third party evaluators shall also provide evaluation help and suggestions to the local schools through the project staff for evaluation and, in the event that student evaluation is not conducted by the local schools, it will be conducted by the third party evaluators.

Method of Evaluation

The purpose of this section of the report is to introduce the method of evaluation and to suggest how it may best be utilized by decision makers.

The Conceptual Model: CIPP

The contract for this evaluation specified the use of the CIPP Evaluation Model (Context, Input, Process, Product) described in detail in the book, Educational Evaluation and Decision Making, written by the Phi Delta Kappa National Study Committee on Evaluation.¹

One of the basic assumptions of this model is that the purpose of evaluation is not to prove but to improve. Consequently, the evaluation model differs significantly from a research model. A research model only provides certain kinds of information under certain conditions. This evaluation model, on the other hand, is concerned with responding to a wide variety of needs for information by educational decision-makers under diverse and often adverse conditions. (p. 141)

The CIPP evaluation model assumes that information needs vary with the various kinds and levels of decision

¹Stufflebeam, Daniel; Foley, Walter J.; Gephart, William J.; Guba, Egon G.; Hammond, Robert L.; Merriman, Howard O.; and Provus, Malcolm M.; Educational Evaluation and Decision Making, Itasca, Illinois: F. E. Peacock Publishers, Inc. 1971.

makers in a system. In order for the greatest amount of improvement to occur within a system, the appropriate information must be supplied to these various decision-makers. Furthermore, it must be supplied at the time it is needed. Obviously, joint planning for evaluation is therefore necessary. The intent of this Evaluation Report is to facilitate that joint planning while increasing the awareness of and lending structure to decision situations.

Later in this section of the report, four categories of decisions will be explained and paired with the four kinds of evaluation in the CIPP Model. Sample questions taken from the source book mentioned above will appear to illustrate each of these decision-evaluation pairs. Since information needs differ with the kind and level of decision maker, brief suggestions will be given as to who the prime users are of the four types of evaluation.

Increasing Awareness of Decision Situations

For a successful application of the CIPP Evaluation Model, information needs must be specified at least in part by the various levels of decision-makers. "Given that evaluation should service decision problems, the parameters of those problems must be understood by evaluators. At a minimum they must know:

- (a) Who the decision makers are
- (b) What decision questions they must answer

- (c) What decision alternatives are to be considered
- (d) What criteria are to be used in judging the alternatives, and
- (e) The projected timing of the steps in the decision process." (p. 49)

This first phase of the decision process requires a minimal level of awareness of the operations of the project before all of the above questions can be answered with assurance.

The decision-making process to be served by this evaluation has been conceptualized into four stages: the awareness stage (the stage presently being serviced by this report), the design stage, the choice stage, and the action stage. (p. 53)

Increasing the awareness of decision situations is related to identifying unmet needs, unused opportunities, barriers to success, and other factors which might result in discrepancies between the project design and the procedures or between the performance and the objectives.

In this early stage, one of the evaluator's tasks is interpreted to be that of specifying these needs, opportunities, and problems in such a way as to create this awareness base for the decision.

Lending Structure to Decision Situations

Another major task of the evaluator during this stage is that of creating a framework for conceptualizing and analyzing decision situations.

After an initial view of the project, the evaluators compiled several clusters of questions designed to lend structure to the awareness stage. Although most of the questions will be commented on in this report to some degree, the primary significance of these questions may be that of structuring the awareness levels of decision-makers. It is assumed that decision-makers will consequently be in a better position to utilize the services of the evaluators for more specific information quests during the later phases, quests which are directly related to decision situations. The questions relate to the total context of the project, to the input, the process, and the product.

Neomobilistic Setting

The application of the CIPP model varies with the setting in which it is employed. Four types of settings are identified by the model's authors, depending upon the size of the change being attempted and the degree of information available on how to accomplish such a change. Due to the large scope of the present career education project and the innovative or novel character of the concept and the approach to implementation, the setting under consideration has been identified by the evaluators as that of neomobilistic.

"In the neomobilistic setting, the evaluator's involvement is higher than in any other setting--large change is being

attempted in face of slow understanding about how to accomplish the change." (p. 100)

In such a setting, the task of the evaluator becomes that of identifying "structuring questions" that follow from change objectives, identifying barriers to success, and monitoring attainments in order to identify discrepancies between performance and objectives. (p. 95) Through delineating, obtaining, and providing information, the evaluators have sought to reduce the effects of bias, limited perspectives, inadequate understanding, and other sources of irrationality in the decision process. (p. 96) They have attempted to increase awareness of and lend structure to decision situations. They have not attempted to make decisions themselves.

"Decision-makers likewise have responsibilities to the evaluator. They must honestly seek to increase the rationality of their choices, and they must be willing to view problems of choice from different value positions that may be relevant." (p. 96)

This project will include evaluation of four parts of career education in Iowa. These parts are shown below:

	ELEMENTARY	SECONDARY
STATE		
LOCAL		

On one dimension is the state effort as it is being carried out by Iowa State University and the local effort as it is being carried out by the nine participating school districts. On the other dimension is the program at the elementary level on the one hand and the secondary level on the other hand.

At each of the two levels, state and local, the CIPP Evaluation Model will be applied.

Four decision-making typologies are conceptualized in the CIPP model, those being depicted in the following chart:

(p. 80)

TYPES OF DECISIONS

	INTENDED	ACTUAL
ENDS	PLANNING DECISION To determine objectives whose achievement results in program improvement.	RECYCLING DECISIONS To judge and react to attainments.
MEANS	STRUCTURING DECISIONS To design procedures.	IMPLEMENTING DECISIONS To utilize, control, and refine procedures.

Each of these four types of decisions is serviced by a particular kind of evaluation.

TYPES OF EVALUATION CORRESPONDING TO DECISION TYPES:

CONTEXT EVALUATION (Most Basic) Two Modes: -contingency -congruence	PRODUCT EVALUATION
INPUT EVALUATION	PROCESS EVALUATION

To facilitate an understanding of the model being employed in this evaluation, a brief description of each decision typology and its corresponding evaluation typology seems in order. In the following passages of explanation of the CIPP model, frequent paraphrasing or direct quoting will be done from the source book specified in the contract for this evaluation, Educational Evaluation and Decision Making.²

1. PLANNING DECISION-----Served by CONTEXT EVALUATION

Planning decisions are related to major changes which are needed in a program. If decision makers become aware of discrepancies between program objectives and program performance, between what is intended and what is actually occurring, between what the program could become and what it is likely to become, then planning decisions are in order. Context evaluation would be needed to service these decisions.

Examples of planning decisions are reflected in the following questions which would in turn be answered by context evaluation:

Should program goals be changed?

Should we change or sustain our present mission?

What are the top priority needs that our program should serve?

What are the characteristics of the problems which must be solved in meeting the top priority needs to be served by the program?

What behaviors should the students exhibit following their participation in the program? (p. 81)

²Ibid.

Context evaluation in supplying the information base necessary to answer these planning decision questions, also defines the relevant environment and boundaries in which a program operates. Context evaluation:

- describes the values and goals of the system under study;
- describes variables known to be important for achieving given goals;
- reflects theoretical and empirical knowledge in a field;
- determines whether practice is consistent with theory;
- identifies unmet needs, unused opportunities, and barriers to success
- looks for new or emerging value orientations outside the system which relate to changes within the system;
- provides a basis for stating change objectives; and, generally, provides a basis for widespread communication both within and outside of the system included by the program.

Context evaluation is regarded as the most basic type.

It is systematic in that it monitors the entire system in which a program operates in order to maintain a current baseline of information about it.

Who uses context evaluation? Authority for planning decisions most frequently resides with policy making groups. Boards of education, funding agencies, local superintendents, state departments of public instruction, steering committees, department chairmen, or curriculum superivisors would be most likely to utilize context evaluation for arriving at planning decisions.

2. STRUCTURING DECISION-----Served by INPUT EVALUATION

The CIPP Model interprets structuring decisions to be those decisions which specify the means to achieve the ends. Method, content, organization, personnel, schedule, facilities, and budget are considered in arriving at structuring decisions. Modification of the established objectives often results from structuring decisions. Structuring decisions related to work, resources, and time may take several forms: they may be PERT networks, job descriptions, or line-staff organizational plans; they may be procedural specifications or designs for evaluating processes and products; or they may be program budgets. In any or all of these forms, structuring decisions provide the operating guidelines needed to carry out the aims of the earlier planning decisions.

Input evaluation provided information for determining how to utilize resources to meet program goals. During the awareness phase of decision making, the evaluator can lend structure to strategy building by raising relevant questions.

Throughout the various phases of decision making, input evaluation may be reflected in these kinds of questions:

- Are the given objectives stated operationally and is their accomplishment feasible?
- What are the potential costs and benefits of each of the several competing strategies?
- Is it logical to believe that a given strategy can accomplish the specified objectives?

- Is the particular strategy based upon valid theoretical principles?
- How much training will the staff require before they can effectively implement a given plan?
- What specific procedures will be needed to implement a given strategy?
- How can existing staff and facilities best be utilized in the implementation of a new strategy?
- What specific schedule of events and activities can guide the strategy's implementation?
- What side effects might a particular strategy produce?
- What are the attitudes of students, parents, teachers, etc. toward a particular strategy, and what do they know about it?
- How should a particular strategy be administered, evaluated, and reviewed at various levels?
- What process and product evaluation designs are required for efficient and effective strategy implementation?

Summarily, structuring decisions lead to actions designed to operationalize a procedure. This is apt to include budget and resource allocation, staff recruitment, orientation, and motivation of personnel.

Input evaluation, by supplying answers to questions such as these, is intended to assist operations managers to select and structure project designs.

Who uses input evaluation? Most structuring decisions are made by operations managers rather than policy administrators. "Operations managers" might include project directors, building principals, activity supervisors, and area coordinators.

3. IMPLEMENTING DECISIONS-----Served by PROCESS EVALUATION

Implementing decisions, according to the CIPP Model, are decisions which carry through the action plan. These decisions involve many choices regarding changes of procedures in process.

The following questions illustrate implementing decisions:

- Should the staff be retained?
- Should new procedures be instituted?
- Should additional resources be sought?
- Should responsibilities be reassigned to staff?
- Should the public relations activities be changed? (p. 83)

Process evaluation is designed to supply information useful to decision makers in answering these implementing decisions. Process evaluation identifies and monitors continuously the potential sources of failure which might be related to any of the following: interpersonal relationships among staff and students; communication channels; logistics; understanding of and support of the program by persons involved and affected by it; and adequacy of resources, physical facilities, staff, and time schedule. Further, process evaluation notes the main features of the project design, such as concepts to be taught, the amount of discussion to take place, or types of interactions expected to occur. Then evaluators describe what actually takes place. Continuous feedback is important if problems are to be identified and

remedied. Process evaluation helps to explain reasons for the outcomes and whether intended procedures were actually used.

Who uses process evaluation? Operations managers, project directors, or their designated representatives such as teachers, counselors, or other staff are responsible for implementing decisions. Hence, they would be prime utilizers of process evaluation. Decision makers use process evaluation not only for anticipating and overcoming procedural difficulties but also for a record of the process used to achieve project attainments.

4. RECYCLING DECISIONS-----Served by PRODUCT EVALUATION

Recycling decisions are concerned with comparing attainments to objectives in order to determine whether to continue, terminate, evolve, or drastically modify the activity. They are concerned with attainments at any point in a program. These attainments may be full cycle outcomes or short cycle achievements needed in a sequence of steps toward an outcome.

Questions which illustrate recycling decisions are as follows:

- Are the students' needs being met?
- Are we solving the problems as intended?
- Is the project failing?
- Was the product worth the investment?

- Has there been a significant gain in pupil achievement?
- Have we benefited by using the opportunity that was presented us?
- Has sufficient progress been achieved to warrant continuation of the project?
- Were the results from project A better than those from project B?
- Was the procedure effective.
- Has the project resulted in improved teacher competence?
- Have school and community relations been improved?
- Have students improved their self-concepts? (p. 84)

Product evaluation is designed to supply an information base for answering recycling questions such as those above. This type of evaluation is frequently more important in the latter stages of a program development whereas process evaluation is more important during the early stages.

In a neomobilistic setting where large change is being attempted in an area of low information grasp, product evaluation may tend to be focused on a series of intermediate levels of change rather than on the total change sought for. In other words, one step has to be accomplished before other steps can take place.

Since both context and product evaluations assess the extent to which ends are being attained, a distinction between the two seems in order. Whereas context evaluation continuously monitors the total system, product evaluation occurs more

on an ad hoc basis with respect to specific change efforts within the system.

Who uses product evaluation? Operations managers are responsible for making recycling decisions during the implementation of an activity cycle. Responsible fiscal agents must make recycling decisions at the conclusion of an activity cycle. Although both of these users require product evaluation, the policy administrator or fiscal agent in charge of applying for more funds or responsible for deciding to terminate the project, would be the most notable recipient and user of product evaluation.

In summary, two basic assumptions underlie the CIPP Model:

- (1) The purpose of evaluation is not to prove but to improve, and
- (2) Evaluation is the process of delineating, obtaining, and providing useful information to decision-makers.

Several analytical procedures are conceptually related to the CIPP Model, some of which have been mentioned. A brief indication of the close tie between decision typologies and evaluation typologies has been presented.

The following paragraph from the book Educational Evaluation and Decision Making serves to summarize some of the key aspects of these related analytical aids and concepts.

"In this book, the evaluator is viewed as an extension of the decision maker's mental process. In essence, the evaluator seeks to aid the decision

maker in negotiating each step of the decision process by working with him to delineate the information which is needed, by obtaining this information, and by helping the decision maker to use the information. He performs each of these tasks in relationship to each step in the decision process (awareness, design, choice, and action) in different settings (homeostatic, incremental, and neomobilistic), and in response to each of the four types of decision questions (planning, structuring, implementing, and recycling)." (p. 93)

Evaluation Directions & Questions

The scope of this final evaluation report was defined by the Department of Public Instruction through a series of questions.

These questions were developed to provide information across the broad range of career education targets and tasks.

Three directed efforts were made to answer the questions as completely and specifically as possible.

- A. To provide a picture of the total ICEP realm, third-party has drawn information from past reports, visits, and questionnaire responses to summarize and reflect the historical impact of ICEP on the participating districts.
- B. A questionnaire was sent to each participating district to reflect the opinions of ICEP coordinators in the field.
- C. Personal visits were made to D.P.I. and Project Staff by third party, to adequately group details of this last semester of operation.

Evaluation Questions Answered in This Report:

1. Provide data as to the effectiveness of various strategies used in assisting project schools to establish goals and chronological plans for implementation of career development concepts at elementary, junior high, and secondary levels. p. 30*
2. What kinds of data were used in summer 1974 workshops to identify needs as the basis for planning? p. 96
3. How did project schools decide upon priority of needs for planning? p. 36
4. To what extent did plans developed correlate with identified needs? p. 37
5. To what extent were the plans developed in summer 1974 workshops implemented? p. 96
6. What changes in procedures or methods of planning curricular offerings have occurred in project schools since implementation of ICEP? p. 39
7. To what extent have the summer 1973 workshop materials been revised or updated? p. 92
8. To what extent have summer 1973 workshop materials been incorporated into the curriculum of project schools? p. 92
9. What differences exist between curricular offerings prior to ICEP and current offerings, academic and vocational, e.g., in content, emphasis, structure or number of offerings? p. 43
10. What evidence supports the need for vertical and horizontal articulation of curricula in project schools? p. 50
11. To what extent have both vertical and horizontal articulation of curricula been implemented in ICEP schools? p. 50
12. Rate as to effectiveness methods by which ICEP personnel assisted local project staffs with the

* Page numbers refer to the pages in this report on which the questions are answered.

- integration and articulation of career education throughout each school. p. 55
13. To what extent have activities been incorporated into secondary school curricula of project schools for the development of self concepts as a result of ICEP involvement? p. 57
 14. What changes have occurred in exploratory activities at the junior high school level when compared to activities prior to the project? p. 58
 15. What changes have occurred in vocational curricula at the secondary school level when compared to activities prior to the project? p. 46
 16. What changes have occurred in procedures for evaluation of programs or activities in the project schools as a result of ICEP involvement? p. 102
 17. What types of evaluation and instruments were used by teachers, administrators, and students for evaluation of project attainments? p. 105
 18. How effective were the evaluation procedures and instruments used by the participants? p. 108
 19. What changes have ICEP schools made in their approach to evaluation and reporting of student performance due to involvement in the project? p. 101
 20. To what extent do modifications of guidance and counseling functions in project schools provide for implementation of career development concepts including placement of students in further education or in employment? p. 86
 21. To what extent has involvement in the project encouraged utilization of community resources? p. 74
 22. What procedures initiated by project schools were most effective in enhancing project school-community relationships? p. 69
 23. What procedures were most effective in dissemination of results and recommendations from the project to other schools? p. 71

24. How effective were the procedures and processes used in development of publications? p. 78
25. To what extent was input from teachers used in publications? p. 113
26. Provide data as to the effectiveness of strategies developed in the project to achieve transportability of the model and its component parts. p. 80
27. To what extent have the project schools prepared for continuing the implementation of career development activities as an ongoing facet of the curriculum at conclusion of the project? p. 60
28. What additional procedures or strategies could be developed to facilitate continuation of project activities to meet career development objectives? p. 40

PLANNING AND IMPLEMENTATION

QUESTION 1

Provide data as to the effectiveness of various strategies used in assisting project schools to establish goals and chronological plans for implementation of career development concepts at elementary, junior high, and secondary levels.

ICEP has created a tremendous impact on the attitudes and commitment of teachers with regard to the provision of career development at the K-6 level. Prior to ICEP, most teachers were doing very little with career concepts. Teachers now involved in the ICEP are doing a great deal while teachers not involved maintain a low level of career education activity. Elementary staff involved in the project have been active predominantly in the areas of Self Concept and the World-Of-Work.

The 7-8 grade level has also experienced an effect on the attitudes of teachers but to a lesser degree perhaps than K-6 teachers. The 7-8 teachers who are concerned with the individual student as well as their subject area and who are active in the ICEP display the most intense commitment.

In grades 9-12 there is a greater degree of variation than in either the K-6 or 7-8 levels regarding attitude and commitment. Some teachers who have been involved in the project continue to do very little with career education. There are other 9-12 teachers present who may have been involved but display little commitment because they think career education is a passing fad. Finally, there are those

teachers who, because of the ICEP involvement, are trying some career education activities in their classroom.

In general, elementary staff members are willing to cooperate with secondary teachers in order to establish a K-12 program effort. Elementary staff members have assisted Junior and Senior High staff members with implementation and developmental tasks in many areas.

Developing local internal evaluation techniques appears to be a major problem at present. It is apparent that help is needed in most school districts. A "show me how" approach would be beneficial. Most staff members indicated that continued communication via personal contacts would be helpful. A stronger commitment on behalf of the administrators would add confidence to the staff efforts. Administrative leadership is regarded as important to demonstrate the value of career education. However, despite apparent weaknesses, most schools indicated they would continue to refine their current activities and write additional activities as applicable.

It appears clear that leadership is needed from the DPI or the ICEP in order to assist in the closing out of the project. For example, the Junior High teachers have expressed a desire for more help in writing activities, especially for areas not represented in the summer workshop. This is, perhaps, a reliance on the previous pattern of DPI support. It will be recalled that initial strategies for aiding project schools

in developing introductory goals and plans included the development of objectives for ICEP and a model. Assistance was provided by the advisory committee. A summer workshop was held at Ames where career education concepts and general objectives were explained to staff members of each participating school. The school staffs in turn developed objectives and implementation plans for their area situations.

It was apparent from the onset of the project that two needs for implementing secondary career education would be necessary: in-service training for understanding the nature and purpose of career education as defined by the ICEP, and a need to provide the "how to" assistance. It was apparent that the consultants steadily improved in their ability to provide this type of service to the schools. ICEP consultants visited schools and assisted them further in planning for and implementing career education.

Local workshops were held in each school during the 1973-74 summers so local staff could further refine their objectives, develop materials, and plan for implementation. Meetings were also held with the superintendents of the participating districts to assure their understanding of the project and to gain their support. All these strategies worked well as evidenced by the progress schools have made in implementing career education. In summary, the general objectives and models developed by ICEP staff and the advisory

committee provided an excellent framework for schools to begin and there is a fear that this will be absent in the future.

Of particular note in terms of effective effort; certain specific activities stand out: the workshop at Ames was effective in explaining career education concepts to the participants. Particularly effective was the fact that during that workshop local staff members developed objectives and implementation plans for their area schools.

During the project, visits by the ICEP consultants provided assistance in the form of ideas, materials, and solving problems as they arose.

The local workshops held during the summers of 1973 and 1974 were much needed and were very effective. Teachers did not have enough time for development of career education material during the school year. The workshops provided them with time to concentrate on development of materials, activities and planning the incorporation of those materials and activities in their classes.

If career education is to succeed in local schools, administrative support and understanding is needed. The conferences with the superintendents of the participating schools were effective in gaining that understanding and support. This is evidenced by the increased local support in terms of in-service training, materials, released time, and positive reinforcement.

Even though there is variation among schools and among teachers in the implementation of career education, however, the original goals of the project have been met, and some excellent career education programs and activities have resulted. It is difficult to say which of the above strategies were the most effective. No single strategy would have sufficed. It was the combination that made the project successful. Each strategy was needed and was successful at the particular time. For example, at the beginning the staff of each school needed to understand career education concepts and objectives and to develop and adapt materials and activities to their area situations. This was successfully accomplished through the local workshops during the summer of 1973 and 1974.

In summary, two strategies were most effective in assisting project schools to establish goals and chronological plans for implementing career development concepts. These were the workshops at Ames and the summer workshops in the local schools. It was through these workshops that the goals and plans were developed. Very little was done to develop goals and plans outside the workshops. A logical conclusion that can be reached from that experience is that if goals and plans are to be developed, specific time must be set aside in a workshop atmosphere for the development. Goals and plans were not developed outside the workshop when teachers and administrators had other responsibilities and could only work on goals and plans on an incidental basis.

Further evidence of this is the fact that after the workshops in Ames school staffs were to further develop goals and plans during the school year. That did not happen. Very little further development of goals and plans were accomplished until the summer workshops in the local schools were initiated.

Question 3

How did project schools decide upon priority needs for planning?

The primary source of priority needs for planning was the ICEP project. To a large extent priorities were imposed by the ICEP staff during the early workshops and planning sessions. Of course, the workshops allowed for input from the participating school personnel. Thus initially priorities were as established by the ICEP staff and modified or adapted by representatives of the participating schools.

Of second importance in the establishment of priorities for planning were the local steering committees comprised primarily of local project directors and teachers. These committees took the model and plans developed at the early workshops and further defined priorities based on their own local needs and resources. The extent to which this was a truly cooperative committee effort varied widely from school system to school system. In some systems even though local steering committees were formed priorities were largely determined by the local project directors.

Question 4

To what extent did plans developed correlate with identified needs?

At the general project level plans developed correlated positively and highly with identified needs. The project staff, involving to some extent their advisory committee, consultants, and local participants, first established the career education needs, then developed a model and plans to fulfill these needs. Thus there was a close match between needs and plans. That was true not only of career education needs in general, but also true of the needs for implementation. For example, when it was established that teachers needed time to develop materials, funds were provided for local workshops during the summer.

There was also a positive correlation between plans and needs at the local level, although this varied from district to district. In many cases when a need was established for more exploratory activities or more community involvement plans were made to meet these needs and, within the resources available, subsequently implemented.

It should be recognized, however, that career education needs of Iowa elementary and secondary students were never really established in an empirical sense. Iowa agreed with the U.S.O.E. push toward career education and established needs based on philosophy and logic rather than on empirical study. Little was done at either the state or local level to gather data on

the career education needs of students. Thus most plans were developed for the purpose of implementing a generally felt need for career education rather than to satisfy specific career education needs of Iowa's youth.

Question 6

What changes in procedures or methods of planning curricular offerings have occurred in project schools since implementation of ICEP?

A number of changes in procedures and methods of planning curricular offerings have occurred in project schools since implementation of ICEP. Some of these changes relate directly to career education while others relate to the process of curriculum development in general. Below is a list of the most significant changes in methods and changes for curriculum planning that have occurred.

- (1) Teachers have developed specific learning objectives.
- (2) Teachers are increasingly developing their own activities and materials rather than relying on textbooks and materials developed elsewhere.
- (3) There is increased joint curriculum planning involving teachers and administrators.
- (4) More attention is paid to curricular articulation between grade levels.
- (5) There is increased communication and coordination between departments.
- (6) There is increased involvement of persons in the community.
- (7) The orientation for curriculum planning has shifted from primarily academic to increased emphasis on satisfying the total needs of students.

Question 28

What additional procedures or strategies could be developed to facilitate continuation of project activities to meet career development objectives?

In order to facilitate continuation of project activities, the following strategies are suggested.

- (1) Each district should continue to have a career education director or coordinator. If the initial thrust is to be continued it is essential that some one person have the responsibility to see that it is continued and to provide leadership, direction, and coordination for its continuance.
- (2) Several areas of the D.P.I. should provide leadership for career education development. In the past most of the leadership for career education has come from a few people in the Area Schools and Career Education Branch. However, many local school personnel do not look toward the Area Schools and Career Education Branch for leadership. Teachers, for example, are more likely to look toward, and take leadership from, persons in their own curriculum areas. A math teacher is more likely to implement career education if the leadership comes from the state math consultant. Thus, it is important that leadership for career education come from D.P.I. personnel in other areas in addition to the Area Schools and Career Education Branch.
- (3) Immediately useable career education activities and materials should be made available to teachers. The project has shown that unless teachers can be given released time during the school year or paid for development during the summer they will develop few activities and materials of their own. Thus it is important that teachers be provided with finished materials and activities that can be incorporated in the curriculum with little effort on the teachers' part. Teachers do not even have the time to study a broad variety of materials in order to select the best and most appropriate. That must be done for them. The D.P.I. could be very helpful by serving as a clearing house for good useable career education activities and materials.

- (4) The new AEA's should serve as a vehicle for continuing and expanding the career education effort. They should provide career education consultant help, coordination and materials.

CURRICULUM

RESPONSES TO EVALUATION QUESTIONS

Question 9

What differences exist between curricular offerings prior to ICEP and current offerings, academic and vocational, e.g., in context, emphasis, structure, or number of offerings?

The part concerning vocational offerings is answered in detail in question 7 which follows. Briefly, seven of the nine ICEP schools have added at least one new preparatory course. The courses added have included a wide variety of vocational areas. However, it appears that administrators, counselors, and teachers of the ICEP high schools are more aware of career education, are more favorably disposed to the concept, and are making some long range plans toward reaching the goals of the project. Course implementation takes time. Given another year, more preparatory courses will probably be found in the curricula of the high schools of the ICEP districts.

Variety was the rule among the new courses being offered in the high schools of the seven ICEP school districts that did add preparatory experiences for their students the past year. South Winneshiek added forestry, and semester units in business English and computer usage. Sheldon High School introduced horticulture and Clarke High School added a new course in fabrics. Courses in industrial and consumer math were begun by Humboldt and a computer course was also started at Carroll. West High School of Davenport taught blueprint reading for the first time

last year. The Marshalltown school district purchased a state highway garage and used the facility to conduct an auto mechanics course. They also started new classes in advertising and retailing and enlarged their distributive education program.

One example of a school district's planning for more preparatory courses for next year is Davenport where West High School will be offering courses in carpentry, mass-media, creative writing, auto servicing, and chef's training.

Most of the preparatory experiences being offered in the ICEP school districts at the present time are found within the existing vocational programs. This is not an anomaly, however, since in the past funds have been more readily available, expertise by present staff is more easily found within these areas, and facilities and equipment are, in some cases, on site and can be put to use for new programs. It appears that this practice will continue given the financial situation of the Iowa school districts and the methods of disbursement of state and federal vocational funds. The school districts must take advantage of matching funds available through the vocational programs to be able to introduce any new preparatory programs requiring large expenditures of capital outlay.

Several schools have also begun to offer a number of career exploration "mini-courses" at the junior high and high school level.

The above are all additions to the regular curriculum and are readily observable. The ICEP project has also resulted

in a number of changes within the regular curriculum which are not as apparent but are significant changes in context, emphasis and structure. These changes include:

- (1) an increased emphasis in many parts of the curriculum on career awareness.
- (2) increased emphasis on self concepts at the elementary level.
- (3) increased emphasis on knowledge of the world of work.
- (4) increased emphasis on the relationship of both academic and vocational subjects.
- (5) increased emphasis on career guidance and participation in career guidance activities by teachers.
- (6) increased use of community resources as part of the curriculum, e.g., field trips and community speakers.

Question 15

What changes have occurred in vocational curricula at the secondary level when compared to activities prior to the project?

Preparatory courses appear to be increasing both in number and variety in a majority of the high schools of the ICEP school districts. Seven of the nine districts have added at least one new course this year and indications are that several more preparatory courses will be added for the 1975-76 school year. The ICEP has undoubtedly had an influence in this increase of preparatory courses, but at the same time part of the growth may have been due to the general public's increased awareness of the importance of career education. The financing and staffing of new preparatory courses is, of course, a problem. However, it appears that administrators, counselors, and teachers of the ICEP high schools are more aware of career education, are more favorably disposed to the concept, and are making some long range plans toward reaching the goals of the project. Course implementation takes time. Given another year, more preparatory courses will probably be found in the curricula of the high schools of the ICEP school districts.

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Most of the preparatory experiences being offered in the ICEP school districts at the present time are found within the existing vocational programs. This is not an anomaly however, since in the past funds have been more readily available and expertise by present staff more easily found within these areas. In addition, facilities and equipment are, in some cases, on site and can be put to use for new programs. It appears that this practice will continue given the financial situation of the Iowa school districts and the methods of disbursement of funds for state and federal vocational programs. Opportunities for introduction of new

preparatory programs requiring large expenditures of capital outlay are limited. Therefore, it appears that few of the career education preparatory courses will be found in the "general" course offerings of the ICEP school districts in the near future.

Two types of changes in career exploratory offerings are emerging in project schools. One change is the emphasis directed toward integrating exploratory experiences into the curriculum while the second thrust sees curricular activities being developed in a way that leads to more structural changes.

One change in both the general and vocational programs reported in Carroll, Clarke, Davenport, Marshalltown, and South Winneshiek is the emphasis given to equal opportunities for boys and girls to have a variety of experiences and to take any course that is offered. Particular attention has been given to allowing boys and girls to explore career areas and take classes such as industrial arts and home economics previously restricted to one sex.

In some cases simply opening registration allowed the changes, but in Marshalltown junior high students will be offered a new series of shop, home economics, and humanities classes next year to provide all students with more options. South Winneshiek already offers junior high students nine week units in art, agriculture, typing, home economics, and industrial arts. Junior high students in Clarke now have a social awareness class that offers exploratory activities.

Counselors at Clarke, Shenandoah, Davenport, Sheldon, and South Winneshiek have begun to be more active through the creation of career information files which are available to junior high students. Project AWOL (A Week of Learning) at Humboldt offered a week of exploratory experiences and plans are now being made for two such weeks next year.

The types of changes at the senior high level generally concern expanded preparatory activities, but some new preparatory courses do allow exploration. Davenport senior high students will be unrestricted in access to all courses for which prerequisites have been met. This will allow both sexes to take a broader selection of courses. New courses in Davenport will include lifetime sports, computer programming and aviation ground school. There already are a number of informal units and after school activities at West High allowing students to gain ideas about various careers. Humboldt is introducing technical math, mass media, and graphic arts courses to meet needs for students in both general and vocational areas.

It appears that the ICEP has led to a generally increased awareness of potential exploratory opportunities at all levels. Teachers are taking advantage of these opportunities, but most formal modifications to provide for career exploration have come at the secondary level.

QUESTIONS 11 and 10

To what extent have both vertical and horizontal articulation of curricula been implemented in ICEP schools?

What evidence supports the need for vertical and horizontal articulation of curricula in project schools?

Administrators and teachers agree that integration of career education into the curricula is essential and necessary. It is obvious that elementary teachers have, to a great extent, succeeded in integrating career education into the regular curricula. This observation is strengthened by the existence of the large volume of materials and activities that have been developed for classroom use. Project schools have supported an integrative approach to career education from the outset of the project. Hundreds of activities have been written by staff members in all schools. Elementary teachers are using activities that were developed during summer workshops as well as in formal and informal in-service meetings during the regular school year.

In most cases, formal scheduled in-service meetings have not been held during the current school year. Humboldt held a formal workshop during the current school year so that teachers who attended the summer workshop could communicate their accomplishments to those teachers that did not attend. Carroll Elementary School dismissed classes early 2 or 3 times during the regular school year to work on the integration

of career education activities into the regular curricula. Meetings by project schools to facilitate integration of career education into the regular curricula, in general, are held informally. Sheldon, Springville, Clarke-Osceola, and Davenport were school districts reporting that such informal in-service meetings were held.

Many elementary teachers are making efforts to modify, delete, refine, or further develop activities that are currently being used. One elementary teacher from Harris School in Davenport remarked that "the only way to implement career education is to integrate; it can't be 'something else' to teach." Administrators and teachers agree that they are more aware of what their colleagues are doing as a result of formal and informal in-service training sessions involving integration of career education into the curricula. Elementary teachers are further along in their efforts to integrate career education into the curricula than are the 7-12 teachers.

Less time has been devoted to articulation by project schools. Elementary teachers and administrators agree that articulation is important, however. In Springville articulation between elementary grade levels occurred in the initial planning and at summer workshops. An elementary teacher from Marshalltown stated that "articulation helps teachers prepare for their classes better and keeps them from overlapping subject matter content." Humboldt is the only project

school that has placed as much emphasis on articulation as on integration. While articulation has been successful within buildings, it has not been successful between buildings of different grade levels. It appears that elementary project schools have had little opportunity to meet across grade level lines. Sheldon was one project school that reported this problem. Sheldon also reported that they needed to devote more effort to articulation. Carroll Elementary School experienced difficulty in articulating between grade levels because of lack of communication between buildings. In-service meetings to work on articulation during the current year are, for the most part, nonexistent. Schools report that they meet informally to discuss articulation. Clarke-Osceola is planning some in-service meetings at the conclusion of the school year and during the summer months to facilitate articulation between grade levels.

Integration of career education into the regular curricula at the junior and senior high school levels is being implemented to a lesser extent than at the elementary level. Where integration of career education has occurred at the secondary level, it was through the summer workshop effort in 1973. Sheldon, Carroll, Davenport Smart Junior High, and Marshalltown Senior High indicated that there had been no formal in-service meetings in their buildings to facilitate integration of career education into the regular curricula.

Secondary teachers and administrators in most of the districts agree that the integration of career education into the regular curricula is essential and important but are doing very little to achieve this purpose.

Articulation is not being accomplished to any appreciable degree at the secondary level. Again, teachers and administrators agree that articulation is important but have made no provisions for formal in-service meetings specifically aimed at this. If articulation between grade levels has occurred to any extent, it was during the summer workshop. Few schools indicated that they had spent any time on articulation at the secondary level. Springville reported that little articulation had occurred other than that at the workshop last summer. Sheldon, Carroll, Davenport Smart Junior High, Shenandoah, and Marshalltown Senior High indicated that no formal in-service meetings had been held to facilitate articulation. The South Winneshiek secondary staff has not been supportive of or in agreement with elementary efforts, thus little or no articulation has occurred. Davenport West High did experience minimal progress last summer. Marshalltown Junior High has discussed articulation efforts but such efforts have not been put into practice yet. However, it was mentioned that articulation between grade levels did occur at the ninth and tenth grades in Marshalltown. Limited in-service meetings by departments had resulted in some cooperation between grade levels at the Junior-Senior High in Clarke-Osceola. Clarke-

Osceola also indicated that in-service meetings had been planned for later in the school year and during the summer months to facilitate articulation.

In summary, it appears that elementary teachers have been more successful in integration and articulation efforts than have secondary teachers. This may be due to the fact that the elementary levels developed and implemented the career education concept a year earlier than did secondary staff members. Also, secondary teachers appeared to be more reluctant to change than did the elementary staff members.

Question 12

Rate as to effectiveness, methods by which ICEP personnel assisted local project staffs with the integration and articulation of career education throughout each school.

The primary methods through which ICEP personnel assisted local project staffs with the integration and articulation of career education throughout the schools were these:

- (1) workshops for local personnel held at Ames.
- (2) preparation of career education materials.
- (3) dissemination of career education materials.
- (4) visits to the project schools to personally consult with and assist the local personnel.

The workshop method was very effective. Through the workshops the staff got the local personnel to internalize the concepts of career education, to develop objectives and to make specific plans for the integration of career education into their curricula.

The ICEP staff developed a number of career education booklets.⁶ Although these booklets are useful to nonproject schools that are starting career education they were not very useful to project schools for two reasons - they were distributed too late in the project and they were too general to be of any real use. Thus production of materials by project staff was not an effective strategy for helping local personnel.

The project staff disseminated to the local schools materials that they developed, materials that were developed in other project

schools, and materials that were developed elsewhere. This was not an effective strategy for helping local personnel. As mentioned above, the material developed by the project staff was too general and was distributed too late to be of much help. The materials developed by other project schools could have been useful but were not used very much because they were, in most cases, distributed in a mass, unedited form. Distribution of good career education material developed elsewhere could have been an effective strategy but little of this was done. The project staff resisted the distribution of materials developed outside the project.

Personal visits to the project schools were very effective in some cases and ineffective in others. This depended to a large extent on the particular circumstances. The staff was too small to spend much time in any particular school and toward the end of the project, because of other responsibilities, the staff made few school visits. There was also quite a bit of staff turnover so frequently a school had one project staff consultant one year and another the next year. And, of course, some staff members were more knowledgeable and helpful than others. In general local personnel felt that the staff visits were the most effective when they were made on a regular basis, were planned and scheduled in advance, and when the staff offered specific suggestions to individual teachers.

Overall, it must be concluded that the project staff was effective in assisting local project staffs with the integration

and articulation of career education throughout each school since that objective was reached and a large share of the credit must go to the project staff. It certainly could not have been done without the project staff.

Question 14

What changes have occurred in exploratory activities at the junior high school level when compared to activities prior to the project?

This question has been partially answered in the response to question 7. The reader is referred to that response for information on specific curriculum changes.

Although there have been few major curriculum changes at the junior high level - few full regular courses have been added - there have been numerous changes within the curriculum which provide many additional exploratory activities for students. Marshalltown Junior High has introduced a new series of revised career oriented exploratory courses in shop, home economics, and the humanities. South Winneshiek Junior High has started nine-week exploratory courses in art, agriculture, typing, home economics, and industrial arts. Some of the junior highs have initiated a series of "mini-courses" which provide the opportunity for some career exploration as well as serving other purposes.

During the life of the project most participating junior high schools have opened up exploratory courses, which traditionally have been restricted to one sex, to both sexes. Thus, for example, boys now have an opportunity for exploration in home economics while girls have an opportunity for exploration in industrial arts.

However, it is within the regular junior high curriculum that most changes in exploratory activities have occurred. Most participating junior high teachers have introduced career oriented activities into their regular courses. These include a broad variety of activities which relate their subject areas to related careers. Math teachers, for example, have introduced activities which teach their students about careers in mathematics and mathematics related careers (such as accounting and actuarial science) as well as teaching them how mathematics is used in and related to other occupations (such as carpentry). Thus a subject such as mathematics becomes not only an academic subject, it also becomes a subject for career exploration. Junior high teachers have also effectively used field trips and outside speakers as means toward career exploration and orientation.

QUESTION 27

To what extent have the project schools prepared for the implementing of career development activities as an ongoing facet of the curriculum at the conclusion of the project?

The K-8 portion of the project is fairly complete at most of the pilot schools. This is particularly true at the K-6 level where career education concepts have been internalized to the extent that there is little doubt that career education will be maintained after the March 1 date. Most of the K-6 project teachers have become ego-involved with career education activities to the extent that they will at least maintain their present level of involvement. The schools are also providing more and more local support for career education in terms of materials, in-service training for old and new teachers, released time to work on career education, and positive reinforcement for participation. In Humboldt, for example, the Board and administration have established a policy that urges teachers to include career education in their plans for the year and requires teachers to show evidence at their annual evaluation sessions with the principals that they are working career education into all phases of the curriculum. Maintenance of the career education programs will depend to some extent on the leadership of the principals and other staff members who provide instructional leadership. In Springville Elementary School, for example, the commitment and leadership of the principal is so strong that at least

the present level of activity will be maintained. That kind of commitment and leadership is not evident in all the schools. Increased availability of commercial instructional materials which include career education will also help maintain the career education programs.

Expansion of programs at the K-6 level is another problem. After the ICEP ends there will continue to be some expansion involving nonproject teachers in the project schools. However, it is questionable whether project teachers will expand their present level of involvement. Many feel that they are doing enough currently and that they should now begin consolidating their efforts, eliminating the activities they have tried but which are not very successful and concentrating on the activities they have found to be successful.

At the 7-8 level the commitment on the part of teachers and administrators is not as strong as at the K-6 level. When the funded project ends many grade 7 and 8 teachers will continue with career education activities because they believe in the benefits for their students. Others, however, will go back to becoming subject oriented as they were before ICEP. The attitude of the junior high principals will have an important effect on the continuation of career education. Where the principal is committed to career education and provides leadership and positive reinforcement to teachers for participation, career education will be more likely to

flourish than in cases where the principal is indifferent to career education. Sheldon is an example of a junior high where the commitment of the principal and teachers is so strong that career education will continue at least at the present level after the ICEP ends.

It does not appear at this time that career education will be maintained in grades 9-12 at the same level as in grades K-8 after the ICEP ends. Teachers at the 9-12 level tend to be much more independent and subject matter oriented than at the K-8 level. Their continued participation in career education will be less affected by support or non-support of the administration. At the present time it appears that the majority of the 9-12 teachers, especially the teachers of academic subjects, will do little in career education after the ICEP ends. This will be largely affected by external factors beyond the control of the ICEP. For example, the chances of a math teacher including career education in math courses will be greatly increased if math texts include career education materials, if math professional organizations take a stand in favor of career education, if colleges include career education as part of the training of math teachers, and if the DPI math consultant provides leadership in the area of career education for math teachers. Without those influences it is likely that career education in grades 9-12 will decline in the project schools

except in cases where teachers are particularly committed or the administration brings pressure for career education as in the case of Humboldt. Some activities begun as part of career education will continue, such as the program in Sheldon which provides an opportunity for on-site work experiences by high school students.

Most schools are still planning CEP implementations and no clear pattern has emerged as yet. Two directions seem likely. First, the various disciplines (departments) will identify activities, concepts, clusters, and objectives that seem most appropriate to the subject taught in a department and the teachers will be responsible to integrate CEP into their own departmental curriculum. The second pattern would be the mini-course or unit format that would allow for elective exploratory and preparatory activities. These two thrusts may be combined in some schools.

The methods of implementing Career Education into the various districts were similar but not identical. To promote uniformity, a general plan was written to guide prospective CEP centers in implementing Career Education into their school.

Plan for Implementation

A recommended period of time for implementing Career Education in your school should be one calendar year.

I. Appoint a faculty project coordinator for the school.

The person selected should be a dynamic leader and be sincerely interested in Career Education. He must have the time and energy to devote to Career Education. This person may be an administrator or a teacher and should be appointed as soon as possible.

Five in-service sessions, three more closely grouped to the beginning of the school year for the purpose of better supervision and guidance, and the last two designated as times to correlate and evaluate the progress.

A. Collecting all possible material on Career Education.

He should contact the D.P.I. for the purpose of obtaining all materials of a general and specific nature. This should include:

1. Iowa Model
2. All materials from the nine career pilot schools
3. Microfilm material from area libraries

He should begin to assimilate commercial materials from educational publishers pertaining to specific subject areas. Caution: Discretion should be used in immediate purchases because with the advent of Career Education, many publishers have rushed into publication of materials that are of questionable value.

Teachers should have an opportunity to examine many different materials in their subject area to determine which are the best.

B. Organize material

All materials should be organized into the categories defined in the outline to be organized into special subject areas at all levels. Discretion should be left to the coordinator to decide at which level the materials will be used.

C. Organization of orientation workshop

The coordinator has the responsibility of organizing this workshop for time allotments, material to be covered and contacting resource people.

II. Orientation workshop

- A. It is necessary to have all of the faculty involved in order to have all grade levels and subject areas included for a total Career Education program.
 - 1. The general definitions and explanations of Career Education should be made by the coordinator and resource person and hand out materials of selected speeches by other authorities.
 - 2-3. Clarification of all objectives should be the first order of business.

III. Small group work (five areas)

- A. Appoint team leaders who will function as small group coordinators who will work and be a part of the master committee. The master committee will be composed of six people:
 - 1. The five group team leaders
 - 2. The project coordinator

The master committee will be used for giving direction and guidance to the five group areas.

- B-C. It is necessary for all teachers to discuss and review all definitions, explanations and objectives of Career Education for their understanding and clarification. This is a most important step in the implementation of Career Education into any school program. All teachers should determine in their own minds how they will use their resources and materials for inclusion into the school curriculum.

IV. Individual Work

- A. The inventory of local resources means all the people-places-things that will be used in planning their Career Education activities.

- B. There should be a prescribed form for recording Career Education activities.

V. Large Group

There is a need for all subject areas to become aware of activities being used at all levels. Specifically for teachers of higher grade levels to have the opportunity to expand and reinforce activities used at the elementary level.

Question 13

To what extent have activities been incorporated into secondary school curricula of project schools for the development of self concepts as a result of ICEP involvement?

Almost no activities have been incorporated into secondary school curricula of project schools for the development of self concepts as a result of ICEP involvement. There is a general attitude that that is the responsibility of the elementary rather than secondary schools. At the secondary level efforts have gone into activities in the areas of knowledge of and orientation to careers rather than self concepts.

Question 21

What procedures initiated by parents would be most effective in promoting better school-community relations?

These schools used by the group... that... was the case of... effective in... school-community relations... affected... relations with...

COMMUNITY AND SCHOOL RELATIONS

The committee... the committee...

A number of other... reviewing... of... activities... very effective in... relations...

- (1) ...
- (2) ...
- (3) ...

In view of the activities listed above the principal... people... all in... activities... relations...

Question 22

What procedures initiated by project schools were most effective in enhancing project school/community relationships?

Most schools used only one procedure that had as its purpose the improvement of school/community relations - that was the use of advisory councils. These councils were quite effective in providing input to the schools and in improving school/community relations. The councils were most effective in improving relations with the individuals on the committee but were also effective in improving relations with the communities in general, especially the smaller communities.

A number of other activities were very effective in improving school/community relations although improvement of those relations was not one of the objectives of those activities. Activities with other objectives which were very effective in improving school/community relations included:

- (1) field trips.
- (2) use of community speakers in the classroom.
- (3) work-experience programs.

In each of the activities listed above the primary purpose was for students to learn about careers, not to improve school/community relations. However, each of the activities did very effectively improve school/community relations as a result of the contacts between community persons

and the schools, teachers, and students.

Another procedure used which, as a side effect, improved school/community relations was the use of questionnaires distributed by project schools to members of the community. This improved relations through giving citizens a feeling that the schools were interested in them and their opinions.

Finally, a few of the project schools effectively improved school/community relations through using mass media for project publicity. This was effective when it was done but it was not done to a large extent in most of the project schools.

Overall, the ICEP has probably done more to establish communication between the schools and the community and to improve school/community relations than any other new educational project in recent years.

QUESTION 23

What procedures were most effective in dissemination of results and recommendations from the project to other schools?

At this time, the diffusion and dissemination of materials referring to the project has been on somewhat a limited scale. It is notable, however, to observe that the requests for information and materials are occurring at a significantly high rate. The decision was made early on in project operation that, as the project matured, the documents produced were to become public record and information available to a variety of users. Strategies were developed to aid and assist in the production and dissemination of the documents. This strategy developed in the following manner:

- (1) The ICEP would develop materials from workshops and curriculum development efforts;
- (2) The ICEP would disseminate materials among the nine project schools;
- (3) A review committee would edit and screen materials to delete duplication;
- (4) A technical writer would develop publications for dissemination state-wide;
- (5) The Department of Public Instruction would print and disseminate whatever is deemed appropriate for state-wide use.

Much of this procedure has been successfully undertaken and many documents are currently available at the present time. Many of the documents available are listed here. There have been additional publications completed or near completion at the time of this writing that may not appear here:

Project Publications

1. Career Development Model and Explanation with objectives and glossary terms

2. Selected Occupations by Clusters for Use in Elementary Schools
3. Self-awareness Classroom Activities
4. Implementing Career Education in the School Curriculum
5. Information Centers in Career Education
6. Implementing Career Education Objectives in the Classroom Accommodation Phase
7. Implementing Career Education Objectives in the Classroom Exploration
8. Implementing Career Education Objectives in the Classroom Preparation and Exploration
9. Career Education and the World of Work
10. The Self-Concept and Career Education
11. Selected Occupations by Subject Matter and Occupational Clusters for Use in Secondary Schools

Initially, local response to these publications has been less than enthusiastic. The majority of the local personnel feel that the value in the publications lies in the information provided to those districts who are about to embark upon a Career Education project - not those who are in the midst of program operation.

Information dissemination has gone well beyond the printed document, however, with the impact of on-site visits, conferences and workshops being most often cited as aids to information exchange and interchange.

Many of the districts, i.e. Humboldt and Carroll, have developed "Career Education Teams" that have traveled to other ICEP districts for purposes of observation and sharing

of ideas. Other Career Education staff members have visited non-ICEP districts to observe their efforts in the Career Education arena.

Certainly the largest bonus has been the participation of over 300 teachers in conferences and workshops supported by the D.P.I. The information exchange at these meetings goes well beyond the published "agenda" and into transfer of ideas for classroom application of Career Education concepts, a remarkable exchange indeed.

It appears that, as seems to be the rule with projects of this sort, that information dissemination will continue long after the essential completion of the program. In that sense, perhaps, this evaluation is somewhat premature and must be considered incomplete at this point in time.

QUESTION 21

To what extent has involvement in the project encouraged utilization of community resources?

There has been an increased use of community resources during the past year to implement the career education project goals. Most of the pilot schools have made considerable use of community resources for career education. The resources were felt to have improved through a greater involvement of students in local industries and an extended use of resource people within the school for purposes of describing the relationship between their careers and the way they lead their lives. The community resources are readily available in the form of versatile and willing people, although there seems to be more career information going from the schools to the community than vice-versa. Also, there are many opportunities for students and community members to relate to each other in terms of careers that are being pursued by members of the community and the challenges and opportunities that are available for students after they leave the educational setting.

Communities have responded well as evidenced by steering and advisory committees of lay people, who were instrumental in facilitating local businesses, service clubs, industry, agencies, and labor organizations to solicit their resources

for the development of the career education project.

There were several features that were utilized by the majority of the CEP schools. They were field trips, films, and speakers. One example of a resource speaker is the "Parent of the Week" project in Carroll. Here a teacher asks each child in the classroom to invite a parent or proxy for a classroom visit and interview. Interviews are taped and made available to other classes and saved for the following school year. Other teachers vary this format by visiting parents on the job or asking parents to serve as contacts to establish such units.

Some projects were unique in being able to utilize features particularly relevant to CEP. The location of an Area Community College near one program, the growth of a varied agricultural, industrial and service economy in another community, several CEP programs in or near metropolitan areas, and the close association of another CEP program with Project SPACE, a program consisting of eight schools from Pottawattamie Mills, and Fremont and Page counties who cooperate with Iowa Western Community College in a vocational training program. The curriculum includes such projects as building a house, running a filling station, caring for children, office management, merchandising and retailing, landscaping, and horticulture.

Another outgrowth of the ICEP has been the establishment

or updating of community resource files by the counseling staffs. Shenandoah, Springville, Clarke, Davenport, Sheldon, Humboldt, and Marshalltown all have either revised or instituted resource files for use by their teachers and students. A positive side effect of the resource files is the interaction between the school and the community, not only in the development of the file, but in the use of the community's resources in the form of field trips, speakers, etc. Most of the counselors in the schools that have the resource files have been pleased with the response of civic groups and business concerns in helping to establish the resource files. At Clarke, for example, the local Rotary Club helped the school counselor.

Increased utilization of community resources in the classroom and student participation in the community together with the increased awareness of the community about efforts of school people to bring the community into the total educational program has served to improve school-community relations.

Many of the school/community activities were being carried out to some extent prior to the ICEP. However, as a direct result of ICEP:

- (1) the quantity of school/community activities has increased greatly.
- (2) school/community activities have become much better organized. Prior to ICEP most school/community activities, with the exception of work-study programs, were operated on an incidental, haphazard basis with little overall planning and coordination.

Now, these activities are much better organized and coordinated. As a result of ICEP, for example, most project schools have now established files of resource persons and resources for field trips.

- (3) school/community activities have become much more career oriented than they were in the past. This is especially true of field trips. Prior to ICEP field trips had little career orientation. Career awareness and exploration have now become objectives of field trips. Through field trips students are learning about careers by observing and talking with workers in various roles. For example, in the past, classes have visited banks to learn about banking. Now when they visit banks they learn both about banking and careers in banking. The same is true of community speakers invited to schools. For example, prior to ICEP an insurance salesman would have come to the school and the students would have learned about insurance. Now they also learn about careers in insurance.

Question 24

How effective were the procedures and processes used in development of publications?

Project publications fall into two categories: (1) those developed by the local project participants and reproduced and distributed by the project staff and (2) those developed and reproduced and disseminated by the D.P.I.

The process of reproducing and distributing materials developed by the local personnel did not have very good results. Local personnel were asked to write up the activities they developed and send them to the ICEP staff. There they were reproduced and distributed to all the project schools. The local school personnel produced lots of materials but in many cases the activities were not documented completely enough to be useable. The reproduction of these materials was a very large task and the reproduction and distribution was delayed considerably. When they reached the local schools they were not used very much. In some cases they were placed in the local project director's office and were not readily available to teachers. In other cases the teachers felt that the effort in searching through the files for appropriate materials was just not worth it.

Some excellent career education booklets, which are especially useful to nonproject schools, were developed by

the project staff and printed and distributed by the D.P.I. However, the production of those booklets was generally behind schedule and they were printed in such small quantity that the supply was soon exhausted. Development of those booklets took a lot of project staff time. Many local personnel felt that that time could have been better spent in visiting and helping them.

QUESTION 26

Provide data as to the effectiveness of strategies developed in the project to achieve transportability of the model and its component parts.

There are three aspects to transportability: (1) assuring that the model and its parts are documented in such a manner that they can be transported, (2) providing the means of transporting the model and its parts, and (3) making it generally known that material is available.

The first aspect has been fairly well accomplished. The model, several statewide objectives, and the local objectives have been well documented. In addition, and especially as a result of the summer 1973 workshops, the local career education activities have been well documented.

The means for transporting career education include the availability of printed information on the model and its parts from the project staff, the DPI, the participating schools, and the area libraries (microfiche of activities and materials). In addition, area conferences have been held to explain career education, the participating schools welcome visitors and have had many of them, and many local staff members have become missionaries for career education, distributing both verbal and written information about career education.

Perhaps it is too early for the third aspect, making it generally known that materials are available, to be accomplished

but nonparticipating schools are not presently well informed about the career education materials available and the means of obtaining them.

Districts which have done a particularly good job of transporting their career education concepts and materials include Shenandoah and Humboldt. Shenandoah has prepared a tape-slide presentation on career education which has been shown to many educators in that area of the state. Humboldt set aside three half days during November and December for visits by staff of other districts interested in career education.

Another factor that aids transportability is that the nine project school districts are evenly distributed across the state and represent large, suburban, and small districts.

The three aspects of transportability are especially important at the K-8 level. The documentation of activities based on the established state-wide objectives is most evident at the elementary level. The 1973 summer workshop was primarily responsible for this being accomplished. Many teachers have made use not only of their materials, but also materials produced by other teachers in other project schools. Through this exchange of ideas elementary staff have tended to be the best salespeople for career education to other districts throughout the state.

At the high school level, curriculum transportability is somewhat of a different process than at the elementary

level. High school teachers tend to look for leadership to their subject area peers rather than to administrators. Little is being done to transport career education through subject matter professional groups or subject area curriculum leaders.

In discussing transportability, it is difficult to separate activities of the DPI and the Iowa Legislature, thus activities of all three of those groups which effect transportability will be discussed.

Early in the project, the ICEP staff, working with its advisory committee, developed a model for career education. Materials describing this model were printed and widely distributed to educators both inside and outside of Iowa.

Later, a philosophical basis and rationale for career education was developed. That is now in the process of being distributed.

In addition to the above, the ICEP staff has developed a series of publications which describe career education concepts and implementation procedures. Those publications are being distributed by the Iowa DPI.

Each of the nine local school districts involved in the project has developed a wealth of career education activities and materials. These materials have been made available in printed form to the other schools in the project. In addition, the materials have been put on microfiche and placed in the area libraries where they are available to anyone who wishes to study them.

Area workshops were conducted by each of the nine districts in the project. Each of the workshops was attended by representatives of other schools in the area. The purpose of the workshops was to describe career education concepts and programs to the other districts.

Each of the nine participating districts developed and documented their own plans for implementation of career education. Those plans are available to other districts.

Staff of the participating districts, the project, and the DPI have consulted with districts who are moving into career education. Other districts have also visited the participating schools to observe career education implementation first hand.

The DPI is currently holding a series of in-service meetings on career education for its staff. One purpose of those meetings is to prepare the DPI staff to assist with the implementation of the Iowa career education model in Iowa school districts.

The project staff has participated in numerous programs both inside and outside of Iowa in which they have described the Iowa model to educators.

This past spring the Iowa Legislature made career education mandatory in Iowa schools. Although the legislature did not specifically require implementation of the ICEP model, it is likely that most Iowa districts will adopt that model, in whole or in part.

Iowa State University has conducted a number of workshops on the ICEP model for local schools. In addition, Iowa State has established a committee to develop guidelines for the incorporation of career education in preservice and in-service teacher education programs.

of the

The first part of the report is devoted to a description of the current state of the field of guidance and counseling. It discusses the historical development of the field, the current state of the field, and the future of the field.

The second part of the report is devoted to a description of the current state of the field of guidance and counseling. It discusses the current state of the field, the current state of the field, and the current state of the field.

The third part of the report is devoted to a description of the current state of the field of guidance and counseling. It discusses the current state of the field, the current state of the field, and the current state of the field.

The fourth part of the report is devoted to a description of the current state of the field of guidance and counseling. It discusses the current state of the field, the current state of the field, and the current state of the field.

GUIDANCE AND COUNSELING

The fifth part of the report is devoted to a description of the current state of the field of guidance and counseling. It discusses the current state of the field, the current state of the field, and the current state of the field.

The sixth part of the report is devoted to a description of the current state of the field of guidance and counseling. It discusses the current state of the field, the current state of the field, and the current state of the field.

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The twelfth part of the report is devoted to a description of the current state of the field of guidance and counseling. It discusses the current state of the field, the current state of the field, and the current state of the field.

Question 20

To what extent do modifications of guidance and counseling functions in project schools provide for implementation of career development concepts including placement of students in further education or in employment?

ICEP has played a significant role in modification of the guidance and counseling sectors of the ICEP schools. Although it would be unfair to categorize the majority of guidance programs as something other than traditional, the increased credibility and legitimatization of career awareness concepts due to ICEP involvement has, at least, altered the position of the guidance area within the total scope of ICEP school operations. The role played by the guidance and counseling sector in the schools of all nine ICEP districts has undergone some degree of modification. Despite the fact that many of the counselors were involved in career education and career awareness counseling prior to ICEP inception, all agree that in one form or another their relationship with both students and faculty has been affected due to their school's participation in the ICEP.

The most commonly indicated pattern of growth and development is that picture of expansion of services in which the project has served as a legitimizing factor for those counselors who have seen the need for career education counseling in the past. This is especially true in those high schools traditionally sending fifty to sixty percent of

their high school graduates on to college. Because of this change in the image and role of the counselor, they are better able to meet the needs of not only the college bound student, but also those students whose interests and abilities lie outside the realm of continuing formal education.

Beyond the obvious implications for improved services to students, a somewhat unexpected benefit is that of the alteration in the counselor's relationship with his/her colleagues. For example, in some of the project schools the counseling staff has been increasingly used by the teachers as resource persons for career education. Humboldt Junior High has a cooperative project with the reading teacher, and at Lenahan Junior High in Marshalltown, the counselor meets students seven times per year in large group situations. For the most part, however, the counselors at this stage are not being asked to take a direct part in specific activities within the classroom.

Beyond the development in inter and intrapersonal relationships there appears to have been in information availability and transmission, the means to this information transmission is the creation of the career information centers and the way in which they are utilized. Humboldt, Sheldon, South Winneshiek, Clarke, and Shenandoah have all established these centers under the jurisdiction of the guidance counselors. The career information centers fulfill

several functions for students, teaching faculty, and counselors. They serve as a focal point for dissemination of information on career opportunities for students. Since the centers are located within the counseling complex, questions and interests can be dealt with more effectively.

This process both increases the visibility of the counselor to the student, and at the same time, provides the perceptive counselor with an opportunity to become more familiar with the needs and interests of the student body. In some of the ICEP schools, teachers have even used the information center as an instructional tool. At Clarke Junior-Senior High School most of the teachers have students working on projects that require use of the center as well as assistance by the counselor to complete the project.

With regard to utilization of community resources for exploration and potential employment; another outgrowth of the ICEP has been the establishment or updating of community resource files by the counseling staffs. Shenandoah, Springville, Clarke, Davenport, Sheldon, Humboldt, and Marshalltown all have either revised or instituted resource files for use by their teachers and students. A positive side effect of the resource files is the interaction between the school and the community, not only in the development of the file, but in the use of the community's resources in the form of field trips, speakers, etc.

Most of the counselors in the schools that have the resource files have been pleased with the response of civic groups and business concerns in helping to establish the resource files. At Clarke, for example, the local Rotary Club helped the school counselor.

Three of the nine districts have some form of career exploration day or a college and career night. The counselors at Marshalltown High School have established student self-scheduled career exploration days. Through the cooperation of the Lennox Corporation and the local Jaycee chapter, the career days have been reported to be a big success. The Carroll school district conducts an "AWOL" (A Week of Learning) program.

As far as actual placement is concerned, however, counselors are still doing little in placement of graduates in employment.

The above comments are concerned directly with the work of counselors as it effects the functions of implementation of career development concepts and the placement of students. Those functions have also been modified and affected in other ways. Through the career education project students are developing an increased sense of self awareness and are becoming more knowledgeable about careers.

Also, because of the career education project teachers are playing a larger role in career counseling and guidance.

They have become increasingly responsible for developing career self concepts, awareness of careers, and providing specific information about careers. Because of the project a student considering a career is more likely to talk to a teacher whose subject area is related to that career.

Question 7

To what extent have the summer 1973 workshop materials been revised or updated?

Question 8

To what extent have summer 1973 workshop materials been incorporated into the curriculum of project schools?

THE 1973 SUMMER WORKSHOPS

In 1973 a "Proposal for Exemplary Programs of Project in Career Education" was funded for the purpose of planning and conducting local workshops to complete the task of planning and implementation of the ICEP that had already begun. This summer project was funded because of a need to provide some time for teachers to develop activities that would be integrated into the total curriculum. Without the opportunity to write these activities the ICEP would be hard pressed to implement the concept into the nine districts' curriculum as originally planned.

Each of the nine project schools conducted a local project. Over six hundred school personnel were involved. A sum in excess of \$226,000 was provided by the DPI to fund these local efforts. The following is a summary of the observations made by the Third Party Evaluators in a report of the 1973 Summer workshop submitted on September 30, 1973.

SUMMARY AND OBSERVATIONS

1. The workshops provided time, money, and resources to aid in the development of activities that will aid in the accomplishment of the project objectives. As one director reported: this was an opportunity for the staff to "put in order" the activities they had started this past year.
2. The workshops provided opportunity for the local staffs to share experiences and ideas regarding implementation of career education concepts.
3. The workshops provided for outside resource people (consultants) and in one instance (Marshalltown) an opportunity for involvement in community activities.
4. The workshops provided opportunity for the establishment of priorities for the curriculum in each school district.
5. The workshops provided opportunity for development of worthwhile materials for use in the local context in which they were developed.
6. The workshops had an impact on the whole curriculum: staff was provided an opportunity to review current objectives and course and grade content of their existing programs, and to relate career education objectives to the curriculum in a systematic way.
7. The workshops created an awareness in local staff members that they must get the task of local evaluation under way.
8. The workshops involved over 600 teachers of local districts.
9. The workshops provided opportunities which helped improve the morale of local staff members.

In general, the 1973 workshops were reported as being very successful. The report of the third-party evaluators stated--(September 30, 1973):

"Of the many factors contributing to the success of the ICEP, the summer workshops, held in the local districts in 1973, have been observed to be one of the most positive activities of the ICEP project to date. As a result of these workshops, a large number of learning activities have been developed and are in the process of being tried out and refined in project schools."

Most of the materials developed during the 1973 workshops were revised and updated by the teachers who developed the materials. In most cases they were tried out and revisions and updating were made. Many teachers would have liked to have done more but simply did not have time. In some districts specific time was set aside to work on revision of materials. In South Winneshiek, for example, some time was allocated each week for refinement of career education materials.

One problem with the revision of materials was that some teachers were uncertain about the quality of the materials they developed. They understood that they were to receive guidelines for evaluation of materials from the project staff but those never came. One school, Davenport West High School, developed an internal evaluation form to be used as the basis for revising and weeding out materials they developed. Davenport also developed an index of materials they developed locally. This index is revised as materials are added or

deleted and is used as a disseminating device within schools of that district.

The materials developed have been well integrated into the curriculum of the project schools by the teachers who developed the materials. There are very few cases where a teacher developed materials, then did not use those materials. However, there was not a lot of sharing of materials among teachers. Teachers used primarily the materials they had developed themselves rather than materials developed by others.

A key to the use and revision of career education materials was the fact that they were developed by the teachers themselves. Thus the teachers became ego involved with the materials, used them, and revised them as appropriate.

Question 2

What kinds of data were used in summer 1974 workshops to identify needs as a basis for planning?

Question 5

To what extent were the plans developed in 1974 workshops implemented?

In 1974 the State Department of Public Instruction again saw the need to fund a series of local summer workshops in the ICEP districts. The published guidelines - see appendix A - stated the purpose of these workshops. The following is a restatement of this purpose:

I. Purpose

Contact from various persons directly involved with the Iowa Career Education Project has indicated the need and value to provide for concerted interdisciplinary planning and further development of project school activities directly related to the implementation of career education in their respective schools. Efforts to describe the purposes of the staff involvement have resulted in the following goals:

- A. Develop for each project school an interdisciplinary curricular plan for implementing activities that provide career development experiences for secondary age students (grades 7-12).
- B. Develop and initiate implementation of plans for the final year of involvement as an Iowa Career Education project school.

Each project school was requested to develop and submit a workshop proposal, in collaboration with the Iowa Project

Staff, to the Director of Career Education of the DPI.

See appendix B for these...

Each of these proposals was reviewed in cooperation with the Iowa Project staff and a decision was made as to the aptness of design.

These proposals were required not only to identify the staff involved but to identify the proposed objectives and activities for the workshop.

This emphasis on prior planning was extended through a request to provide a planned agenda of activities (inclusive of dates, times, and topics) for the proposed workshop.

Initially the D.P.I. Guidelines (Appendix) called for each submitted proposal to be approved prior to the implementation of the proposed activities (workshop). However, due to staff commitments and prior responsibilities, a few of the schools conducted workshops prior to proposal approval. The D.P.I. was able to maintain a flexible and responsive mode to these schools.

The D.P.I. made \$150 stipends available for each participating staff member to a total of 15 members per district.

This was utilized in payment for an equivalent of 30 hours of professional time for each participating staff member.

This was practically limited through the definition of professional staff as "those individuals who have a major responsibility for implementing career education at the secondary level."

The D.P.I. went as far as to recommend the personnel to participate as administration curriculum area heads, coordinators, and instructors directly involved.

The following workshop activities were suggested by the D.P.I.:

- A. Devise and/or locate methods and materials designed to assist students in understanding and appreciating the career implications of specific subject matter.
- B. Integrate, to the fullest extent possible, the programmatic assumptions of career education in the curriculum of the district. Emphasis should be placed on the instructional activities and teacher-pupil relationships.
- C. Identify and plan for the utilization of career oriented methods and materials in the instructional program, where appropriate, as one means of educational motivation.
- D. Devise and/or locate methods and materials which will assist students in developing and clarifying personal values relating to career development.
- E. Devise and/or locate methods and materials which will assist students in forming appropriate work attitudes and habits.
- F. Submit to the Career Education Division, Iowa Department of Public Instruction, materials describing:
 1. the interdisciplinary curriculum plans for implementing activities that provide career development experience for secondary age students (grades 7-12)
 2. the plans for the final year of involvement as an Iowa Career Education project school.

Little data was used to identify needs as a basis for planning during the summer 1974 workshops. Rather, plans were based on philosophical considerations, materials made available by the project staff, and the judgment of the local personnel. Some available literature was searched and used, but this consisted mostly of philosophical considerations and ideas rather than data as such. In the process of planning for the utilization of and identification of community resources, however, some data on those resources was gathered and used in planning. No district really used data to access and plan to meet the career education needs of the students.

The plans developed during the summer 1974 workshops were pretty well implemented in the project schools. The plans that were most fully implemented were those that involved the use of community resources and the establishment of career information centers. Career education materials were also developed during the workshops and plans made to incorporate those materials in the curriculum. Those plans were fairly well carried out by the teachers who developed the materials.

In general the plans developed that could be carried out by the staff involved in the workshops were pretty well carried out. However, plans that involved other staff were not well carried out due to the difficulty in getting other staff involved in career education.

1. Introduction

The purpose of this study is to evaluate the effectiveness of the proposed system in various scenarios. The results are presented in the following sections.

The study is organized as follows. Section 2 describes the system architecture and the experimental setup. Section 3 presents the evaluation methodology and the results. Section 4 discusses the conclusions and future work.

EVALUATION

The evaluation is conducted using a set of test cases. The results are compared against the baseline system. The proposed system shows improved performance in terms of accuracy and efficiency. The results are summarized in Table 1.

Question 19

What changes have ICEP schools made in their approach to evaluation and reporting of student performance due to involvement in the project?

With a few isolated exceptions, ICEP schools have made little observable change in their approach to evaluation and reporting of student performance due to involvement in the project. With the project emphasis on self awareness and a more "humanistic" approach it would be reasonable to assume that this would be reflected in evaluation and reporting of student performance, with less emphasis on reporting academic achievement compared with the achievement of other students. There are a few isolated instances where teachers have moved in that direction. Workshops emphasized evaluation based on career education objectives. Little of that was incorporated in actual practice by teachers. In general there is no evidence that the project has had any affect on the approach of most teachers and schools toward the evaluation and reporting of student performance.

QUESTION 16

What changes have occurred in procedures for evaluation of programs or activities in the project schools as a result of ICEP involvement?

The staff member who has been involved in ICEP has a heightened awareness of the necessity for and the tools of program evaluation.

Shortcomings in the ICEP evaluation effort have pointed the way toward pre-operational consideration of evaluation as being critical to embarking upon any new program. This was pointedly brought home to local staff through ICEP's failure to include pre-test measures in their evaluation efforts.

The search for available tools has increased the staff awareness of instrumentation and how to discover their availability and appropriateness.

The effect of evaluation measures on the student has allowed the staff member to become more sensitive to the effects that evaluative measures have upon those who are being evaluated.

It is often noted that we learn through our mistakes. This is a further instance of that occurring. Project schools have been presented with a situation in which the lack of adequate procedures and methods resulted in a less than complete project. It is unlikely that they will allow this to occur again if given any facility to prevent its occurrence.

tests were the standardized instruments found to be of value in this instance.

Finally, three schools were selected for administration of a criterion-reference test of the objectives listed for the first two phases of the ICEP model. The materials indicated for each objective are rated by at least two persons along the following dimensions:

1. Is the objective clearly stated by the teacher and compatible with the Career Education objective?
2. Is the performance objective clearly stated and compatible with the instructional objective?
3. Is the criteria clearly defined?
4. Are the activities clearly stated and compatible with the performance objective?
5. Does the evaluation instrument measure the stated performance objective?
6. Did the teacher follow through on teaching the objective as identified?

Secondary: Although the secondary evaluation procedures have not been implemented at this point, the planning is complete and the structure is clear:

1. A paper-and-pencil test encompassing the objective stated for the Exploration and Preparation phases of ICEP will be administered in much the same way as this was undertaken at the elementary level.
2. A questionnaire will be administered to a sample of teachers, counselors, and administrators in all project schools which centers on changes in activities and perceptions during ICEP implementation in each building.

3. A sample of lay community members will be asked to respond to a questionnaire dealing with local effects of ICEP.

As will be reported in a review of evaluation outcomes, there has been a lingering and consistent level of confusion with regard to purposes, methods, and expectations of evaluation both on a short-term and long-term basis. This may account for the somewhat restrictive and ineffective K-8 evaluation as well as the relatively late-coming Secondary effort.

QUESTION 17

What type of evaluation and instruments were used by teachers, administrators, and students for evaluation of project attainments?

The evaluation efforts have been distinct for both the elementary and secondary levels:

Elementary: Several evaluation strategies have been utilized in combination or separately at the elementary level.

The single most common element of the K-6 evaluation process was the pencil-and-paper objective exam with its basis in the project objectives.

Several hundred items were developed through the cooperative efforts of teachers and evaluation consultants to serve both the Accommodation and Awareness phases of the ICEP model. A pilot test and item analysis procedure enabled the staff to select 80 of these items for application in grades 4-6 and 40 items for use in grades 2 and 3. Administration was then undertaken by education majors who had no contact with the ICEP project. At this time, the results are undergoing further analysis.

To accompany these self-developed instruments, two standardized commercially available tests were utilized in grades 2-6. The Coopersmith and Thomas Self-Concept

In response to the question "What progress has been made in local evaluation efforts?" the January 1975 Third Party report indicated:

Response to this effort in any form (questionnaire, interview, etc.) was uniformly negative and often hostile.

Concerns centered not only about the instrumentation and its lack of objectivity but beyond toward its effects on students and teachers as well.

Clearly this area is in need of greater developmental efforts. The image of evaluation within ICEP is poor and the environment in which it will be conducted is hostile but it remains necessary.

Largely, evaluation procedures, while finding a sympathetic ear to the difficulty of an evaluation of this type, were consistently viewed as inappropriate and inadequate. It seems uniform throughout the concerned districts that there is a feeling that not much is being done in the evaluative sector. Perhaps the relative "trend" of evaluation and related jargon in use in today's educational circles has alerted district staff members to a false set of expectations. Perhaps the evaluation methods are simply inadequate as the respondents indicate. Regardless of cause and effect relationships, the evaluation component is unsatisfactory at this point and does merit increased attention.

Evaluation procedures have not met the needs or expectations of ICEP participants. It seems relatively clear at this final stage of ICEP implementation that evaluation of a subjective nature has been present in the thoughts

of local school personnel and that this subjective evaluation is reasonably positive with regard to the goals of the project. Unfortunately, the inability of ICEP to deliver an effective means for the objective evaluation and support of these subjective observations results in frustrations and displeasure for all concerned.

QUESTION 18

How effective were the evaluation procedures and instruments used by the participants?

Evaluation procedures and instruments utilized by participants were the "weakest link" in the ICEP structure. In July of 1973 a Third Party evaluation report indicated that:

"There is no evidence that evaluation plans have been developed at any ICEP site. In some schools teachers are aware that they are to be responsible for evaluation, but none have described methods that are anything but broad and subjective."

and

"Although many teachers express concern over the area of measuring outcomes, few are involved in such measurement. The effort is so far confined to subjective accounts of change."

The January 1974 report indicated that:

"Very little local evaluation of career education programs is taking place. Many local staff members are not aware of either their responsibility for evaluation or how to go about evaluation."

The negative theme with regard to evaluation was a consistently recurring notion in Third Party reports. The June 1974 report placed evaluation efforts under the general rubric of "Inhibiting Factors" and stated that:

"teachers in the project schools are confused and unhappy with the local (internal) evaluation effort. This is true in all of the project districts. The biggest complaint seems to be the "unsureness of role" on the part of the local teachers as to their responsibility in this effort."

This "learning from mistakes" process is not lacking in value. It has resulted in three readily seen benefits.

- A) Increased thought as to value of adequate evaluation in its absence.
- B) Seeking knowledge of instruments and techniques available.
- C) Increased planning for future evaluation efforts.

The changes have then occurred in the form of increased knowledge levels, awareness of, and planning for evaluation efforts as they will be necessary in the future - a benefit to all of those students to come.

However, as far as this project is concerned, ICEP involvement has not resulted in changes in procedures for evaluation of programs or activities.

Publications

The first of these publications is the 'Handbook of Educational Research'...

The second of these publications is the 'Handbook of Educational Research'...

PUBLICATIONS

The first of these publications is the 'Handbook of Educational Research'...

The second of these publications is the 'Handbook of Educational Research'...

General Publication Information

At the time of this writing, certain of the planned publications were in various stages of completion.

Early on in ICEP progress, the decision was made to approach the publication problem through the production of 1000 copies of each. It is clear at this point, that this plan was and is inadequate, as those 1000 copies have been distributed. To answer this problem, the Publication Division of the DPI is involved in MICRO FICHE reproduction of these documents as well as "hard copy" commercial publication. Beyond this, there are plans for the submitting of these publications to the ERIC system.

Certain monographs are being produced by local subject-matter experts as well as publications directed to specific issues raised through local needs assessment i.e., "occupational clusters for use in Secondary Schools", "The Self-Concept and Career Education", and "The World of Work and Career Education". These publications, again, are directly related to what was observed in the ICEP field setting.

Prior to this summer effort, several other publications were made available i.e., "Information Centers in Career Education", "Career Decision Models and Evaluation", "Selected Occupations by Cluster for use in Elementary Schools" and "Self-Awareness - Classroom Activities".

In the completion phase are articles such as "Career Education Objectives in the Classroom - Awareness Phase" and a film publication for the "Accommodation" phase.

The schools have engaged and utilized these publications extensively. A common suggestion is that they are especially valuable to new programs and a common complaint is that there are too few copies available. The following responses will clarify these issues.

QUESTION 25

To what extent was input for teachers used in publications?

Input from teachers was not employed to a great degree. In fact, teachers had very little input in the publication. They did make several comments about several problems they encountered concerning the publications. Some of the problems were:

1. The publications were not reaching the teachers en mass. 60% of the teachers knew nothing of the publications. 90% of the teachers indicated no involvement with publications.
2. Teachers felt the materials were better for a newly developed program and not an ongoing program.
3. Some teachers were not aware of the presence of such materials.
4. The materials were more theoretical than practically functional.
5. Many teachers said there was an extended lapse between the time they submit activities and the return of the duplicated activities from the DPI.
6. The several changes in the reporting format of the publication were confusing.
7. A lack of an adequate number of materials.
8. Teachers not taking the time to write up materials for distribution.

In view of the problems the teachers did seem optimistic about making sure ICEP information was flowing both ways. They seemed to feel there would be a greater sense of participation knowing their voices were being heard and their

ideas being considered by the DPI. And lastly, two worthwhile suggestions were given by the teachers.

The two suggestions the teachers seemed to have a consensus regarding how to increase the input of teachers in the publications were:

1. Appointment of a local coordinator who would save teachers by editing their activities to reduce repetition of similiar activities coming from different CEP schools, and to make sure ICEP material reaches every teacher.
2. Publishing a regular CE newsletter with contributions from teachers of the project schools to keep every teacher informed on a regular basis. This newsletter would be realistic and practical in aiding CE pesonnel of current activities. It would also be documented by the DPI and available to all teachers on microfiche in area libraries.

It cannot be known what the effect of these suggestions will be within the "winding down" stages of the project, but certain elements could well be offered for adoption within ongoing district efforts.

SUMMARY

This is a general evaluation summary of the entire Iowa Career Education Project rather than a summary of just this final report.

First of all, even though there were parts of the project that did not go as well as was originally hoped, the project in general was very successful. It accomplished very well what it set out to do. At the beginning of the project a reasonable observer might well have said, "It will never work. It depends too much on voluntary participation of too many schools and local staff members. You will never get them to participate to the extent necessary to make the project successful." However, the local schools and staff members did participate and the project was successful.

Perhaps the key factor in the success of the project was the flexibility of the D.P.I., the project staff and the local schools. Rather than being inflexible and insisting on sticking to the original plans in total, they were flexible and modified plans and procedures as needs arose. For example, when it was apparent that teachers needed time set aside to develop career education materials and to plan for the implementation of those materials in their curricula, summer workshops to provide that time were funded and implemented during the summers of both 1973 and 1974. Also, when it was discovered that the career education model was without a

definite philosophical base, a group of persons were called in to develop a philosophical base.

As far as project strategies were concerned, the strategy of extensively involving teachers from the beginning in the planning stage, and then in the material development stage was very successful. Through being involved in the planning and development of materials the teachers internalized the career education model and concepts and became ego involved with the plans and materials they developed.

The project was more successful at the elementary than at the secondary level. In retrospect, that is to be expected with this type of broad project. Secondary teachers are more subject oriented and independent than are elementary teachers.

Two parts of the project that were problems throughout and were never really successfully solved were local evaluation and publications. On the part of local teachers there was a great deal of confusion concerning evaluation and quite a bit of resistance. Publications always seemed to be late. That was more of a problem of staff time and funds rather than intent.

So, the project is now complete. A career education model and a large quantity of career education methods and materials have been developed and implemented in the project schools. That effort will be continued in those schools. In addition, other schools will, perhaps with some modifications,

utilize the model and many of the materials developed through the project.

DEPARTMENT OF EDUCATION
WORKSHOP GUIDELINES

Workshop... (faded text describing the purpose and goals of the workshop)

APPENDIX A

D.P.I.: Workshop Guidelines

- 1. To facilitate... (faded text)
- 2. Proposals... (faded text)
- 3. All proposals... (faded text)
- 4. Cooperation... (faded text)

IOWA CAREER EDUCATION PROJECT
SUMMER WORKSHOP
GUIDELINES

I. Purpose

Contact from various persons directly involved with the Iowa Career Education Project has indicated the need and value to provide for concerted interdisciplinary planning and further development of project school activities directly related to the implementation of career education in their respective schools. Efforts to describe the purposes of the staff involvement have resulted in the following goals:

- A. Develop for each project school an interdisciplinary curricular plan for implementing activities that provide career development experiences for secondary age students (grades 7-12)
- B. Develop and initiate implementation of plans for the final year of involvement as an Iowa Career Education project school

II. Provisions

- A. To facilitate coordination of summer workshop activities and to assure that such activities are in furtherance of Iowa Project objectives, each project school is requested to develop and submit workshop proposals in collaboration with Iowa Project staff.
- B. Proposals are to be submitted to the Director of Career Education, Iowa Department of Public Instruction, and will be reviewed in cooperation with Iowa Project staff.
- C. All proposals must be submitted and approved prior to implementation of proposed activities.
- D. Compensation for expenditures incurred will be made after proposed activities have been accomplished and staff involvement certified by the superintendent of the respective project school.

- E. Stipends will be made available in the amount of \$150 per professional staff member who contributed toward the purposes and goals of the proposed workshop.
1. Professional staff shall be limited to those individuals who have a major responsibility for implementing career education at the secondary level. (Suggest personnel-- administrator, curriculum area head, coordinator and instructor).
 2. Stipends will be available for no more than 15 professional staff members per project school district.
 3. A commitment is made of an equivalent of 30 hours time of each professional staff member to receive stipend.
- F. Proposal should identify the following:
1. Name of district
 2. Person responsible for proposed activities
 3. Identify in descriptive form the proposed objectives and activities.
 4. Identify the staff to be involved in proposed activities with the name, title or area of responsibility, and address for each person to receive stipend.
 5. Planned agenda of activities (dates, times, and topics)

III. Suggested Workshop Activities

- A. Devise and/or locate methods and materials designed to assist students in understanding and appreciating the career implications of specific subject matter.
- B. Integrate, to the fullest extent possible, the programmatic assumptions of career education in the curriculum of the district. Emphasis should be placed on the instructional activities and teacher-pupil relationships.

- C. Identify and plan for the utilization of career oriented methods and materials in the instructional program, where appropriate, as one means of educational motivation.
- D. Devise and/or locate methods and materials which will assist students in developing and clarifying personal values relating to career development.
- E. Devise and/or locate methods and materials which will assist students in forming appropriate work attitudes and habits.
- F. Submit to the Career Education Division, Iowa Department of Public Instruction, materials describing: (1) the interdisciplinary curriculum plans for implementing activities that provide career development experience for secondary age students (grades 7-12), and (2) the plans for the final year of involvement as an Iowa Career Education project school.

APPENDIX

ICEP Summer Workshops

The exemplary projects entitled "Models for Precareer Education in Iowa" and "Models for Secondary Career Education Programs in Iowa" were funded approximately four years ago for the purpose of: (1) establishing procedures and practices for conducting K-12 career education programs, (2) developing program models that can be used to implement career education programs in schools of different sizes and settings, (3) establishing and conducting career education programs in selected school systems, and (4) encouraging similar programs in other schools through dissemination of procedures and materials from the pilot programs.

In all of the pilot schools an attempt has been made to implement the career development concept as an integral part of the total school curriculum rather than a separate entry. This process has required teachers to evaluate their courses of study and develop new instructional materials and approaches to accomplish implementations of the project objectives. This process is difficult and very time consuming. Local school districts were able to provide some released time but more time for teachers to plan and develop career education activities was needed if career education was to be integrated in the total school curriculum. Consequently,

a "Proposal for Exemplary Program or Project in Career Education" was submitted and funded for the purpose of planning and conducting local workshops to complete the planning and implementation of the concept in the nine project schools.

Objectives

The objectives of the "Proposal for Exemplary Program or Project in Career Education" are as follows:

1. Meet and discuss approaches and techniques being used to implement career education among the nine project schools.
2. Review current objectives and course content in the instructional disciplines at all grade levels in each of the nine project schools.
3. Build career education objectives into current course content (those that have not been included).
4. Generate career development curriculum guidelines and instructional materials at all grade levels and in all educational disciplines.
5. Establish procedures for coordinating instructional activities in career education between and among grade levels and educational disciplines.

The coordination of the project's efforts toward realizing these objectives was directed by Dr. Alan A. Kahler, Mr. Donald Flynn, project staff of Iowa State University and local school project administrators.

BODY OF PROPOSAL

Statement of Problem

The exemplary projects entitled "Models for Precareer Education in Iowa" and "Models for Secondary Career Education Programs in Iowa" have been underway for approximately two years. It is the purpose of these projects to: (1) establish procedures and practices, based on previous research, for conducting kindergarten through 12th grade career education programs, (2) outline and describe program models that can be used to implement career education programs in schools of different sizes, (3) establish and conduct such programs in selected Iowa school systems, and (4) encourage similar programs in other Iowa schools as a result of procedures demonstrated in these model programs.

Accepting the charge that these two projects were to be exemplary efforts, based on the findings of previous research, the projects began with an extensive review of the literature from all known sources. This review provided valuable information that was useful in generating (1) a project definition for career education, (2) a model describing the career development concept to be used in implementing the project definition of career education, (3) objectives for use in implementing the concept in the classroom and (4) procedures to follow in organizing and administering such programs. During two two-week workshops held on the campus of Iowa State University, this information was used by local school administrators and faculty in developing the approach to implementing career education in each of the project schools.

In all of the project schools, the career development concept was viewed as becoming an integral part of the total school curriculum and a part of each instructional unit taught by the project teachers. This approach was taken to avoid making career education a "plug-in"- "plug-out" instructional approach. As the implementation of the career development concept progressed in each of the project schools, it became apparent that in order to make the concept an integral part of the total curriculum, teachers needed time to evaluate their courses of study and develop instructional materials and approaches to use in implementing project objectives. In as much as local schools were able to do so, released time for teachers to plan and develop career education activities was provided.

Progress toward meeting the objectives of the project has been most satisfactory. Teachers have studied the instructional objectives, decided on those each teacher would implement, and are now in the process of building them into their courses of study. They have relied on the information available from other career education projects supplied by the project consultants and their own creativity in developing activities that would implement the career development concept in their classroom teaching. It is apparent, however, that they are at a crossroad in terms of their progress. They have exhausted their reservoir of ideas and those available from outside sources and now need time to complete their task of planning which will lead to implementing career education in their total school curriculums.

The central purpose of this project will be to plan and conduct local workshops to complete the planning and implementation of the career development concept in each of the nine project schools.

Review of Literature

The review of literature and other project activities related to this project provided little information that would assist in completing the task described above. At present, there appear to be as many approaches to career education as there are people initiating them. These efforts, in many cases, reflect the backgrounds of those who have initiated the projects. In the main, major emphasis is placed on the world of work and occupations and how all teachers can implement the study of occupations in their instructional programs. In other instances, the approach to career education reflects a strong guidance orientation. In many of the projects, strong emphasis is being placed on changing the curriculum in the local school to reflect solely a career education approach. Very few of the projects have taken an interdisciplinary approach to career education using the career development concept to supplement or enrich the existing curriculum as is being done in the Iowa project. As a result, project staff and local school administrators and teachers have found it extremely difficult to obtain materials and approaches that would be useful in implementing career education in their schools and classrooms.

Objectives

1. Meet and discuss approaches and techniques being used to implement career education among the nine project schools.

2. Review current objectives and course content in the instructional disciplines at all grade levels in each of the nine project schools.
3. Build career education objectives into current course content (those that have not been included).
4. Generate career development curriculum guidelines and instructional materials at all grade levels and in all educational disciplines.
5. Establish procedures for coordinating instructional activities in career education between and among grade levels and educational disciplines.

Administration

This project will be conducted under the direction of Iowa State University through the College of Education, the University Extension and Short Course Program, and the Department of Agricultural Education. Dr. Alan A. Kahler will serve as director of the project assisted by Mr. Donald Flynn, project staff members, and local project school administrators.

Procedure

This project is being submitted to the State Department of Public Instruction and the State Board of Education as a supplement to the two projects described in the "Statement of Problem." All project activities will continue the efforts underway in these projects with the expressed purpose of clarifying and refining activities that will continue and improve career development programs in each of the project schools.

Phase I -- Project Workshop (To be funded through the overall career education projects.)

1. During the month of April, a three-day workshop will be held on the campus of Iowa State University. In attendance will be project teachers, administrators, guidance personnel, and project staff and consultants. This workshop will be funded through provisions in the Iowa Career Education Project budgets.
2. It will be the purpose of this workshop to:

- a. provide local project staff an opportunity to share experiences in implementing career education in their schools.
 - b. obtain new ideas for implementing career education programs.
 - c. develop initial plans for the summer workshops.
 - d. review and identify methods of evaluating local outcomes in career education.
3. The outcomes of the workshop will be summarized by project staff members and distributed to each of the local schools during the month of May.
 4. Project steering committee members and consultants will be invited to attend and participate in the workshop.
 5. Extensive use will be made of local project personnel in planning and executing this workshop. Local teachers and administrators will serve as discussion leaders and will assist in planning the workshop. Coordinators from each of the project schools will meet in advance of this workshop to assist in determining priority concerns and needs for preparing local school personnel for participation in the workshop.

Phase II -- Local School Workshops

1. A committee composed of a representative from each of the nine project schools, preferably superintendents, will be established to plan and coordinate the workshops at the local and state level.
2. This group will meet periodically with the Iowa State University project staff and Department of Public Instruction representatives in planning and coordinating the workshop efforts in the nine schools.
3. During these meetings, project resources and consultant needs will be determined and assigned to assist the local project staff in implementing their workshops. In addition, local school commitments will be determined and assigned to each of the workshops.
4. As a result of these meetings, a workshop plan and program will be developed by each of the nine schools

by the middle of the month of May. This plan will describe the organization of the workshop, location of the workshop, involvement of staff and specific outcomes to be generated during the workshop.

5. Each of the workshops will be held during the month of June.
6. Local workshop coordinators will be appointed by the superintendent to supervise the workshop activities.
7. Each local workshop participant will be paid a stipend at a maximum rate of \$450 for a minimum of 90 hours of workshop activity.
8. The career education project coordinators will assist the local workshop coordinators in implementing and summarizing the workshop activities for each school. Ten copies of each school's workshop report will be forwarded to the career education project staff and each of the other project schools.
9. The materials generated during each workshop will become a part of the program descriptions being generated in the overall project and will be distributed to other schools in the state by the State Department of Public Instruction.
10. Initial workshop descriptions and objectives are attached to this proposal in the appendix section.

Participants

Workshop participants will be selected by local school administrators and workshop coordinators. Lists of these individuals will be forwarded to Dr. Kahler for identification and preparation for payment of stipends. In the main, participants will include all teachers, administrators, and guidance personnel who have participated in the project from its inception and others whom local administrators feel should be involved to make the career development concept function in the school curriculum.

Methods and Materials

Materials needed to conduct each of the workshops will be provided by using local and project funds. In the main,

these materials will include paper and duplicating supplies and resource materials available from other states.

Evaluation

Evaluation of each of the workshops will be conducted as a part of the third party evaluation effort assessing the effectiveness of the total career project. This effort will be coordinated by the career project staff and project director. In addition, local workshop outcomes will be evaluated according to the product produced as outlined in their workshop descriptions.

Time Schedule

<u>Activity</u>	<u>Date</u>
Meeting of workshop coordinating committee	March 15, 1973 April 15, 1973 May 15, 1973
Project Workshop	April 10-12, 1973
Completion of local workshop plans	May 20, 1973
Conduct Local Workshops	June 4-29, 1973
Complete workshop reports	July 15, 1973
Share workshop reports with career education project staff and other schools	August 15, 1973

Abstract

Title of Project: Instructional Materials Development and Articulation in Career Education

Project Director: Alan A. Kahler

Applicant Organization: Iowa State University, Ames, Iowa

Duration of Project: Beginning Date: March 1, 1973
Ending Date: August 15, 1973

Total Funds Requested: \$250587

The central purpose of this project will be to plan and conduct local workshops to complete the planning and implementation of the career development concept in each of the nine project schools participating in the Iowa Career Project. More specifically, the project will (1) share approaches and techniques to implement career education among the nine project schools, (2) review current grade levels in each of the nine project schools, (3) build career education objectives into current course content (those that have not been included), (4) generate career development curriculum guidelines and instructional materials at all grade levels and in all educational disciplines, and (5) establish procedures for coordinating instructional activities in career education between and among grade levels and educational disciplines.

Included in the project will be the nine schools participating in the Iowa Career Education Project. Local school administrators and project staff members will cooperatively plan workshops to be conducted by each of the project schools during the month of June. The Iowa Career Education Project will provide the services of specialists in areas of their need and will assist with the cost of supplies and materials needed to conduct the workshop.

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