THE EFFECT OF CAREER AWARENESS AND EXPLORATIONGRANTS
ON CAREER EDUCATION EFFORTS IN IOWA SCHOOLS

An abstract of a Dissertation by
Jo Shaw Kiley
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Drake University
Advisor: James R. Halvorsen

The Problem. The purpose of this study was to determine whether the "seed money" given to school districts for Career Awareness and Exploration (CA&E) grants had a lasting effect. The following objectives were established to study the problem: to determine the difference in the status of career education in school districts which received funding and school districts which did not receive funding; to determine what differences exist in the perceptions of various educational role groups of the status of career education in school districts which did receive funding; to determine what differences exist in the perceptions of various educational role groups of the status of career education in school districts which did not receive funding; to determine what differences exist in the perceptions of educational role groups concerning the status of career education between those who were employed at the time funding occurred and those who have been employed since funding ceased.

Procedure. An original survey instrument was developed that included four questionnaire sections: Administration, Personnel, School and Community Relations, and Curriculum. Perceptions of superintendents, principals, counselors, and teachers on the current status of career education were assessed.

Thirty school districts were identified for the purpose of this study. Fifteen school districts comprised the first group which participated in the CA&E grants from 1973-74 through 1975-76 inclusive. A second group of fifteen districts which had not been funded were matched with the fifteen funded districts. Within the funded districts, the personnel groups were defined as to time of employment, either when funding occurred or after funding ceased.

For each individual a yes to no score ratio for each section of the questionnaire was tabulated. The mean ratios for each educational role group were used for the analysis. Four t tests (p<.05, p<.01) for independent samples were calculated for each of the four sections of the instrument. This sample procedure was utilized in the examination of the perceptions of the funded district personnel by time of employment. A one-way ANOVA (p<.05, p<.01) was utilized to study the differences among the perceptions of the four role groups in funded and non-funded districts.
Findings. Study findings indicate there was a difference in the status of career education in funded and non-funded schools on the administrative and curricular indicators of career education program development, but not on the personnel, and school and community relations indicators. The funded districts showed greater compliance with administrative indicators and non-funded districts with curriculum indicators.

Teachers in funded districts perceived level of compliance with indicators in the following order (high to low): administrative, personnel, curriculum, and school and community relations. Principals in funded districts perceived level of compliance highest for administrative and personnel indicators and lowest for curriculum, and school and community relations indicators. Superintendents and counselors in funded districts perceived no difference in compliance with the different indicators.

Superintendents in non-funded districts perceived highest compliance with curriculum and personnel indicators and lowest compliance with administrative, and school and community relations indicators. Teachers in non-funded districts perceived level of compliance with indicators in the following order (high to low): administrative, curriculum, personnel, and school and community relations.

No difference in perceptions of level of compliance with the different categories of indicators was found between personnel who were employed at the time funding occurred and those who have been employed since funding ceased.

Recommendations. The findings of this study have limited implications for reinstituting the CAE grants. Further research should investigate the lasting effects of "seed money" on career education.
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The School of Graduate Studies
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of the Requirements for the Degree
Doctor of Education

by
Jo Shaw Kiley
May 1981
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by

Jo Shaw Kiley

Approved by Committee:

James R. Halvorsen
Dr. James R. Halvorsen, Chairperson

Richard H. Lampshire
Dr. Richard H. Lampshire

Edward E. Hakanson
Dr. Edward E. Hakanson

Douglas H. Smith
Dr. Douglas H. Smith

Richard D. Brooks (Deceased)

Dean of the School of Graduate Studies
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Chapter 1

INTRODUCTION

Since January 1971, career education has been a highly visible presence in American education. It has brought under scrutiny the expectations for and the images of education at all levels. It has stimulated expanded linkages between school personnel and their counterparts in industry and other community sectors. The magnitude of scholarly research, literature, commercial and non-commercial instructional materials is already larger than many of the more established content areas in education. Career education was not a new idea in 1971, and its thrust today is pervasive. Career education began as a reform movement in response to the criticism that public education should, but does not, teach students how to work, how to live a meaningful life, and how to find personal fulfillment. The federal and state governments have spent

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millions of dollars for career education in aid to state and local education agencies to reform the troubled educational establishment.

Utilizing federal vocational monies and the overmatch of state dollars, the Iowa Department of Public Instruction offered "exemplary"\(^1\) Career Awareness and Exploration (CA&E) grants from the school year 1973-74 to the close of the 1978-79 school year on a non-competitive basis. A total of one hundred thirteen (113) school districts participated for a maximum of three years in the CA&E grant project over that six year span of time.\(^2\)

The Career Awareness and Exploration (CA&E) grants were designed as exemplary projects to provide impetus to career education practices in Iowa's public schools with "seed money." This change agent effort was an opportunity to reform education by infusing career education concepts

\(^1\)Definition: "A project which exhibits promising practices and products for other school districts; they should have a high probability of successful continuation after the close of the project; they are not necessarily original research and development activities" (Wm. L. Hull and James Bina, The Influence of Selected Organizational Variables on Continued and Extended Use of Exemplary Projects in Vocational Education. Research and Development Series No. 116. [Columbus, Ohio: Center for Vocational Education, Ohio State University, 1977]), p. 3.

\(^2\)State of Iowa Department of Public Instruction, Directory, Iowa Approved and Funded K-12 Career Awareness and Exploration Projects by Local School Districts FY'78 (Des Moines, Iowa: DPI, 1977).
into the curriculum. Providing financial assistance for educational change followed the Federal government's intentions of Part D of the Vocational Education Amendments of 1968 and the government's thrust of funding exemplary projects.

A question of importance seldom asked in the research of career education is in regard to the lasting effect of changes brought about through grants and whether or not the status of career education is any different in school districts which had no financial assistance. A related question asks if there are any administrative techniques and organizational arrangements that are likely to result in the continuation of exemplary efforts when outside funds are no longer available, and if so, what are they?

A foundation for career education was established with the success and acceptance of state funded exemplary and research projects. Aware of the national career education thrust, also, the Career Education Division management staff recommended to the State Superintendent of Public Instruction the promotion of career education to all school districts in Iowa through incentive monies to develop and implement K-12 career education programs. The Guidelines for Participation in Career Awareness and Exploration (CA&E) efforts were approved by the Iowa State Board of Public
Instruction on April 26, 1973. The accepted definition:

Career Awareness and Exploration (CA&E) Education consists of coordinated programs, activities and services designed to develop an understanding of and a respect for self and the world of work, to orient individuals to the broad range of occupations open to them and to assist individuals to make personally realistic choices of careers as the need for such decisions arise.

The Department of Public Instruction began allocating funds to the exemplary effort for the 1973-74 school year on a statewide basis. Reimbursement of the local education agency was limited to 20 percent of the total Iowa Career Education funds available and was not applicable to budget items below grade seven.

The temporary funding to the school districts in the form of "seed money" for three consecutive years was offered as a change agent effort. The funding pattern was 80 percent the first year, 60 percent the second year, and 40 percent the final year. Agencies participating in the approved Career Awareness and Exploration programs were

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reimbursed for costs attributable to the program, such as salaries of teachers, travel, consultant fees, transportation for field trips and the development materials. At the end of the three year period, the local school assumed complete financial responsibility for the program.

The funding for the Career Awareness and Exploration (CA&E) grants to local school districts on the decreasing sunset funding formula required the superintendent of schools and the board of education to identify career education as a high priority and to make a commitment to support career education at an ascending level for three years. If the innovation was successful, it was assumed that the district would use other sources of funds to continue career education as an integral part of the curriculum.

Fifteen schools applied for financial assistance that first year. None were rejected. The Career Awareness and Exploration (CA&E) applications were not competitive and awards were based on the merit of the proposal. The agencies wishing to participate submitted applications following the Guidelines for Participation. The guidelines required the inclusion of the following support information: advisory committee, offering information, evaluation, facilities and equipment, dissemination of results and
Basically, the proposals were founded on four components within administrative techniques and organizational arrangements: administration, personnel, school and community relations, and curriculum.

Published in the guidelines for the career education grants was the notice of the availability of assistance from consultants in the Elementary/Secondary Section of the Career Education Division for program planning and development. After the grants were awarded the same consultants' role was to provide technical assistance. Unfortunately, the files of the districts that participated in this study did not include any evidence of the extent of acceptance of the offers. The input or assistance from an external agency, therefore, is not known.

The state education agency provided no funds to defray the costs of the initiation stage for the Career Awareness and Exploration (CA&E) grants where planning essential to proposal development occurred. As part of the proposal, however, the local education agencies submitted information which could have documented activities in the initiation stage. Minutes of the school district's advisory meetings held for the purpose of developing the proposal and identification of community members were to

1 State of Iowa, "Appendix I, Career Education Guidelines," npn.
be described in the proposal. The body of the application included: the problem and rationale for the proposal activities; project objectives and content of the career education program to be implemented for each career development phase included in the grant; evaluation procedures; organizational arrangements and administrative techniques to be employed.¹

Within the proposals written by the school districts were provisions in five domains of educational change: school programs, school personnel, the social and culture of the schools, the governance of education, and school finance.² The Guidelines required, for example, "the planning and implementation of activities in at least one elementary school, one junior high school, and one senior high school organized as an administrative unit in a sequential education progression for students."³ The social organization of the schools that has supported traditional education was reorganized to deliver career education programs. "Approvable professional staff orientation and


development activities regarding career development"¹ were introduced and developed for "all staff."² The guiding of career education required different kinds of leaders, some who had never been involved with educational programs. School finance was altered to provide the resources for career education with partial assistance from the state education agency in return for some financial commitment from the local education agency. The plan of each school district was different from that of other districts—no two districts started from the same place, but their plans included all domains of change in varying degrees. Furthermore, they did not establish identical goals.

Rationale for the Study

No evaluation was conducted by the Department of Public Instruction during the active time of the grants. Pursuant to the requirements of the Career Awareness and Exploration (CA&E) awards, reports were submitted to the Director, Career Education Division, Department of Public Instruction.³ Each school conducted its own evaluation to


determine the extent to which the project objectives had been achieved. Since this was descriptive and subjective information, no data could be aggregated.

No one has examined the permanence of career education associated with the Career Awareness and Exploration (CA&E) grants nor the status of career education in schools which received no assistance. This study examined that permanence of change associated with the Career Awareness and Exploration (CA&E) grants in the first group of schools which received financial assistance and the status of career education in schools which received no assistance. Very little research has been conducted on this topic.

The four year lapse of time since the funding ceased provided a valid perspective for a longitudinal investigation of the status of career education in selected schools. The present study examined the perceptions of school superintendents, building administrators, counselors and teachers regarding the current status of career education.

As career education efforts were initiated by the Iowa Department of Public Instruction, "seed money" funds were made available for this purpose from vocational education monies from the school years 1973-74 through 1978-79, six years. Therefore, the investment of "seed money" to stimulate educational change in a school district, necessitated an examination of the status of change and its
permanence.

The findings of this study contribute to the growing body of research about career education and provide an indication of the effectiveness and impact of the Career Awareness and Exploration (CA&E) projects, and also provide a means for determining the feasibility of reviving the Career Awareness and Exploration (CA&E) grant methodology as a viable service delivery system for career education in Iowa.

Objectives for the Study

The purpose of this study was to determine whether the "seed money" given to school districts for three consecutive years with CA&E grants made a difference in the status of career education four years after the funding ceased. In an effort to determine the lasting effects of that "seed money" the following four objectives have been established:

1. To determine the difference, if any, in the status of career education in school districts which received Career Awareness and Exploration (CA&E) grants and school districts which did not receive such grants.

2. To determine what differences, if any, exist in the perceptions of various educational role groups of the status of career education in school districts
which did receive funding.

3. To determine what differences, if any, exist in the perceptions of various educational role groups of the status of career education in school districts which did not receive funding.

4. To determine what differences, if any, exist in the perceptions of educational role groups concerning the status of career education between those who were employed and those who have been employed since funding ended in those districts which received funding.

Hypotheses of the Study

It was anticipated that the fifteen school districts which received grants would be perceived to have continuation efforts of their successful career education activities four years after the funding ceased than would be perceived to be occurring in districts which never received such funding. In the districts which received funding superintendents, building administrators, counselors and teachers were expected to perceive the status of career education in essentially the same way. Likewise, in the districts which did not receive funding it was anticipated that the education related personnel would perceive the status of career education in their districts in the same way. In districts which received funding, it was expected that the
perceptions of the current status of career education would be the same for personnel who were in the school system at the time funding occurred and those who were employed once funding ceased.

The following four null hypotheses were used to test the perceptions about the current status of career education in the first group of school districts which received the Career Awareness and Exploration (CA&E) grants and fifteen randomly selected and matched school districts which had no financial assistance.

Hypothesis 1. There is no difference in the current status of career education in funded and non-funded school districts as perceived by school personnel in those districts.

Hypothesis 2. There are no differences among the perceptions of the four groups of school related personnel concerning the current status of career education in school districts which received funding.

Hypothesis 3. There are no differences among the perceptions of the four groups of school related personnel concerning the current status of career education in school districts which received no funding.

Hypothesis 4. There is no difference in the current status of career education in funded
districts as perceived by school related personnel who were and still are employed at the time when funding occurred and those who have been employed and are still employed since the funding ceased.

Limitations

This study included fifteen school districts, the total number of districts in the first group of schools participating in the Career Awareness and Exploration (CA&E) project for three consecutive years, and fifteen additional school districts matched for various characteristics to serve as a comparison base. Only school districts within the state of Iowa and under the jurisdiction of the Iowa Department of Public Instruction participated in the study. Findings of the study are only applicable to the sample for this study. While the study is limited to the school districts in this study, the instrument and process can be replicated with another population.

This chapter provided background of the Career Awareness and Exploration (CA&E) grants to better understand the problem studied. The next chapter presents relevant research related to career education and exemplary projects.
Glossary of Terms

The following terms were used in this study:

1. Administrative technique. "A method or procedure which requires the approval of the chief administrative officer of an organizational unit in a school district; the method should be manipulable by most managers of educational exemplary projects."\(^1\)

2. Career Education. "The sequence of experiences beginning in early childhood and continuing throughout adult life, which prepares individuals for present and future occupational and leisure time activities. Career education includes programs, activities, and services which contribute to the maturation of the individual in his career development process through the development of concepts of self and the world of work. The initial phases of this process have been identified as career awareness and exploration."\(^2\)

3. Continuation. "The process of remaining in existence when funds from outside the organization are no longer available."\(^3\)

4. Educational exemplary project. "A project

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\(^1\)Hull and Bina, p. 3.


\(^3\)Hull and Bina, p. 4.
which exhibits promising practices and products for other school districts; they should have a high probability of successful continuation after the close of the project; they are not necessarily original research and development activities."\(^1\)

5. Organizational arrangement. "The administrative structure of the school, and the mechanisms such as committees which exist for interaction with the school staff and the community."\(^2\)

\(^1\)Hull and Bina, p. 4.

\(^2\)Hull and Bina, p. 4.
Chapter 2

REVIEW OF RELATED LITERATURE

Introduction

Research findings and a summary of the related literature will be presented around the following topics:

1. National perspectives of the early history of career education as they relate to the Career Awareness and Exploration (CA&E) project.

2. Career education as a reform movement and change in educational practices. This section also includes the roles of educational personnel at the district and classroom levels and the critical stages of the change process for career education.

3. Review of research studies related to educational exemplary practices. "Continuation" and "seed money" receive special attention in this review.

National Perspectives of the Early History of Career Education

Career Education Concept

The concept of career education began to take form during the early 1960s in both the career guidance
movement\textsuperscript{1} and in the phenomenon known as the "reorientation of vocational education."\textsuperscript{2} It was not until 1970, however, that former U.S. Commissioner of Education, James E. Allen, introduced the term career education in a speech before the National Association of Secondary School Principals.\textsuperscript{3} The introduction of the term career education, however, is widely attributed to an address entitled, Career Education Now, given by U.S. Commissioner of Education, Sidney Marland, on January 23, 1971 before the annual convention of the National Association of Secondary School Principals in Houston, Texas. While this speech and the many which followed in rapid succession to various professional, civic, and industrial groups gave visibility and credibility to career education, neither the term nor the concepts it embraced were without precedent in American educational history. It is not the purpose of this study to deal in depth with these antecedents to career education. Such

\begin{itemize}
\item \textsuperscript{2}G. L. Mangum, Reorientating Vocational Education (Ann Arbor, Michigan: Institute of Labor and Industrial Relations, 1968).
\item \textsuperscript{3}J. E. Allen, "Competence for all as the Goal for Secondary Schools" (Address given to the Annual Convention of National Association of Secondary School Principals, Washington, D.C., February 10, 1970).
\end{itemize}
analyses are available in other places.\textsuperscript{1} Suffice it to say that Commissioner Marland's emphasis on career education extended a political economic, social evolutionary process which had been building rapidly during the 1960s.

When Commissioner Marland made his Career Education Now speech in the winter of 1971 he cited four problems plaguing American public education: (1) the need for reform of vocational education, (2) the "irrelevance" of general education, (3) the "false dichotomy between things academic and things vocational," and (4) the need for "true and complete reform of the high school."\textsuperscript{2}

While Commissioner of Education, Marland promoted the movement by talking about the problems of American education rather than by defining the career education concept and by trying out his ideas rather than researching them. Although Marland made some definitive statements about career education, he refused to launch the movement with a


"national" definition. It is doubtful, however, if anyone, including the federal government could have defined career education to everyone's satisfaction.

Initially, a major share of career education leadership fell to the Bureau of Adult, Vocational, and Technical Education. A major challenge to this unit was to provide the states with guidelines for using available discretionary funds in launching exemplary career education programs. The Division of Vocational and Technical Education, Bureau of Adult Vocational and Technical Education, in a draft paper on career education indicated that:

It is a comprehensive educational program focused on careers, which begins in grade 1 or earlier and continues through the adult years. For elementary and secondary education, the program includes a structuring of basic subjects, grade 1-12, around the theme of career opportunities and requirements of the world of work. Career education not only provides job information and skill development but also helps students to develop attitudes about the personal, psychological, social and economic significance of work.  

Career education was not only intended to operate within the articulation of a formal education structure from K-14 or on to adult education, but its linkages with

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the community and with industry were also being identified. The term represented a "synthesis and blend of many concepts and elements available at some point and in some place in American education."¹

In 1975, the Office of Education published an official policy paper of the then U.S. Office of Education entitled "An Introduction to Career Education." This paper presented the results of a consensus statement representing conceptual agreements on career education. The definition of career education which the consensus statement provided was:

Career education is the totality of experiences through which one learns about and prepares to engage in work as part of her or his way of living.²

Early Funding for Career Education

Of special interest to the genesis of career education was Part D, Section 142(c) of the Vocational Education Amendments of 1968 which was concerned with the development of Exemplary Programs and Projects in Vocational Education. In particular, such projects were to develop pre-vocational efforts in the elementary and junior high schools, create new curriculum thrusts in vocational education and, in

¹Herr, Review and Synthesis, p. 6.

general, broaden the relationships of vocational education to the larger educational context of which it is a part. The Part D projects and career education have common origins and share many educational concepts and goals. It would not be accurate to presume, however, that the first round effort of Part D constitutes a fair test of implementing the career education concept.¹

Funding has a great deal to do with the shape and substance of any educational effort. This truism applies quite clearly to career education. On the one hand, the initial use of vocational education monies as the major source to fund career education activities has caused an image problem. Some critics of career education continue to believe that career education and vocational education are synonymous; that career education has no validity or implications beyond occupational or career preparation.² On the other hand, the lack of large scale Federal funding coupled with significant persuasion by U.S.O.E. officials about the importance of career education has stimulated a large amount of fiscal support for the concept at state and local levels. Further, restricted federal monies have also led to an emphasis on demonstration and exemplary projects from which state and local efforts could learn and grow.

¹Herr, The Emerging History, p. 6.
²Herr, The Emerging History, p. 20.
Following a meeting by Commissioner Marland with the Council of Chief State School Officers in June 1971, the first Federal fiscal commitment for career education occurred. Commissioner Marland decided to use his discretionary monies under Part C, of the Vocational Education Act Amendments of 1968, a total of $9 million, to allocate to states for each to formulate comprehensive career education models.¹

Every state and territory responded with a plan and letter of assurance for use of the funds provided. By June of 1972, grant award documents had been issued and the research and development projects in career education were underway in every state and territory of the United States.² Iowa received $128,938 that fiscal year.³

In fiscal year 1973, funds from Section 142(c), Part D of the Vocational Education Act were added to those of Part C to increase the support for career education exemplary projects. Iowa received a total of $138,955⁴ which was utilized along with the overmatch of state monies from the Iowa Legislature to fund the Career Awareness and

¹Herr, The Emerging History, p. 21.
²Herr, The Emerging History, p. 25.
⁴Herr, The Emerging History, p. 27.
Exploration (CA&E) grants and other selected exemplary projects.

**Career Education as a Reform Movement and Change in Educational Practices**

**Educational Reform**

In the late 1960s, educational reform was often cast as an "input-output" problem. The supply of the right amount and kind of inputs—money, innovative ideas, and technology—would enable school districts to change their educational practices and thus "produce" improved student outcomes.¹

"Career education represents a response to a call for educational reform," said Kenneth B. Hoyt, Director of the Office of Career Education, and this opinion is shared by advocates of career education at the federal level.² This is a frequently cited explanation for the emergence of career education. Former Commissioner Terel Bell's observations are a good case in point:

Career education is an idea which has become a movement....I believe career education to be the most viable vehicle for needed educational reform


to come along in many a year. It has been forged from local needs and built by local expertise. School personnel at every level are nearly exploding with ideas and implementing the concept. In an amazingly brief time, the idea of career education has taken root, has been nurtured by instant advocates, and has born blossoms in nearly all of the fifty states and six territories....The Council of Chief State School Officers estimates that almost five thousand of the seventeen thousand school districts in the United States will have active career programs in the 1974-75 school year. Those who in the past have contended that it takes fifty years for any good idea to become common practice in American education are being proven wrong by career education.\(^1\)

A common response to career education as a reform movement is a policy of "benign neglect."\(^2\) This policy, which is essentially a policy of non-action, is attractive to school districts where school reform is not a serious or pressing problem. Sometimes the implementation of career education reform activities is considered more of a threat than the absence of such activities.\(^3\)

Another response to career education as a reform movement is a policy of "muddling through."\(^4\) The "muddling through" concept consists of a series of fragmented, disjointed programs.\(^5\) Sometimes it is the best of all possible

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\(^1\) Terrel H. Bell, Foreword, in K. B. Hoyt, Career Education: Contributions toward an Evolving Concept (Salt Lake City, Utah: Olympus, 1975), pp. 5-10.

\(^2\) Reinhart, p. 264. \(^3\) Reinhart, p. 264.

\(^4\) Reinhart, p. 264. \(^5\) Reinhart, p. 264.
alternatives, but in most instances it is not.

A third way to face the issue of reform is by using a "strategic" approach.\textsuperscript{1} It consists of a series of integrated, systemic programs that collectively embody a coherent, although open-ended strategy for effecting career education reform.\textsuperscript{2} According to Reinhart two conditions need to exist in a school district to utilize the strategic approach: the intellectual capacity to conceive and design the programs, and the implementation of the programs is politically feasible.\textsuperscript{3}

It is often difficult to prove that an absolute change or reform of education has taken place. It should also be acknowledged that criteria for the judgment of success or failure of career education reform efforts are less than ideal. Lee Anderson, however, described a viable approach when he wrote:

In setting forth a position about the reform of the schools, the best that can be done is to establish standards and criteria for reform, identify the domains that come under the aegis of reform, analyze each of the domains independently and according to the relationship among them, and recommend the approach in public policy that is most likely to be successful in carrying out reform.\textsuperscript{4}

\textsuperscript{1}Reinhart, p. 264. \textsuperscript{2}Reinhart, p. 264.
\textsuperscript{3}Reinhart, p. 264.
The word reform should not be casually associated with career education unless one truly means it. That is, reform means change. It means modifying and reorganizing a system. It means understanding and adopting new assumptions, new curriculum frameworks, and new roles for administrators, practitioners, and learners. Reinhart refers to educational change as "any planned alteration or intended innovation in the educational enterprise."

Career education as a reform movement required the whole system of education to change, which included the people in the system. The four selected educational groups of superintendents, principals, counselors and teachers within the educational system, therefore, enabled the researcher of this study to look at the status of change through institutional and personnel changes at the district and classroom levels. The new focus for all of education called for differentiated roles of personnel in the change process for school districts.

Superintendents, as the top level administrators, provided institutional leadership, the most important responsibility that top level administrators have. In a

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2Reinhart, p. 254.  
3Reinhart, p. 208.
paper written by Brickell and Aslanian, "Learning to Live on Hard Money," the writers cited points that mature career education programs kept or expanded. The number one "thing" that the local education agencies maintained was central office endorsement of career education.\(^1\) Support from superintendents positively affected the fidelity of implementation and the percentage of goals achieved in the nationally funded projects examined.\(^2\)

Based upon extensive field work experience, Berman and Pauly hypothesized in the Rand study that the superintendents and school district officials play major roles in the initiation and continuation stages of innovations, but they often do not directly affect the implementation stage.\(^3\) They also found that the longer the superintendent's tenure in the district, the more likely projects were to be continued.\(^4\) It was further stated that superintendents, who tend to be organizationally remote provided a generalized support that may have made schools receptive to

\(^1\)Henry M. Brickell and Carol Aslanian, "Learning to Live on Hard Money" (New York: Policy Studies in Education). (Mimeographed.)


innovations.¹

A career education project highlighted in a study for the National School Boards Association emphasized the necessity of placing the administrative responsibility with an assistant superintendent responsible for curriculum and instruction or with the highest level administrator possible. The reasoning for this recommendation: "Such a person will have to take the responsibility eventually—why not right away?"²

Top level administrators must understand the concept of career education, know the characteristics of good career education programs, and understand the options they have to implement it.³ A project director cited that the superintendent in that district assumed an active leadership role of educating the principals and the secondary level staff of the merits of career education and gaining their support. It was summarized by the director: "Single out an enthusiastic top-level administrator to sell career education to


³Reinhart, pp. 207-208.

⁴Brickell and Paul, Getting and Spending, p. 39.
Beyond having the technical knowledge and organizational expertise, a top level administrator must be able to view the school district as a social institution. The superintendent must be not only able to make decisions, but project the ramifications to the district's social structure. Furthermore, that person must be a creative leader with the responsible determination to make career education succeed. Philip Selznick describes further what it takes:

From a personal standpoint, responsible leadership is a blend of commitment, understanding, and determination. These elements bring together the selfhood of the leaders and the identity of the institution. This is partly a matter of self-conception, for whatever his special background, and however important it may have been in the institution must transcend his specialism. Self-knowledge becomes an understanding not only of the leader's own weaknesses and potentialities but of those qualities in the enterprise itself. And the assumption of command is a self-summoning process, yielding the will to know and the will to act in accordance with the requirements of institutional survival and fulfillment.

Principal's involvement was that of embodying policy in the social structure of a school system. The principal must both represent the administration and get along with teachers and students. Therefore, there is built in tension

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1Brickell and Paul, Getting and Spending, p. 39.
2Reinhart, p. 278. 3Reinhart, p. 278.
4Reinhart, pp. 203-226.
in the principal's role because it is difficult to do both at once.\textsuperscript{1}

As part of administrators' involvement, the questionnaire results of the Study of Financing Career Education cited the medians of three to five hours for their training. A number of districts with continuing exemplary programs advised training administrators first and training them thoroughly when introducing career education. Study results indicated that administrative leadership was essential in establishing career education, so administrative training was essential.\textsuperscript{2}

The active support of the principal was vital to the project's implementation and especially to its continuation.\textsuperscript{3} One measure of that support cited by the Rand researchers was the extent to which principals participated in project training activities. Involvement of the principal in staff training provided the information and skills needed to help teachers implement the project and sustain project activities in the face of eventual staff attrition. More important, it signalled the staff that their efforts

\textsuperscript{1}Reinhart, p. 275.

\textsuperscript{2}Brickell and Paul, \textit{Getting and Spending}, p. 8.

\textsuperscript{3}Berman and Pauly, \textit{Factors Affecting Change}, Vol. II, p. 75.
were supported and valued.\textsuperscript{1}

The principal's unique contribution to implementation lies not in "how to do it" advice better offered by project directors, but in giving moral support to the staff and in creating an organizational climate that gives the project "legitimacy."\textsuperscript{2} The principal's role was also crucial for continuation, independent of what kind of innovation may be involved reported Rand.\textsuperscript{3} At the end of funding, the principal must take a stance toward the project and make a variety of decisions that explicitly or implicitly influence what happens to project methods or materials within the school. In particular, the principal is chiefly responsible for establishing the school's educational policies and philosophy. A project that is consonant with the school's general operating style would be more likely to be sustained or spread than one that was not.\textsuperscript{4} The Rand team stated, "All told, the principal amply merits the

\begin{itemize}
\item[\textsuperscript{1}] Berman and McLaughlin, Implementing and Sustaining Innovations, Vol. VIII, p. 30.
\item[\textsuperscript{2}] Berman and McLaughlin, Implementing and Sustaining Innovations, Vol. VIII, p. 31.
\item[\textsuperscript{3}] Berman and McLaughlin, Implementing and Sustaining Innovations, Vol. VIII, p. 31.
\end{itemize}
title of 'gatekeeper of change.'

The Study of Financing Career Education cited that half of the teachers responding to the survey provide career education regularly in the typical district. The implications presented for this were:

Some combination of money for staff development and administrative monitoring of teachers' classroom performance will need to be used if a majority of teachers are to do the job. The second--administrative monitoring--is not an extra expense because administrators should do it in the normal course of supervising the instructional program.

In educational change counselors assume the role of facilitators of guidance functions rather than the direct transactors of them. Reinhart went on to say that counselors' roles are changing dramatically, new roles are being established, team effort is gaining new importance, and new systems are requiring procedures that are entirely different.

Hoyt stated that the school counselors should assume the pivotal role in the career development component of career education.

Newton cited in an evaluation report

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2 Brickell and Paul, Getting and Spending, p. 12.


5 Kenneth B. Hoyt, Rupert N. Evans, Edwin F. Mackin, Garth L. Mangum, Career Education, What it is and How to do It (Salt Lake City, Utah: Olympus, 1972), p. 127.
that counselors typically indicated (80 percent) that their work had increased since career education.¹

The role of the counselor to act as consultants to teachers and coordinator of guidance and curriculum services indicates a definite change in the role of the school counselor. In the study conducted for the National School Boards Association, "the typical district had two full-time staff members with responsibilities including career education (often the case with guidance counselors)."²

A Maryland school district coordinator for career education recommended that school districts should try not to add extra personnel to coordinate the career education program.³ The Stanford Research Institute and Policy Studies in Education researchers learned that "hard money goes for local salaries: only soft money goes for outside services, travel, and novelties."⁴

Rand stated their data left little doubt that an effective project director greatly enhanced the


²Brickell and Paul, Getting and Spending, p. 10.

³Brickell and Paul, Getting and Spending, pp. 37-38.

implementation of a special project.\textsuperscript{1} A central aspect of implementation is the teachers' acquisition of new skills, behavior, and attitudes; this task specific learning is the role of an effective project director.\textsuperscript{2} The director's special skills and knowledge can clarify project goals and operations, minimize the day-to-day difficulties encountered by teachers, and furnish the concrete information they need to learn. Summarized data from the Comprehensive Career Education Model school districts pointed out that the typical teacher cannot handle the logistics of using the community--take trips and inviting speakers--without assistance.\textsuperscript{3} Face-to-face contact with teachers is highly desirable in promoting and sustaining career education in the classrooms.\textsuperscript{4}

Teachers have been identified as the key people in the delivery of career education. As a manager of the learning process, the teacher translates the bulk of the policy, planning, curriculum development and guidance into

\textsuperscript{1}Berman and McLaughlin, \textit{Implementing and Sustaining Innovations}, Vol. VIII, p. 31.

\textsuperscript{2}Berman and McLaughlin, \textit{Implementing and Sustaining Innovations}, Vol. VIII, p. 44.

\textsuperscript{3}Brickell and Aslanian, "Learning to Live," npn.

\textsuperscript{4}Brickell and Aslanian, "Learning to Live," npn.
learning experiences for the student.\textsuperscript{1}

Three teacher attributes—years of teaching, sense of efficacy and verbal ability—significantly affected most project outcomes in the Rand study.\textsuperscript{2} They found that years of teaching and teacher sense of efficacy had strong and significant, but very different, effects on most of the outcomes measured in the study of four federal programs. Specifically, the number of years of teaching had negative effects: the longer the teacher taught, the less likely was the project to achieve its goals or to improve student performance. Furthermore, teachers with many years on the job were less likely to change their own practices or to continue using project methods after the end of federal funding.

Teachers' attitudes about their own professional competence, in short, may be a major determinant of what happens to projects in classrooms. In contrast, teachers' verbal ability had no relationship to project implementation, outcome, or continuation with the exception of its positive correlation with improved student achievement.\textsuperscript{3}

A number of project directors have affirmed that

\begin{enumerate}
\item Reinhart, pp. 210-211.
\item Berman and McLaughlin, Implementing and Sustaining Innovations, Vol. VIII, p. 32.
\item Berman and McLaughlin, Implementing and Sustaining Innovations, Vol. VIII, p. 32.
\end{enumerate}
although teachers appreciate extra pay for training, the
pay alone cannot induce teachers to work hard to implement
new strategies if professional motivation is absent.¹ The
Rand data suggest that mobilization strategies can generate
staff commitment, and therefore should be a prime consider-
ation in project planning. Teachers and administrators
should be convinced of the project's educational promise
and scope, and should jointly participate in its planning.
Institutional support of this nature is critical to project
implementation and is more difficult to generate once the
project is under way.²

Finley, in 1975, evaluated eight career education
programs in the state of Rhode Island. Among the findings:
96 percent of all teachers involved felt that their program
had some or much success; only teachers in grades kindergar-
ten to four felt little success was gained. The programs
with the most success had attempted total career education
conceptualization integration within their existing curricula.
The author also felt that teachers were more involved in
such total efforts. Projects reporting minimal success
depended on the use of published materials and piecemeal in

¹Berman and others, Factors Affecting Implementation, Vol. VII, p. 83.
Hoyt said that career education does not ask the academic classroom teacher to simply add one or more units to an already overcrowded set of learning objectives. Rather, it asks the teacher to change and adapt current lesson plans to accommodate a career education emphasis.\textsuperscript{2}

A research team identified the following elements of implementation strategies that promoted teacher change: staff training, frequent and regular meetings, staff meetings held in conjunction with staff training, the quality and amount of change required by the project.\textsuperscript{3} In the NSBA study it was presented that over 35 percent of the school districts they studied had committees or task force meeting at least monthly to guide the work.\textsuperscript{4}

Newton, in 1974 evaluated the career education programs in Bowling Green, Kentucky, and presented major results relevant to the educational personnel at the building level:

Teachers reported that inservice workshops providing multisession small groups or in combination with multisession large groups were most

\textsuperscript{1}Herr, \textit{Research in Career Education}, p. 25.

\textsuperscript{2}Hoyt et al., \textit{Career Education, What It Is}, p. 123.

\textsuperscript{3}Berman and Pauly, \textit{Factors Affecting Change}, Vol. II, p. 3.

\textsuperscript{4}Brickell and Paul, "Getting and Spending," p. 6.
successful. Most teachers reported that other teachers (66 percent) or administrators (50 percent) were the most successful type of resource person for increasing their knowledge and understanding of career education. Workshops/inservice were seen as the best way of increasing knowledge of career education by 72 percent of the teachers, 80 percent of the counselors, and 50 percent of administrators.

On a twenty point test of knowledge about career education the following rankings were obtained: teachers 15.81, counselors 18, administrators 18.13.

On a 100 point test of attitudes about career education, the following rankings were obtained: teachers 80.91; counselors 93.75; administrators 93.50. A definite positive correlation was found to exist between knowledge and attitudes toward career education.¹

Stages of the change process. While the Guidelines for Participation in the Career Awareness and Exploration (CA&E) grants imply the process of change as consisting of the three stages or phases of planning, implementation, and dissemination, the Rand study conducted in 1975 utilized the more comprehensive terms of initiation, implementation and incorporation.²

The initiation stage occurs in the life of an innovative project when local school officials conceive and formulate plans, seek resources and make decisions


about which projects they should select and support.\(^1\) In the initiation stage, there seem to be two types of motives at work—"opportunism" (where the district's quest was motivated by the availability of funds) and "problem solving" (where the district, sensing real needs for change, tried to deal systematically with its own adaptation to present realities and future prospects).\(^2\) The implementation process and project outcomes were found to be directly affected by the dominance of the motive in the initiation stage.\(^3\)

Hoyt in 1972 identified ten action steps which must be undertaken if career education is to become a reality. The action steps in the earliest phases are devoted to establishing the preconditions required for the concepts and innovative processes to gain a footing. In the first phase, the emphasis is on defining the goals and developing a strategy for selling the program as well as identifying the "shakers and movers" who can make the program a success.\(^4\) The second phase is given to organizing the resources

\(^1\)Berman and Pauly, Factors Affecting Change, Vol. II, p. 3.

\(^2\)Berman and McLaughlin, Implementing and Sustaining Innovations, Vol. VIII, p. 11.


\(^4\)Hoyt et al., Career Education, What It Is, p. 151.
in preparation for a program of action.¹

In a report summarizing recommendations appearing in the final performance and evaluation reports of eighty-one career education programs funded by the then U.S. Office of Education during 1976, program planning was one of the nineteen general categories highlighted. Participants stated that the results from student and teacher pre-program surveys can provide a good base for program planning.² Also stated was the recommendation to assess the needs and milieu of the community before investing major funds or efforts to any aspect of the program.³

In the implementation stage, the project confronts the reality of its institutional setting, and project plans must be translated into practice.⁴ Many innovative projects fail or are disappointing because they are not implemented according to plan. The issue of implementation is often more subtle and complicated than mere fidelity to pre-designed means for attaining specific educational goals.

¹Hoyt, et al., Career Education, What It Is, p. 151.


³Bonnet, p. 73.

Implementation, therefore, is the change process that occurs when an innovative project impinges upon an organization.¹

A project from the Research and Development Center for Teacher Education at the University of Texas at Austin involved the initial empirical verification of a model that describes the process of change in terms of the individuals involved. This model, the Concerns Based Adoption Model (CBAM),² speaks to the process of innovation adoption from both the organizational and individual perspectives. In the CBAM, innovation adoption is viewed as a highly personal experience, a process through which individual teachers move in ways and at rates different from other teachers.³ According to the CBAM, innovation adopters develop along two important dimensions as they implement an innovation: in the kinds of concerns they have about the innovation; and, in their skill and sophistication in


²G. E. Hall, R. C. Wallace and W. F. Dossett, A Developmental Conceptualization of the Adoption Process within Educational Institutions (Austin, Texas: Research and Development Center for Teacher Education, University of Texas, 1973).

use of the innovation.\textsuperscript{1} It is proposed that with assessment information about concerns and use, managers of change can be more effective in facilitating innovation adoption.

Implementation variables have long been recognized as having important implications for analysis and interpretation of outcome data. CBAM research is based on the assumption that the primary unit of adoption is the individual classroom teacher.\textsuperscript{2} The individual innovation user also serves as the primary source of analysis since experience has demonstrated that asking more remote sources about the use or nonuse of an innovation by their faculty is highly precarious.\textsuperscript{3} In the CBAM model, eight Levels of Use of the Innovation have been identified and operationally defined.\textsuperscript{4} The content of the Levels of Use (LoU) dimension is the behaviors of innovation users and nonusers.

\textsuperscript{1}Loucks and Hall, "Assessing and Facilitating," p. 18.


\textsuperscript{3}Berman and Pauly, Factors Affecting Change, Vol. II.

\textsuperscript{4}Levels of Use (LoU): Level O-Non Use; Level I-Orientation; Level II-Preparation; Level III-Mechanical Use; Level IVA-Routine; Level IVB-Refinement; Level V-Integration; Level VI-Renewal (Susan Loucks, Beulah Newlove, Gene Hall, Measuring Levels of Use of the Innovation: A Manual for Trainers, Interviewers, and Raters [Austin, Texas: Research and Development Center for Teacher Education, University of Texas, 1975], p. 8.
The focus is not on how they feel, but on what they do in relation to the innovation.\footnote{1}{Hall and Loucks, "A Developmental Model," p. 265.}

The term "incorporation" was used in the Rand study (1975) to denote the final stage in innovation—when an innovative practice may lose its "special project" status and become part of the routinized behavior of the local education agency.\footnote{2}{Berman and Pauly, \textit{Factors Affecting Change}, Vol. II, p. 4.} Incorporation represents the most serious commitment on the part of the district, as outside "seed money" is withdrawn and decisions must be made not only whether to continue, but also what components of and on what scale a project should be continued within the district.\footnote{3}{Berman and others, \textit{Factors Affecting Implementation}, Vol. VII, p. 8.} Rand researchers believed this decision may involve more than the success or failure of the project during its trial period. Economic, political, and organizational pressures and constraints may play major roles in determining the innovation's future.\footnote{4}{Berman and McLaughlin, \textit{Implementing and Sustaining Innovations}, Vol. VIII, p. 19.}
Review of Research Studies Related to Educational Exemplary Practices

This section is organized into five sections. The first examines the context for research on the diffusion of educational innovations. The second relates research findings to the administrative techniques and organizational arrangements which influence the degree of success of an exemplary project. The third and fourth present the issues of continuation and "seed money". The fifth reviews specific studies on vocational education exemplary projects promoting career education and career education projects.

The Research Context

The research findings on the effectiveness of demonstration sites are inconclusive. One of the more extensive studies of demonstration sites was conducted by House in 1970. This study of twenty demonstration centers of the Illinois Gifted Program included a sample of 1100 teachers and administrators. House found:

The fact that visitors valued the demonstration programs highly had little relationship with later adoption. Situational constraints in the adopting district seem to be of greater importance than the intrinsic characteristics of the demonstrated program or the process demonstration itself.¹

The recommendations from this study suggest several variables for examination. Among them are: the location of the demonstration center; the selection and control of staff; and the mode of operation.

Variables perceived to be critical to the successful use of tested demonstrations lack empirical documentation. Rogers and Shoemaker (1971)\(^1\) have assembled a list of generalizations about the diffusion of innovations. The supporting information for many of those generalizations specifically mention the use of demonstrations as a device for encouraging the use of innovations. The studies conducted by Development Associates, Inc. (1975)\(^2\) and the Rand Corporation (1975)\(^3\) also indicate difficulty in collecting empirical documentation at the local level via final reports of exemplary projects.

The Conceptual Model

The conceptual model underlying the present study focused on the administrative techniques and organization

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arrangements which influence the degree of success of an educational exemplary project. Success is interpreted as the degree of continuation on-site and the transportability of project results to other sites.¹

Numerous factors influence the stages of a demonstration or exemplary project: initiation, implementation, and continuation. The conceptual model related the implementation objectives to the end purpose of an exemplary project: (a) continuation at the sites and (b) transportability to other sites.² Categories related to the factors of continuation and transportability were:

(1) characteristics of the community; (2) characteristics of the school system; and (3) project organization including project implementation strategy, dissemination of information and technical assistance.³

The researcher of this study was primarily interested in the factors which occurred during the implementation of the funded projects. It was assumed these points would have the greatest potential for influencing the management and organization of an exemplary project. The factors

¹Hull and Bina, The Influence of Selected Organizational Variables, p. 6.

²Hull and Bina, The Influence of Selected Organizational Variables, p. 8.

³Hull and Bina, The Influence of Selected Organizational Variables, p. 8.
related to school district demographics and the community would have less potential for making a difference in the implementation of the CA&E grants or any other exemplary educational project.

(1) Characteristics of the community are important for the innovative project to succeed. The relationship between the local education agency and the community is likely to influence the probability of success of a project, and particularly a career education project stressing the community involvement.

In 1974 Rothman\(^1\) cited the importance of the quantity and quality of the school and community relationship. Rothman indicates the increased probability of success as the quality and quantity of interactions increase as well as where community support of the specific program increased.

Published results of the exemplary funded Title III projects also point out other related information of the community and continuation. The profile of the community more likely to adopt a Title III project was one that was more likely to recruit its superintendent from outside the system and was considered by its superintendent to be more

\(^1\)Jack Rothman, Planning and Organizing for Social Change (New York: Columbia University Press, 1974).
openminded and supportive of new ideas.\(^1\) Involvement in the project's formulation and operation was also a significant factor in the project's success. The best record for innovation and for continuation was experienced by projects in which students and school board members were meaningfully involved.\(^2\)

Hearn reported urban projects had higher continuation rates, cost more per pupil, had significantly more projects with higher percentages in budgets for training, less projects with higher budgets for dissemination, and more with higher evaluation budgets. Hearn went on to recommend that since rural projects were more likely to be discontinued, states should provide more technical assistance and perhaps a longer project period to rural applicants.\(^3\)

As the same researcher examined the adoption rate of Title III innovations after the end of federal funding, the effects of social system variables on continuation were studied. He found that in school districts with higher educational levels more projects were expanded and were continued. Communities with higher family incomes had a slightly greater percentage of continuations. Where

\(^1\)Norman Hearn, "The Adoption Rate of Title III Innovations After the End of Federal Funding," *Educational Technology*, X (March 1970), 43-45.

\(^2\)Hearn, pp. 43-45.

\(^3\)Hearn, pp. 43-45.
communities went outside their systems for superintendents, they were more successful with continuations. Almost half of the discontinued projects were in communities that had hired all of their last three superintendents from inside the system. The greater number of innovations tried in the past by the school district, the more likely the adoption of the project. The same was true of communities rated "open-minded" and "supportive" by the superintendent.¹

(2) The characteristics of the school system have multiple and sometimes conflicting influences on the exemplary project. Undoubtedly much of the behavior exhibited by a school staff is the result of organizational constraints placed on them by their environment. Sieber² has written a succinct statement of distinctive features of the educational system influencing innovation in school systems. Sieber identified four factors that contribute to slow acceptance of new ideas: Schools are vulnerable to the pressures exerted by representatives of community groups. Frequently these pressures are directed towards separate and conflicting goals. This leads to a condition of goal-diffuseness in most schools. The teaching staff

¹Hearn, pp. 43-45.

serve in quasi-professional roles that do not allow control of their own destiny. And, finally, the degree of form control is likely to influence the adoption of an innovation in school systems.

The size of the school district is an important factor to consider when implementing a demonstration project. The larger the district, the more likely the demonstration project is to have the potential for mobilizing resources necessary for a successful demonstration project. This statement was supported by Brickell\(^1\) and substantiated by Baldridge and Burnham.\(^2\) Size was an influential factor in the establishment in the agricultural occupations curricula in high school programs.\(^3\) Zaltman, Duncan and


\(^3\)David L. Williams and William L. Hull, Personal and Situational Variables which Inhibit or Stimulate the Adoption of Agricultural Occupations Curricula as an Innovation in Vocational Agriculture by Institute Participants (Stillwater, Oklahoma: Oklahoma State University Research Foundation, September 1968).
Holbek\(^1\) cite the degree of formalization and centralization of the school organization as factors which influence the adoption of an innovation in school systems. According to Vroman and Watson,\(^2\) the higher in the organizational structure project involvement, the higher the probability of success. The history of success and/or failure of past innovations is likely to influence the behavior of the staff. The willingness of top administrators in a school system to endorse the exemplary projects appears likely to influence the acceptance of the project by those it is intended to serve. The influence of key school administrators to the success of a project is supported by a number of studies. Brickell\(^3\) in his study of New York state education agencies named the school administrators as one of the most important persons to be convinced of the need for a change in the school system. The Rand Corporation Study of 1975\(^4\) indicated that a higher degree of administrative


\(^3\)Henry M. Brickell, *Organizing New York State for Educational Change* (Albany: University of the State of New York, State Education Department, 1961).

\(^4\)Rand, *Federal Programs Supporting Educational Change*. 
support, particularly from the building principal, would increase the probability of success of the project. Hull and others\(^1\) found a high degree of relationship between the formal authority vested in a position held by an administrator and his opinion leadership within the organization. A study of education faculty members conducted by Kazlow and Giacquinta\(^2\) found status variables such as administrative rank to be more important than personality variables such as openmindedness in explaining receptivity to innovations.

In examination of attributes of superintendents that experienced successful adoptions, it was found that the central office leader was more likely to have a doctorate, have been born in a rural area, moved more often, attended more out-of-state meetings, and though younger may still have had more experience as a superintendent. If the superintendent regarded himself as an "innovator," he had a greater continuation rate, though his self-perceptions as either a "liberal" or "conservative" did not relate to success.\(^3\)

\(^1\) Wm. L. Hull and Others, *Opinion Leaders in the Organizational Structure of Two State Divisions of Vocational and Technical Education*. Research and Development Series No. 82 (Columbus, Ohio: Center for Vocational and Technical Education, Ohio State University, 1974).

\(^2\) Carole Kazlow and Joseph B. Giacquinta, "Faculty Receptivity to Organizational Change" (Paper presented at the Annual Meeting of the American Research Association in Chicago, April, 1974).

\(^3\) Hearn, pp. 43-45.
A summary of the available research on the use of innovations in schools by Giacquinta concluded with a theoretical framework very similar to the conceptual framework developed by Hull and others. The properties of the schools as consumers of demonstration projects are powerful forces to be recognized. Incentive must be identified that will allow an orderly assimilation of the demonstration project into school activities. The implementation of exemplary projects in school districts must recognize and work with these forces which impact on school events and activities.

(3) The project organization factors, implementation strategies, and dissemination activities are of interest to this study. The ability of the school staff to launch a concerted, programmatic demonstration is likely to influence the use of exemplary materials and activities. The demonstration project staff must present a unified image to other professionals within the school and the school district as well as to the visitors from other

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educational settings. Pincus\(^1\) poses three factors as determinants of innovation in schools: bureaucratic safety, responses to external pressure; and approval of peer elites. It is necessary for demonstration project staff to project a sense of commitment and approval of the materials and activities being demonstrated. Communication of such beliefs should be conveyed frequently to school staff and to the community throughout the duration of the project.

Staffing patterns are likely to indicate a great deal about the commitment of the administration to the demonstration project. A recent study by Cohen and Bredo of organizational change in schools suggests:

The critical issue for further research lies in the precise nature of the working relationships between staff members. . . . our data analysis revealed that when we inquired about the precise way team members worked with each other and the way they had divided their labor, we were able to make the most powerful predictions of all.\(^2\)

Specifically, Hetzel and Barnard\(^3\) indicated that the greater the percentage of full-time staff, the more likely the


program is to succeed. Demonstration projects must be organized in an efficient manner allowing project staff to fulfill expectations for their roles in the school. McCaslin and others,¹ however, indicate the advantages of using part-time staff members to influence the success of the project.

A survey for the NDN (National Diffusion Network) Reporter in 1979 substantiated several major evaluations conducted in recent years. Many respondents noted, for example, that new projects cannot be imposed on schools or teachers. Administrative commitment is important, but teachers must be involved and enthusiastic about the project. Teachers need training, a long term commitment from administrators and the follow-up assistance of the D/D (Developer/Demonstrator). Comments from the respondents highlighted the necessity for enthusiasm and competency to go hand in hand along with committed staff. While one research study cited the recommendation of recognition to staff participating in an exemplary effort, this survey pointed out several things which may cause a successful project to fail. They were: departure of originators of the project from the district; too much success, such as

¹Norman L. McCaslin, Kay Adams, and Charles J. Gross, An Evaluation of the Resource Development Unit of the Kentucky Bureau of Vocational Education (Columbus, Ohio: Center for Vocational Education, Ohio State University, July 1976).
the excelling of experimental slow students over regular students; teachers chided by colleagues for "working too hard"; administrators overburdening the successful teachers by assigning them all of the school's difficult students. When asked the solution to these problems, the respondents called for CITEF (Commitment, Involvement, Training, Enthusiasm and Follow-up)—plus good communications.¹

The amount of technical assistance provided by the project staff to potential users of the materials and activities being demonstrated could determine the ultimate success of the project. Brickell² enumerated a number of characteristics of the adopting setting that he believed to be important to the continued use of educational innovations. Among these factors are listed equipment, materials, facilities, and the capability of evaluating the innovation being demonstrated. The need for resources and use of acceptable implementation techniques were factors identified as important to the use of innovations in school settings.³

¹NDN Reporter: A Bimonthly Newsletter about the National Diffusion Network, No. 4, September/October 1979, 6-7.

²Brickell, "Alternative Diffusion Strategies."

Continuation

Continuation at the funded site is the measure of success for demonstration sites used in this study. Continuation is conceptualized as the use of materials and activities after the termination of outside funding.¹

The issue of continuation, however, has received perhaps even less attention from theorists and analysts than the implementation of innovations. Aside from the important concept of routinization, the social science literature has little to say about what happens to innovations when they are no longer new or "special" or experimental. Similarly, the "seed money" approach in federal policy either simply ignores the issue or assumes a pseudo-rationalistic model of school district behavior—namely, that once an innovation has gone through its federally supported trial stage, the district will discard those innovations that failed and adopt those that worked.

A cursory examination of continuation reveals the federal model to be both simplistic and inaccurate. For example, a study by the Ford Foundation suggests that even successful innovations have a way of disappearing after several years.² It cannot be assumed, then, that even when

¹ Hull and Bina, p. 4.
federal "seed money" leads to successful projects, they automatically "take root."

Most continued projects follow one of two patterns. First, some projects were isolated, in that district administrators simply left the projects up to school level staff. These isolated changes face a precarious future, threatened by staff turnover, principal turnover, principal transfers, and financial pressures.¹

The second pattern of continuation was pro forma, in that district officials formally decided to continue the project but teachers did not use project-related activities extensively in their classrooms.²

In contrast to these unstable patterns, a minority of projects in the Title III study sample became institutionalized—that is, project-related changes became integrated into regular operations at both the district and classroom levels. These projects shed their "special" status and replaced practices that existed before the projects began.³

A few studies have addressed this critical measure.

¹Berman and Others, Factors Affecting Implementation, Vol. VII, p. xi.

²Berman and Others, Factors Affecting Implementation, Vol. VII, p. xii.

In 1970 Hearn conducted a national study of the Elementary and Secondary Act Title III educational programs and found fifty to eighty-five percent of the programs continued, depending upon how the results were summarized. Many of these classified as "continuing" were being conducted at a lower level budget, services, or other indicators of project size than had been originally funded.

Surprisingly, discontinued projects, on the average, had significantly larger budgets for each of the following: training or retraining of teachers, evaluation and dissemination. This study affected OE's policy of local dissemination activities by causing program officers to take a closer look at dissemination budgets. The discontinuance of high-cost training projects is explained partially by the fact that projects which retrained teachers and staff were not likely to be continued after the training was completed. The discontinuation of projects with costly evaluation components may be explained by the possibility that the evaluation type projects were either too technical for local administrators to understand or that such evaluations produced results which found that the program was not significantly better than older approaches.¹

Whatever the case, the impact of the four hundred million dollars invested in Title III programs to stimulate

¹Hearn, pp. 43-45.
innovation in education was dulled by this less-than-optimum continuation of these federally-financed programs. This particular study of the Title III programs has been criticized as lacking validity because school superintendents were used as the respondents in the mail questionnaire. Also, the Hearn study was conducted the third year of a three-year program; it is likely the continuation rate would have been lower if the study had been conducted after all outside funding had ended.

The duel level of effective decision-making in school districts is relevant to continuation. District level decisions to continue a project are not self-executing; they depend on decisions and preferences at the school and classroom level.

Berman and others found that the more central an innovation was, the more likely it was to be continued by the district using its own resources. Projects with high district priority were likely to be continued even in cases when they had not been relatively successful during their temporary federal funding period when they were expensive for the district.¹ Ancillary projects which were opportunistic efforts tended to be add-ons to the district

practices and were not likely to be continued.\(^1\)

The follow-up evaluation of the exemplary projects in the fifty sites conducted by Development Associates\(^2\) indicated continuation was frequently conducted at a lower level of budget and services than during the federally funded time period. The study was conducted in some sites during the last year of federal funding.

In a study conducted by Brickell and Aslanian on six federally funded projects, ten related components the local education agencies kept or expanded as they "learned to live on hard money" were:

1. Central office endorsement of career education.
2. Career education leaders and an identifiable project staff.
3. The idea of infusion, particularly for easy-to-infuse subjects like social studies.
4. The idea of using the community—especially trips and speakers.
5. The practice of developing/adapting materials locally—both to get materials and to get teachers involved.
6. The CCEM (Comprehensive Career Education Model) units as valuable sources of break-apart components.
7. The practice of putting useful materials into teachers' hands.
8. Direct assistance to individual teachers—a shift rather than a continuation or expansion.

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9. Skills in project management.
10. A sense of LEA leadership in career education.

Seed Money

In the discussion related to the commonality of "seed money" for the first group of schools and the affect on local projects, the researcher referred to federal research. All the federal programs had funded some successfully implemented projects as well as dismal failures and many projects in between. The difference between success and failure depended primarily on how school districts implemented their projects, not on the type of federal sponsorship.

Similarly, "more" money supplied by federal funds did not necessarily purchase those things that mattered: it did not buy, for example, more committed teachers, more effective project directors, more concerned principals, and so on. In other words, project outcomes reflected not the amount of funds available, but the quality and behavior of the local staff.  

This is not to say that "federal money doesn't matter." Federal seed money allowed some districts to

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1 Brickell and Aslanian, "Learning to Live," npn.

undertake activities that their staff were anxious to pursue but that could not be supported out of district funds. Moreover, federal funding has bestowed legitimacy on local projects and given them the aura of "special status" which can provide some measure of "protection" for politically controversial or pedagogically untested educational practices.¹

Recommendations for Title III federally funded projects called for the federal officials to recognize that local commitment of funds during the life of the project is predictive of success. Hearn stated that the state education agencies and USOE should consider requiring some financial commitment to the project during the second and/or third year of the project.² In the case of the Career Awareness and Exploration (CA&E) grants, the local education agencies were required to support their projects on an ascending level for the three year duration of the grants.

Few districts in the Rand study sample planned for the long-term stability of projects. The end of outside funding generally resulted in a reduction of resources, particularly expensive ones. Many districts complained of

¹Berman and Others, Factors Affecting Implementation, Vol. VII, p. 76.

²Hearn, pp. 43-45.
insufficient resources to carry on project activities, although the financial requirements for project continuation could have been foreseen and planned for from the initiation stage of the project. Instead, budget and personnel decisions typically perpetuated the "special project" status of innovations, thereby leaving them particularly vulnerable to the financial and political fortunes of the district.¹

Six school districts participated in the CCEM (Comprehensive Career Education Model) for two years. Of special interest are the ten project components those local education agencies dropped or reduced when their outside funding ceased:

1. The amount of time, money, space, and other resources devoted to developing and promoting career education.
2. The high profile of career education, particularly in the community.
3. Outside contact with the five other LEAs, CVTE at Ohio State, universities, and other LEAs nationwide.
4. Outside services from CVTE, universities, and other organizations.
5. Formal in-service orientation and training sessions.
6. Administrative mandates for teachers to participate in career education.
7. Intense concern about guidance and placement, particularly the latter.
8. The CCEM curriculum units in their original highly-structured form.
9. The resource kits of materials accompanying the original CCEM units.

10. Formal evaluation performed either by insiders or by outsiders.¹

Studies of Vocational Education Exemplary Projects for Career Education and Career Education Projects

The following reports contain research findings on the same exemplary projects studied by the researcher for this study. However, all these reports, except Lee collected data prior to the completion of the first cycle of the federal funds. Their findings strengthen the results of this study.

Lee in the Project Baseline study² reported on the fifty-four exemplary projects which were scheduled to terminate prior to or during fiscal year 1974. Of the fifty-four projects, forty were reported to have had at least some impact beyond their school district, with twelve reporting extensive impact within their own state. Extensive impact was described as acceptance in a majority of the schools in the states which were using some or all of the concepts, materials, and other products developed by the funded agency.

One measure of success used in this study is the degree of continuation with state and local funds upon

¹Brickell and Aslanian, "Learning to Live," npn.

termination of federal funds. Thirty-six projects or sixty-seven percent of the fifty-four were continued at a level equal to or greater than during the federally-funded period and fifteen or twenty-eight percent reported reduced continuation.

The Project Baseline reported problems encountered by project directors including the erosion of continuity, local support and confidence during the initial funding periods due to the widespread problem of late funding; isolated cases of lack of support by non-project personnel; and lack of clearly defined goals and objectives. Additionally, the achievement of project goals within the time constraints was inhibited if planning had not occurred prior to funding.

The Rand Study\(^1\) focused upon the nature, permanence, and extent of educational innovations which have been associated with four federal programs. The findings relevant to the exemplary projects are reviewed here. The Rand study had two primary categories: (1) the process of innovation with three stages--initiation, implementation, and incorporation; and (2) the factors affecting implementation and continuation of educational innovations.

\(^1\)Rand, Federal Programs Supporting Educational Change.
The Rand findings indicated that the modes of the initiation stage were typically either opportunistic or problem-solving in nature. The projects which were successful in the implementation stage were characterized by mutual adaptation of innovations. Incorporation of project results occurred in a variety of forms. The projects which replaced existing practices tended to be incorporated more frequently than those projects which supplemented existing practices. Incorporation at the individual school building level was more likely to occur if an emphasis was placed on training for practical classroom issues and if the project used locally developed materials. Incorporation at the school district level was typically determined on the basis of whether the project was successful, affordable, important to the district's priorities, and politically acceptable. The opportunistic mode of initiation usually resulted in a negative determination, whereas a problem-solving mode resulted in a positive decision concerning incorporation.

The findings relevant to the implementation and continuation of educational innovations included three areas: project characteristics; institutional settings; and federal policies. Project characteristics such as implementation strategies and monitoring operations, influenced the success of the project. A receptive institutional setting was

\(^1\)Rand, *Federal Programs Supporting Educational Change.*
essential for a project to succeed. Factors such as true commitment by principals as well as top-level administrators influenced the success of the projects. Rand found that federal policies had little influence on implementation and continuation. In summary, the Rand study indicated that the success of the projects primarily depended on the local internal inputs rather than external inputs with the role of the principal being an important factor in continuation.

The Development Associates study of 1975\(^1\) investigated 50 sites of the exemplary projects. This study was completed prior to the termination of the federal funds in some sites; therefore, the determination of the degree of continuation was somewhat judgmental. The findings relevant to project management included three categories: project objectives, project management practices and organizational characteristics.

Development Associates reported that thirty-seven of the fifty projects or seventy-four percent operated at or below the intended funding level and that the elementary school level had the greatest degree of success. Little relationship was found between objectives and performance activities. Thirty-eight of the fifty projects

\(^1\)Development Associates, Inc., Evaluation of Vocational Exemplary Projects.
or 76 percent reported that they had a dissemination plan, however, only eighteen projects or 36 percent had the plan in written form. Nine projects or 18 percent reported that continuation would occur at a level greater than during the federal funded period; eight projects or 16 percent would have the same level; nineteen projects or 38 percent at a reduced level; and the remaining fourteen projects or 28 percent would not be continued.

In summary, the Development Associates study suggested that the most likely reasons for the limited success of the exemplary projects included a lack of clearly defined objectives, definitions, and managerial procedures at both the project and federal levels.

McCaslin and others studied sixty-one research and development projects in Kentucky to determine their impact on school systems. At least ten visits were made to local school districts. They found:

1. High impact projects use more objective data (tests, empirical data, etc.) to evaluate effectiveness while low impact projects use more subjective data (opinions, testimonials, site review teams).

2. High impact projects provide more adequate orientation for participants concerning their role in the project.

3. High impact projects allow project objectives to change during implementation.

4. High impact projects involve participants more fully in project planning.
5. High impact projects have more accessible planning documents, such as PERT or time effort charts and objectives.

6. High impact projects have less turnover of project staff.

7. High impact projects tend to be sponsored by organizations who have conducted prior research and development efforts.

8. High impact projects have more adequate support systems (secretarial, printing, graphics, etc.).

9. High impact projects have more directors from the district or regional level.¹

In a paper that was an outgrowth of a major study of the post-Comprehensive Career Education Model (CCEM) experiences under an NIE contract by the Stanford Research Institute and Policy Studies in Education, the researchers found:

1. Writing formal plans is unnatural behavior for LEAs; thus, they may not do what those plans say.

2. The creation of good, genuinely new career education concepts, objectives, curriculum outlines, and materials is slow and expensive and requires great talent.

3. Hard money goes for local salaries; only soft money goes for outside services, travel and novelties.

4. Adaptation is a mixed blessing, inasmuch as it may come from creativity or from arbitrariness or incompetence.

5. Face-to-face contact with teachers is highly desirable in promoting and sustaining career education in the classrooms.

¹McCaslin and Others, An Evaluation of the Resource, p. 76.
6. A sense of ownership of and identification with career education practices and materials as being either local inventions or local adaptations is important for teachers to acquire.

7. The secondary schools—particularly the senior high academic classrooms—are still uncrossed frontier for career education.

8. The logistics of substantial career exploration for all high school students in community work sites are extremely formidable and not yet successfully worked out.

9. Career learning has not been adopted by school authorities as something for which the school system will be held accountable.

10. The total CCEM experience would have had more effect on the six LEAs themselves if it had been less abrupt. The same amount of money and outside help, spread over a longer period of time, would have benefited them more.¹

**Summary**

The discussion on the national and state historical perspectives on career education provided the reader a summarized review of important events related to the statewide exemplary effort available to all Iowa public school districts. Career education does not "just happen." National and state initiatives were found to be necessary.

"Seed money" provided school districts the opportunity to solve local problems that district budgets could not accomplish. Outside funding also bestowed legitimacy on local projects and gave them the aura of special status. It

¹Brickell and Aslanian, "Learning to Live," npn.
should be remembered, though, that "seed money" cannot buy commitment of staff nor quality projects. The end of outside funding generally resulted in a reduction of resources, particularly expensive ones.

The research study findings reported in this chapter shed light on how innovation works and on the factors affecting educational change. The important phase of the change process is that of implementation strategies--where local decisions, explicit or implicit, on how to put the innovation into practice occur.

The factors affecting implementation and continuation were: educational methods, project resources, scope of project, implementation strategies, school organizational climate and leadership, characteristics of schools and attributes of teachers; district management capacity and support.
Chapter 3

METHODOLOGY

This chapter provides an overview of the procedures of the study beginning with its initiation in the spring of 1980 through its completion in the spring of 1981. The discussion includes the design of the study, the development of instrumentation, population and sample, and the data collection and analysis procedures.

Design of the Study

To determine the present status of career education in the first group of funded schools and another group of which never had any outside financial assistance, a framework outline was prepared along with appropriate premises that encompassed the four components related to career education program development. The four topical areas were administration, personnel, school and community relations, and curriculum.

Expert reviewers were used to examine the premises for each of the four components to determine if these four areas were likely to identify the present status of career education. Questions were then designed to relate to each
of the four areas and field testing was conducted to test the wording of the questions and format. Several modifications were made before the final questionnaires for each of the educational groups were written.

The expert reviewers were career education consultants in all fifteen Iowa area education agencies, state career education consultants in Kentucky and Alabama, six consultants in the Department of Public Instruction and an expert in measurement and testing. During the spring, summer and fall of 1980 they individually reviewed draft versions of the premises and then draft forms of the questionnaires and provided feedback.

Permission to carry out the study was secured from the superintendents of each of the thirty school districts. Permission to authorize the consultants in the Field Services and Supervision Section to distribute the questionnaire packets to the superintendents of the participating districts and collect the returned envelopes from the area education agency representatives was obtained from the director of that division.

The method of receiving the questionnaire packets, distribution and return was presented and discussed to each superintendent via the telephone. The week prior to the Supervision Consultants seeing the superintendent, a reminder telephone call was made to each superintendent.

A questionnaire instrument of forty-five basic
questions was utilized to seek the respondents' perceptions of the current status of career education. All questions related to the individual's knowledge and did not require research. The data generated by the surveys were tabulated and analyzed to test the hypotheses posed for the study.

Development of the Instrument

The data needed for this study of the current status of career education was collected from the two samples via questionnaires. The two samples were the funded school districts during the three consecutive school years of 1973-74, 1974-75, and 1975-76 and an equal number of non-funded school districts for the same time periods. The questions were directed to the four educational groups within the school district: superintendents, building administrators, counselors and teachers. Different personalized versions founded upon the same premises and outlines were written for each educational group.

All of the instruments were developed by the researcher based on searches of the literature, conversations with all fifteen career education consultants employed in the area education agencies, and personal experience in working with career education as a state education agency consultant. The search of the ERIC system yielded no potential instruments. Therefore, an original instrument was designed, field tested several times and revised. Reviewers were
selected from persons who have worked with career education in state departments and are experienced in instrument design and measurement. In all cases they had been associated with project activities, such as in-service, training sessions, curriculum development projects, etc. They were asked to critique the instruments with the following guidelines in mind:

1. Do the items flow like conversation?
2. Is jargon minimized?
3. Do the items deal with a single concept?
4. Are the items vague or ambiguous?
5. Are the items likely to be within the knowledge frame of reference of the respondent?

The instruments were submitted to the twenty-five expert reviewers and field tested. That information was used to revise the instruments and development of the final instrument used in the study.

The instruments were divided into four major parts: Administration-Section A, Personnel-Section B, School and Community Relations-Section C, and Curriculum-Section D. Each section included two or more categories dealing with the various aspects of career education program development. Each category, in turn, had one or more program indicators. Section A was composed of fifteen basic questions, Section B had eight questions, Section C had nine questions and Section D included thirteen questions (Questionnaire, Appendix A).
The arrangement of the instrument was intended to make it applicable to all levels of career education. This format was employed to avoid the need to separate curriculum sections for each student developmental stage.

The premise of each component in the survey, J-ASK Career Education Survey, is identified below:

1. Administration:
   A. Structure and Process:
      Administrators should be aware of the elements that are essential to the development and maintenance of career education programs. Both effective and efficient use of these elements depends upon the leadership abilities, the communications skills, and the planning, implementation, and evaluation processes used by local administrators, teachers, community representatives, and liaison personnel from the State Department of Public Instruction.
   B. Planning:
      Systematic planning is essential if career education programs are to be successfully implemented, upgraded, and properly maintained. The planning process should focus on active efforts to determine the needs of all students, staff and community. In addition, the planning process should contribute to the formulation of
district-level and building-level career education goals, the identification of necessary resources, and a determination of program implementation procedures.

C. Financing:
Adequate financial resources are required to implement and maintain a quality career education program within a local school district or in an individual school. The available budget should support the needs and priorities outlined within the district's long-range career education plan.

D. Facilities and Equipment:
Many career education activities can be conducted without specialized facilities and/or equipment. However, as students become more aware of their interests and aptitudes in relationship to potential careers, proper facilities, equipment and other related resources become essential to enhance their educational growth. A comprehensive career education program does require adequate facilities and equipment.

E. Program Evaluation:
The district should have a definite plan for the evaluation of its own career education program. Such a plan should be formally implemented in a
manner that will aid the district's staff in determining how well the total career education program is meeting the needs of students, the community, and the world of work.

2. Personnel:

A. Staff Qualifications:
The knowledge, ability, skill, and interest of the school's staff directly affect the quality of the educational programs which operate within the school. Since the staff plays such a significant role in dynamic, ongoing educational programs, it is important that all staff in career education programs be selected on the basis of their demonstrated knowledge, skill, and interest.

B. Staff Development:
Continuous professional staff development is a highly desirable element within all school or school district programs based upon the needs of the audience and current trends in career education. Well designed and fully implemented staff development programs should facilitate the ongoing exploration and development of career-related concepts applied to different educational areas/levels. In addition, staff development activities should help staff members identify
new career education resources, initiate better instructional techniques and strategies, and assist in the identification of systematic methods for integrating career education into all areas of the school's educational program.

3. School and Community Relations:

A. Advisory Committee:
Career education programs should reflect the needs of the occupational world and the community. Advisory committees can assist in representing these needs in planning and in keeping programs current with the requirements of the world of work.

B. Resources:
Adults within the community who are actively pursuing careers can share valuable and direct information with students who are exploring the world of work or preparing for a specific career. Students can gain realistic impressions of careers and occupations through direct contact with people throughout the immediate community.

C. Communications:
The career education program needs to provide for direct communication with all elements of the community it serves. The school staff plays
a critical role in the development of such communication.

4. Curriculum:
   A. Career Guidance:

   Career education programs should assist students become aware of a broad variety of careers, help them make tentative occupational decisions, and provide them with a wide range of career developmental tasks which include the attitudes and values required for productive citizenship. In this broad context, career guidance services are extremely important to all students at the career awareness, career exploration, and career preparation levels.

   B. Curriculum Design:

   All the district's instructional programs should have a direct relationship to career education concept development. The curriculum design should include the identification of program-level goals, objectives, and minimal student competencies, as well as outline procedures designed to encourage each student to participate in effective school and community based learning activities.

   C. Instructional Process:

   The instructional processes which are utilized
in delivering career education to students should seek to incorporate the many unique features and experience base of the school, community, and region into educational opportunities for all students. While many possible instructional processes may be used, interdisciplinary approaches offer significant potential when incorporated with the experience potential of the surrounding work environment.

D. Students:
The career education programs should be designed to provide all students with diverse opportunities to become aware of careers, actively explore different career areas and interests, and to prepare for employment or an opportunity for continued education in their chosen areas of interest.

Population and Sample

The population represented by the study were taken from the public school districts in Iowa. Thirty school districts were identified for the purpose of this study. Fifteen school districts comprised the first group of school districts to participate in the Career Awareness and Exploration (CA&E) grants for the consecutive school years, 1973-74, 1974-75, and 1975-76 inclusive. Another group of
fifteen districts which had not applied for the outside funding were then matched with the fifteen funded districts.

The non-funded school districts for this study were selected by a combination of first matching and then random selection. The following characteristics for matching were obtained from the Management Information Section of the Department of Public Instruction: geographic location, school district size, unique community characteristics such as an institution of higher education within the community, school building(s) in other communities, multiple attendance centers, and type of district organization in terms of grade levels in each attendance center. After the potential non-funded districts had been identified for possible matching with each funded school district, those district names were placed in "lottery pools" for drawing. The combination of first matching and then random selection was done to yield greater precision than would randomization alone.

The specific subjects in the funded school districts constituted two groups: $A_1$ the superintendents, building administrators, counselors and teachers employed for the 1973-74 school year through the 1979-80 school year. The other group, $A_2$ was the education related personnel hired after there was no outside funding for the 1976-77 school year and currently employed in the same district. Within the non-funded school districts there were no distinguished time
periods of employment, although the researcher utilized the same data source for potential participants.

The funded districts included similar numbers of administrators and counselors, but the number of potential teachers was over-represented. It was decided, therefore, to utilize the number of teachers in funded districts during the time period of SY1976-77 through SY1979-80. Potential teacher respondents for the first funding period, SY1973-74 through 1979-80, were decreased in number to match the second funding period respondents. An equal number was selected by random sample. For the sample of the non-funded school districts the researcher utilized the number of superintendents, building administrators and counselors available. For the teacher group, the researcher utilized the same number of samples as those in the funded school districts for each time period.

The sample for the funded school districts was composed of twelve superintendents, thirty-six building administrators, twenty-three counselors and five hundred forty teachers. The sample for the non-funded school districts was composed of fifteen superintendents, fifty-three building administrators, twenty-eight counselors and five hundred forty teachers.
Data Collection

The data for this study were drawn from responses of superintendents, building administrators, counselors and teachers, which focused on the premises of a career education program development. Each version of the study was personalized, but retained the same content as the premise upon which the questions were based.

The format of the questionnaire allowed the respondent to answer on each item of the questionnaire by circling one of the responses: "yes," "no" or "don't know." Because the number of questions, forty-five, was considered large, it was decided to provide a format that required minimum time for completion. Some questions had long answer sub-questions which the respondent was asked to complete if the answer section had been "yes."

The educational personnel of two different time frames (school year 1973-74 through school year 1979-80 and school year 1976-77 through school year 1979-80) constituted one sample of the study. To distinguish each of the educational groups in each time period, the questionnaires were printed on different colors of paper, i.e., bright orange represented the superintendents in the first time period, $A_1$, while the questionnaires for superintendents in the second time period, $A_2$, were printed on light yellow paper.

The matched sample for this study was the educational personnel in the non-funded school districts. Since
there were no designated time periods for the non-funded school districts, the questionnaires were printed on four other different colors of paper, one for each educational group of personnel.

A total of twelve different colors of paper were used: four different colors for personnel in funded districts for \( A_1 \) or "time period one"; four different colors of paper for personnel in funded districts for \( A_2 \) or "time period two"; and, four different colors for total personnel in the non-funded districts. This color coding system facilitated the hand coding of the questionnaires for key punching.

The methodology used to distribute and collect the data is described below:

A. Distribution of questionnaires:

1. Each questionnaire was coded by school name, building number, and respondent number. Attached to each questionnaire was a cover letter (Appendix B) signed by the doctoral student and advisor along with a return envelope. The respondent's name was printed on the flap of the return envelope. Each envelope had the name of a designated representative at an area education agency to whom the completed questionnaires should be returned.

2. The questionnaires for each building were
assembled into a packet. Directions were included with each packet of questionnaires asking the building representative to distribute the questionnaires and encourage the completion and return of the questionnaires to the designated representative within a week of receipt.

3. The packages of questionnaires were delivered by the Supervision Consultants at the monthly superintendents' meetings at the various area education agencies.

B. Collection of the questionnaires:

1. The returned questionnaires to the area education agency representatives were stored until the Supervision Consultants picked up the boxes at the next monthly meeting.

2. Since the Supervision Consultants see the superintendents once a month, a period of four weeks transpired between the time the instruments were delivered and picked up. The superintendents were telephoned the week prior to receiving the questionnaires, the day after the questionnaires had been delivered and once during the remaining time period.

3. After the questionnaires had been returned an individual handwritten note was sent to each superintendent thanking him for his cooperation
and support. The researcher asked that the superintendent extend that appreciation to the other members of the administrative team as well as the staff that responded.

The procedure of utilizing the services of the Supervision Consultants was a very cost effective method of delivering and collecting questionnaires for a follow-up study. Due to the four week time frame between distribution and collection, the researcher was not able to conduct follow-up telephone calls two weeks after the questionnaires had been delivered to those who did not return the questionnaires.

The response rate for the study was very high. One thousand two hundred forty-seven (1247) questionnaires were distributed through the Supervision Consultants during October and November 1980. Of this number, 1177 were returned and included in this study for a response rate of 93.5 percent.

**Analysis of Data**

The returned questionnaires were hand verified and coded so they could be key punched. The questionnaires were then scored, key punched, verified and stored on magnetic tape by the personnel in the Management Information Section of the Department of Public Instruction. Source data tapes were then processed by personnel in the Academic Computing
Facility at Drake University. The data were analyzed in order to reject or retain each hypothesis in the study.

For each individual a yes to no score ratio for each section of the questionnaire was tabulated. The mean ratios for the superintendents, principals, counselors and teachers were used for the various analysis. Therefore, the variance studied was the variance of individual ratios around the mean ratio for each group.

Hypothesis I which states there is no difference in the current status of career education in funded and non-funded school districts as perceived by school personnel in those districts received the statistical treatment of Student's t-test for independent sample. The hypothesis was tested by using the combined mean ratios of all respondents in the fifteen funded school districts and all respondents in the fifteen non-funded school districts for each of the four sections of the instrument: administration, personnel, school and community relations, and curriculum. Four t-tests for independent samples were calculated and the resulting values compared to the .05 and .01 critical value as tabled. The total number of "don't know" responses was reported and discussed.

To test hypothesis II which states there are no differences among the perceptions of the four groups of school related personnel concerning the current status of career education in school districts which received funding, a
one-way analysis of variance was used to facilitate the comparison of the four educational groups to be examined: superintendents, building administrators, counselors and teachers. The one-way analysis of variance was used to determine differences among the mean ratios of the four groups of educational personnel for each of the four sections of the instrument. After a calculated value has been determined, that calculated value will be compared against a .05 and .01 critical value as tabled. The total number of "don't know" responses was reported and discussed.

To test hypothesis III which states there are no differences among the perceptions of the four groups of school related personnel concerning the current status of career education in school districts which did not receive funding, a one-way analysis of variance was used to facilitate the comparison of the four educational groups to be examined: superintendents, building administrators, counselors and teachers. The one-way analysis of variance was used to determine differences among the mean ratios of the four groups of educational personnel for each of the four sections of the instrument: administration, personnel, school and community relations and curriculum. After a calculated value has been determined, that calculated value will be compared against a .05 and .01 critical value as tabled. The total number of "don't know" responses was reported and discussed.
Hypothesis IV which states there is no difference in the current status of career education in funded school districts as perceived by school related personnel who were and still are employed at the time when funding occurred and those who have been employed and are still employed since the funding ceased received the same statistical treatment as hypothesis I, the Student's t-test for independent samples. The two groups to be compared are those personnel employed in the school districts at the time funding occurred and those personnel employed when the funding ceased. The hypothesis was tested using the combined ratio means of all respondents in the first time period for each section of the questionnaire (administration, personnel, school and community relations, and curriculum) compared with the combined ratio means of all respondents in the second time period for each of the four sections of the questionnaire. The calculated value was compared against a .05 and .01 critical value as tabled.

This chapter presented the methodology employed to conduct this study. Presented were particulars on the instrument utilized to gather the data, data collection, population and sample as well as analysis of the data. The next chapter explains the findings of the research.
Chapter 4

FINDINGS

Educational personnel in the first group of school districts which participated in the Career Awareness and Exploration (CA&E) grants and another group of randomly matched school districts which had never received any outside funding were sent questionnaires to identify the perceptions of the superintendents, principals, counselors, and teachers on the status of career education (Appendix A).

The first section of the questionnaire, "Administration," investigated the organizational arrangement of the school district, the planning phase of the change process, finance, facilities and equipment, and program evaluation. To determine the status of the Administration premise in career education program development, fifteen basic questions plus twenty-nine sub-questions could have been answered.

The second section of the questionnaire, "Personnel," questioned the respondents' perceptions of staff qualifications and staff development related to career education. Eight basic questions plus nine sub-questions constituted Section B.

The third section of the questionnaire was "School and Community Relations." The three indicators for gaining
the perceptions of the educational personnel were utilization of an advisory committee, human resources in the community, and communications with the community. Nine basic questions and one sub-question were listed.

The fourth section of the questionnaire was school "Curriculum." Perceptions were elicited from the respondents on the career guidance program, curriculum design, instructional process and career education opportunities for students. Thirteen questions were included in this section along with ten sub-questions to gain the perceptions of the personnel on the overall status of career education as an integral part of the curriculum.

A report of all the responses by the answer categories of "yes," "no," and "don't know" are shown on Table 1. The table organization includes the four sections of the questionnaire, the four educational personnel that constituted the respondents for the study, and the two sample groups of funded and non-funded school districts. The funded district sample is further defined as funded-one and funded-two in order to facilitate the "time of employment" data for the fourth hypothesis. The responses in the cells represent the number of people that identified a given response multiplied by the number of that response in each questionnaire section.

Using the data in Table 1 to aggregate all questionnaire sections and responses by category, one would find
Table 1

Report of all Yes, No, and Don't Know Responses for all School District Personnel on all Questionnaire Sections

<table>
<thead>
<tr>
<th>Questionnaire Sections</th>
<th>Funding Period One</th>
<th>Funding Period Two</th>
<th>Funded Total</th>
<th>Non-Funded Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Don't Know</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School District Personnel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superintendents</td>
<td>220</td>
<td>78</td>
<td>153</td>
<td>19</td>
</tr>
<tr>
<td>Principals</td>
<td>483</td>
<td>187</td>
<td>437</td>
<td>160</td>
</tr>
<tr>
<td>Counselors</td>
<td>413</td>
<td>131</td>
<td>358</td>
<td>32</td>
</tr>
<tr>
<td>Teachers</td>
<td>3427</td>
<td>968</td>
<td>6019</td>
<td>3312</td>
</tr>
<tr>
<td>Total responses</td>
<td>4543</td>
<td>1364</td>
<td>6967</td>
<td>3523</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School District Personnel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superintendents</td>
<td>89</td>
<td>24</td>
<td>63</td>
<td>9</td>
</tr>
<tr>
<td>Principals</td>
<td>227</td>
<td>70</td>
<td>135</td>
<td>87</td>
</tr>
<tr>
<td>Counselors</td>
<td>166</td>
<td>64</td>
<td>122</td>
<td>12</td>
</tr>
<tr>
<td>Teachers</td>
<td>1634</td>
<td>687</td>
<td>1743</td>
<td>1690</td>
</tr>
<tr>
<td>Total responses</td>
<td>2116</td>
<td>845</td>
<td>2063</td>
<td>1798</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School and Community</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superintendents</td>
<td>71</td>
<td>20</td>
<td>19</td>
<td>5</td>
</tr>
<tr>
<td>Principals</td>
<td>176</td>
<td>26</td>
<td>68</td>
<td>67</td>
</tr>
<tr>
<td>Counselors</td>
<td>176</td>
<td>13</td>
<td>31</td>
<td>8</td>
</tr>
<tr>
<td>Teachers</td>
<td>1580</td>
<td>232</td>
<td>728</td>
<td>1567</td>
</tr>
<tr>
<td>Total responses</td>
<td>2003</td>
<td>291</td>
<td>846</td>
<td>1647</td>
</tr>
</tbody>
</table>

4
<table>
<thead>
<tr>
<th>Questionnaire Sections</th>
<th>School District Personnel</th>
<th>Type of School Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Funding Period One</td>
<td>Funding Period Two</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superintendents</td>
<td>160</td>
<td>32</td>
</tr>
<tr>
<td>Principals</td>
<td>301</td>
<td>57</td>
</tr>
<tr>
<td>Counselors</td>
<td>293</td>
<td>50</td>
</tr>
<tr>
<td>Teachers</td>
<td>2380</td>
<td>819</td>
</tr>
<tr>
<td>Total responses</td>
<td>3134</td>
<td>958</td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td>11796</td>
<td>3458</td>
</tr>
</tbody>
</table>
a total of 42 percent "yes" responses for the funded school districts and a total of 35 percent "yes" responses for the non-funded school districts. The "no" responses for each sample were 13 percent for the funded districts and 16 percent for the non-funded districts. The largest number of responses were in the "don't know" selection with 45 percent such responses from the personnel in the funded districts and 49 percent of the same choice by the non-funded school district personnel.

Of the four personnel groups, teachers tended to select "don't know" as a response more frequently than any of the other three groups. This was particularly true in the Administration and Personnel questionnaire sections answered by funded district personnel. A high number of "don't know" or "no" responses by the personnel in the non-funded districts was anticipated. It should be noted, also that since the teachers were the largest role group in this study, their responses tended to skew the results when total responses were used for data analysis.

A further review of Table 1 indicates that superintendents, principals, and counselors had a lower percentage of "don't know" responses than the teachers. The response "no" had the lowest percentage of responses by the funded and the non-funded personnel.

All statistical analysis which follow do not include the "don't know" responses. The yes to no mean ratios for
respondent groups are reported. Hereafter that ratio is referred to as Y/N ratio. Table 2 shows the Y/N ratios for each of the educational groups in the funded and non-funded school districts by sections of the questionnaire. Also identified are the number of respondents for each of the personnel groups.

The results of examining the first hypothesis of testing the difference in the current status of career education in funded and non-funded schools are summarized in Table 3.

The first comparison was between the funded and non-funded district personnel for Section A, Administration. The difference was highly significant indicating that the personnel in the funded school districts perceived their districts to have achieved the Administrative indicators for development of a career education program to a greater degree.

The second comparison was between the funded and non-funded district personnel for Section B, Personnel. According to the data, no difference was noted between the two sample means, indicating that staff qualifications and staff development were not perceived to be really different in the funded and non-funded districts.

The third comparison was between the funded and non-funded district personnel for Section C, School and Community Relations. The data showed no difference. The
<table>
<thead>
<tr>
<th>Questionnaire Sections</th>
<th>Mean Number of Respondents</th>
<th>FUNDED SCHOOL DISTRICTS</th>
<th>NON-FUNDED SCHOOL DISTRICTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Administration</td>
<td>N =</td>
<td>12</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>X =</td>
<td>6.03</td>
<td>5.08</td>
</tr>
<tr>
<td>B Personnel</td>
<td>N =</td>
<td>12</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>X =</td>
<td>4.08</td>
<td>4.94</td>
</tr>
<tr>
<td>C School and Community</td>
<td>N =</td>
<td>12</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>X =</td>
<td>2.42</td>
<td>1.54</td>
</tr>
<tr>
<td>D Curriculum</td>
<td>N =</td>
<td>12</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>X =</td>
<td>3.00</td>
<td>1.83</td>
</tr>
</tbody>
</table>
Table 3

t-Values for Comparing Y/N Ratios Between Funded and Non-Funded School Districts by Questionnaire Section

<table>
<thead>
<tr>
<th>Questionnaire Section</th>
<th>Funded Districts Mean Ratio</th>
<th>Non-Funded Districts Mean Ratio</th>
<th>t-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section A Administration</td>
<td>4.91</td>
<td>3.15</td>
<td>5.30**</td>
</tr>
<tr>
<td>Section B Personnel</td>
<td>2.87</td>
<td>2.88</td>
<td>0.09</td>
</tr>
<tr>
<td>Section C School and Community</td>
<td>1.98</td>
<td>2.17</td>
<td>1.22</td>
</tr>
<tr>
<td>Section D Curriculum</td>
<td>2.42</td>
<td>3.14</td>
<td>2.81**</td>
</tr>
</tbody>
</table>

N = 590  N = 587

**p<.01
funded districts did not indicate their efforts with School and Community Relations were better than the districts which did not receive financial assistance.

The fourth comparison was between the funded and non-funded district personnel for Section D, Curriculum. The difference was significant, but not in the direction expected. The personnel in the non-funded districts perceived themselves as better meeting the indicators of career guidance programs, curriculum design, instructional process and career education opportunities for students.

Table 4 presents ANOVA results among the questionnaire sections in the funded districts for superintendents, principals, counselors and teachers. The results in the table indicate there were no significant differences among the questionnaire sections for superintendents and counselors. Although the superintendent groups were not statistically significant, it is interesting to note that the superintendents had a high mean ratio ($\bar{X}$=6.03) for Section A, Administration, of the questionnaire. Given the number of "yes" responses presented in Table 1, it is likely that an increase in the sample size would have resulted in significant differences among the questionnaire sections for them.

There was significant interaction among the questionnaire sections for the principals ($p<.01$) and teachers ($p<.01$). Figure 1 presents the results of the follow-up
Table 4
ANOVA Results among Questionnaire Sections for Respondent Groups in Funded Districts

<table>
<thead>
<tr>
<th>Questionnaire Sections</th>
<th>Funded Districts</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Supt. Mean Ratio</td>
<td>Prin. Mean Ratio</td>
<td>Couns. Mean Ratio</td>
<td>Teacher Mean Ratio</td>
<td></td>
</tr>
<tr>
<td>Section A Administrative</td>
<td>6.03</td>
<td>5.08</td>
<td>4.70</td>
<td>4.88</td>
<td></td>
</tr>
<tr>
<td>Section B Personnel</td>
<td>4.08</td>
<td>4.94</td>
<td>3.71</td>
<td>2.66</td>
<td></td>
</tr>
<tr>
<td>Section C School and Community</td>
<td>2.42</td>
<td>1.54</td>
<td>2.20</td>
<td>1.98</td>
<td></td>
</tr>
<tr>
<td>Section D Curriculum</td>
<td>3.00</td>
<td>1.83</td>
<td>3.54</td>
<td>2.40</td>
<td></td>
</tr>
</tbody>
</table>

F=0.87  F=7.29**  F=1.84  F=51.18**

**p<.01
Figure 1

_t-Values for Y/N Mean Ratio Differences among Questionnaire Sections for Principals (N=36) in Funded Districts_
analysis for principals. Follow-up analysis with tests of mean ratios between all sections of the questionnaire responded to by principals revealed significant differences among all sections except when Section A, Administration, was compared with Section B, Personnel, and when Section D, Curriculum, was compared with Section C, School and Community Relations. However, the small number of principals involved (N=36), would dictate that these findings should be regarded with caution. Follow-up analysis utilizing t-tests of mean ratios between all questionnaire sections responded to by teachers, as displayed in Figure 2, reveal significant interaction. Thus, the data would indicate that teachers perceived all indicators of career education to be meeting the premises set forth in the questionnaire.

To examine hypothesis III related to non-funded school districts a one-way analysis of variance was used to test differences among the four questionnaire sections for each group of educational personnel. Table 5 presents ANOVA results among the questionnaire sections in the non-funded districts for superintendents, principals, counselors and teachers. The calculated ANOVA results indicate there were no significant differences among the means of the questionnaire sections for principals and counselors. Both samples were relatively small. There were 53 principals and 28 counselors.
Questionnaire Sections

<table>
<thead>
<tr>
<th>Administration</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>24.34**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Personnel

<table>
<thead>
<tr>
<th>School and Community Relations</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>32.19**</td>
<td>8.22**</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Curriculum</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>26.83**</td>
<td>3.01**</td>
<td>5.05**</td>
<td></td>
</tr>
</tbody>
</table>

* *p<.05
** *p<.01

Figure 2

_t_ - Values for Y/N Mean Ratio Differences among Questionnaire Sections for Teachers (N=519) in Funded Districts
### Table 5

ANOVA Results among Questionnaire Sections for Respondent Groups in Non-funded Districts

<table>
<thead>
<tr>
<th>Questionnaire Sections</th>
<th>Personnel Mean Ratio</th>
<th>Non-Funded School Districts Mean Ratio</th>
<th>School Districts Mean Ratio</th>
<th>Teacher Mean Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section A Administrative</td>
<td>1.86</td>
<td>2.26</td>
<td>5.20</td>
<td>3.17</td>
</tr>
<tr>
<td>Section B Personnel</td>
<td>6.16</td>
<td>3.68</td>
<td>4.88</td>
<td>2.59</td>
</tr>
<tr>
<td>Section C School and Community</td>
<td>2.31</td>
<td>2.90</td>
<td>2.24</td>
<td>2.08</td>
</tr>
<tr>
<td>Section D Curriculum</td>
<td>6.79</td>
<td>3.00</td>
<td>5.41</td>
<td>2.92</td>
</tr>
</tbody>
</table>

\[ F = 5.75^{**} \quad F = 1.58 \quad F = 2.37 \quad F = 8.15^{**} \]

**p < .01**
There was interaction among the means of the questionnaire sections for the superintendents (p<.01) and teachers (p<.01). Follow-up analysis utilizing t-tests of mean ratios between all sections of the questionnaire responded to by superintendents is displayed on Figure 3. The analysis reveal non-significant differences only when Section C, School and Community Relations, was compared with Section A, Administration. Since there were only fifteen superintendents that participated in this study, it should be noted that these findings should be regarded with caution. Follow-up analysis utilizing t-tests of mean ratios between all questionnaire sections responded to by teachers reveal interaction. This data displayed on Figure 4 indicates significant interaction. Thus, the data would indicate that teachers perceived all indicators of career education to be meeting the premises set forth in the questionnaire.

Four two-tailed t-tests for independent samples were completed to make comparisons of Y/N mean responses between the funded district personnel employed when the funding occurred, time period one, and those personnel employed after the funding ceased, time period two. The results of examining the fourth hypothesis are summarized in Table 6. The results in the table indicate there is no difference in the current status of career education in funded school districts as perceived by school related personnel who still
Questionnaire Section

**p<.01

Administration
Personnel
School and Community Relations
Curriculum

Figure 3

t-Values for Y/N Mean Ratio Differences among Questionnaire Sections for Superintendents (N=15) in Non-funded Districts
Questionnaire Section

Administration

Personnel

School and Community Relations

Curriculum

**p<.01

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>6.44**</td>
<td>19.00**</td>
<td>2.68**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.75**</td>
<td>3.66**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8.28**</td>
</tr>
</tbody>
</table>

Figure 4

t-Values for Y/N Mean Ratio Differences among Questionnaire Sections for Teachers (N=491)
are employed and were employed at the time when funding occurred and those who were employed after the funding ceased.

Table 6

\( t \)-Values for Comparing Mean Y/N Ratios Between Time Period One and Time Period Two Funded School Districts by Questionnaire Section

<table>
<thead>
<tr>
<th>Questionnaire Sections</th>
<th>Funded School Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time Period One</td>
</tr>
<tr>
<td>Section A Administration</td>
<td>5.24</td>
</tr>
<tr>
<td>Section B Personnel</td>
<td>2.97</td>
</tr>
<tr>
<td>Section C School and Community</td>
<td>1.86</td>
</tr>
<tr>
<td>Section D Curriculum</td>
<td>2.45</td>
</tr>
</tbody>
</table>

N=314 N=276
Chapter 5

DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

The Problem

The purpose of this study was to determine whether the "seed money" given to school districts for three consecutive years with the Career Awareness and Exploration (CA&E) grants made a difference in the status of career education four years after the funding ceased. In an effort to determine the lasting effects of that "seed money" this study investigated the differences in the status of career education program development in funded and non-funded districts in the areas of administration, personnel, school and community relations and curriculum as viewed by various role groups in the school.

Discussion

It was brought out by the researcher of this study that career education was identified as a reform movement, proposing changes for personnel and the institutional setting. This requirement of change with innovations was, of course, difficult to measure, and hence the findings are tentative. Yet, scope of change was an important dimension
with continuation, so the researcher needed to emphasize change.

In the Rand study\(^1\) whether career education was perceived as central to the district's priorities or as ancillary appeared to have affected the interest and commitment of project participants at all levels. Questions in the Administrative section of the questionnaire probed into the factors of motivation for involvement in career education of the district and district level commitment. It was noted that funded district personnel selected more yes responses for these questions than the non-funded district personnel.

Hoyt\(^2\) had stated that career education activities were not intended to be add-ons for classroom teachers. Because the funding for the Career Awareness and Exploration (CA&E) grants occurred at a time when there was no consensus definition, national criteria for a model program, nor proficiency throughout the state, a significant change in teacher behavior was difficult to achieve because there were no clear models to be replicated or adapted. Not only did the CA&E grants require personnel change, but also extra effort. Some projects may not have been perceived to


be successful because the project writers tended to design objectives which were overly ambitious. Some personnel in the funded districts may have perceived their projects as unsuccessful in achieving the stated project goals while personnel in less ambitious career education projects were satisfied with the results of their project. The reason for disparity between teacher change and long-run success may be due to the necessity for new behavior to be incorporated before its effect can be realized.

Complexity is closely associated with other dimensions of change and is thus difficult to measure. Nonetheless, the researcher observed two aspects of project complexity that may have had different effects on questionnaire responses. First, the Career Awareness and Exploration (CA&E) grants were structurally complex requiring K-12 efforts. Because these projects covered both elementary and secondary schools, they were very difficult to implement. Rand\(^1\) found with the projects they examined that structural complexity requiring a great deal of coordination across school grades and levels is not likely to eventuate in successful projects. Such projects often broke down because they attempted too much too soon. In view of the high number of "yes" responses of the funded districts'\(^1\)

personnel in the Administrative section and lower "yes" responses in the other questionnaire sections, the research of this study may substantiate the Rand findings.

A final type of complexity involves the integration of the career education program into the ongoing procedures of the school or school district. An important component of the CA&E grants was teacher training or staff development. Rand\textsuperscript{1} and Brickell and Aslanian\textsuperscript{2} cited pragmatic training programs in relation to the ongoing classroom teaching making a difference in promoting significant or enduring change in teacher behavior. Questions in the Personnel section investigated the staff perceptions regarding staff in-service programs and found strength in the identification of student outcomes for the respondents' teaching area(s)/level(s).

The final aspect of the scope of change attempted by the CA&E grants involved the notion of consonance. If the values and goals identified in the proposal were not congruent with those of the project participants, career education was likely to be partially implemented or not implemented at all. A question in the Personnel section asked if all teaching staff was involved. Data revealed

\textsuperscript{1}Berman and Pauly, \textit{Factors Affecting Change}, Vol. II, p. ix.

\textsuperscript{2}Brickell and Aslanian, "Learning to Live," npn.
negative responses with the exception of the superintendents of the funded districts.

A project's implementation strategy results from many choices about how to implement its goals and educational treatment. Decisions about the type and amount of planning, the location of the project, and about who should participate are examples of such choices, and define in effect how an educational treatment is implemented.\footnote{Berman and Pauly, \textit{Factors Affecting Change}, Vol. II, p. 25.}

The research studies reviewed indicate that the implementation strategies selected to carry out a project vitally influence the innovative process and project outcomes.\footnote{Berman and McLaughlin, \textit{Implementing and Sustaining Innovations}, Vol. VIII, p. 26.} In particular, the strategies that significantly promoted teacher change included staff training, frequent and regular meetings, and local material development. The absence of any one of these elements was likely to reduce the perceived success and the amount of teacher change on the Career Awareness and Exploration (CA&E) projects.

Since the results of the questionnaire identified particular strengths for the funded districts in the area of Administration, it is appropriate to discuss those indicators of planning for design of a career education
program. The funded districts varied considerably in the amount of planning they did, but quality planning that matched the needs of the goals of the grants and its participants seemed to pay off in implementation and continuation.

Indicators of the Administrative section were particularly supporting in the areas of completion of a comprehensive needs assessment, written and endorsed plan, superintendent support, and assignment of district and building level responsibility for career education. Although more funded personnel responded affirmatively to a comprehensive career education approach when compared with non-funded districts, the results are border-line. The majority of school districts had not hired an additional person to be the career education coordinator. This indication followed the recommendation of the coordinator from Maryland and the research for the National School Board Association. This indication followed the recommendation of the coordinator from Maryland and the research for the National School Board Association.

The importance of district and building level support has been cited in the studies of Brickell and Aslanian,

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1Brickell and Paul, Getting and Spending, p. 37.
2Brickell and Paul, p. 10.
Brickell,\textsuperscript{1} Rand,\textsuperscript{2} Vroman and Watson,\textsuperscript{3} and Hearn.\textsuperscript{4} The results of this study substantiated the expectation that administrative support and leadership make a difference. A great number of respondents in the funded and non-funded districts credited the superintendents and principals for the impetus to become involved with career education.

It is relevant to recognize the aspects of the planning process because of their effects on well implemented innovations. Investigation of the planning phase identified interesting results. While there was no significant difference in the comparison of this question with the funded and non-funded personnel, a breakdown of the responses found that when respondents were asked if they had selected student outcomes more superintendents and counselors of non-funded districts responded, "yes". On the other hand, more principals and teachers of funded districts indicated they had chosen career education outcomes

\textsuperscript{1}Brickell, Organizing New York State.

\textsuperscript{2}Berman and McLaughlin, Implementing and Sustaining Innovations, Vol. VIII, pp. 30-31.


\textsuperscript{4}Hearn, pp. 43-45.
for students for their program area(s)/level(s) than non-funded district personnel.

The CA&E grants provided financial assistance to pay teachers and other staff for extended contract work, so the responses of the principals and teachers of the funded districts therefore were as expected. After reviewing the self-evaluations of the school districts which participated in the CA&E grants, the research results substantiate the findings of the study of the post-CCEM experiences; the creation of good, genuinely new career education concepts, objectives, curriculum outlines and materials is slow and expensive and requires great talent.¹ The summer workshops of the funded districts seemed to strengthen staff morale, established a sense of project cohesiveness and broke down the traditional isolation of the classroom teacher. The Stanford Research Institute and Policy Studies in Education researchers also found that schools must have a sense of ownership of and identification with career education practices and materials as being either local inventions or local adaptations.² The summer workshops also provided recognition to those selected, because a limited number of staff could be chosen for summer workshops. Thus, the summer workers received


special recognition, an important factor cited by Pincus.\footnote{Pincus, "Incentives for Innovation," pp. 113-139.}

The CA&E projects also differed greatly in the amount, timing, and type of training for staff involved in the project. The summer workshops for funded district personnel moved beyond the selection of student outcomes and into design of classroom activities. As pointed out by Nelson,\footnote{Herr, Research in Career Education, pp. 24-25.} teachers preferred very concrete "how-to-do-it" workshops given by local personnel as opposed to a more general lecture, inspirational format. The CA&E grants also allowed school districts to contract for services which frequently occurred. An experienced project director, district resource personnel, or regional expert with understanding and experience enabled the staff to meet the workshop objectives.

A follow-up question to the process of selecting student outcomes was the ability of the staff to then integrate these career education objectives into the curriculum. While superintendents, principals and counselors of non-funded districts indicated responses more positively than funded district personnel, those involved in the day-to-day implementation, teachers, of the funded districts were considerably more positive of staff ability. The number of "don't know" responses to this question was
minimal.

The perceptions related to the willingness and effort of the staff to integrate career education resulted in the teachers of the two groups responding nearly the same. The responses of the principals in funded districts, however, overwhelmingly surpassed the same group in the non-funded districts despite the fact there were thirty-six principals in the funded districts and fifty-three in the non-funded districts.

Inquiry as to the extent of the comprehensive approach to career education, indicated the highest number of "no" responses by all respondents. Building personnel in both groups agreed that not all teaching and counseling staff are involved in implementing career education. As expected, the next response indication was "don't know." Superintendents of funded districts were very positive in this question. However, the fact that they are organizationally remote brings questions to mind as to the reliability of that data.¹

While principals indicated their awareness of academic teacher involvement with math, social science, science and language arts, the large number of "don't know" responses clustered around questions of other teachers' classroom activities.

Even though the funded districts received extended contract time to develop local materials, those same districts cited the lack of career education as part of the staff inservice the last year. More funded schools than non-funded schools included career education topics in their staff development efforts this past year. Again, the number of "don't know" responses was minimal.

The most readily available technical assistance for Iowa school districts is through the area education agencies. Funded districts utilized services for planning and implementing more frequently than non-funded. Important in this citation was that most of the teachers in the funded districts were aware of that assistance, whereas non-funded districts had an equal number of "yes" and "don't know" responses.

Studies have cited the importance of the quantity and quality of the school and community relationship. Rothman\(^1\) indicated the increased probability of success as the quality and quantity of interactions with the community increase.

Applicants of the CA&E projects submitted minutes of the advisory council meetings to provide information about the planning and community input to the effort. Whether or not those districts still have an advisory

\(^1\)Rothman, *Planning and Organizing for Social Change.*
council was asked. The personnel in the funded districts responded, "yes". However, in both the funded and non-funded districts, the most prevalent selection was "don't know." Since the membership in the councils tends to be more community members and district administrators, the legitimate response of "don't know" could have been due to lack of communication from the central office.

An important component of a career education program is the utilization of the community as a source of reinforcing educational concepts and proving career development opportunities. More non-funded district indicated the identification of community people who can serve as classroom resources. No attempt was made to further define the actual utilization of those people. Very few personnel selected "don't know". Field trip participation was about equal between the two groups.

As expected, a higher quantity of "don't know" responses occurred in the inquiry regarding the career education opportunities for students at various phases of career development. An exceptional number of funded district personnel indicated a sophisticated career cluster program which included job shadowing and exploration activities in community sites.

To learn whether or not efforts had taken place which could result in community support of career education role groups were asked about district efforts to inform
parents and about the dissemination of information. As was expected the funded districts perceived the parents of their students to have a general understanding of career education. Twice as many respondents, however, indicated "don't know" responses. Utilization of sources for dissemination of information to parents and community on career education efforts in the district was also perceived to be a strength of funded districts. A high number of "don't know" responses was indicated by the non-funded districts.

Results of the questions in the Curriculum section were also varied and interesting. Five questions were designed to attain the perceptions of the role groups toward counselors involvement in career education. Since the elementary schools in the study do not have counselors in their building, the perceptions are difficult to identify. When asked if the staff had received inservice on career guidance information, there were more "no" responses from non-funded district personnel. Indicators of counselor assistance to staff for planning, implementation and evaluation of career education activities was about the same for the non-funded districts.

As expected, the funded district personnel indicated the services of the local resource people for supplementary instruction an integral part of the district's overall instructional program as well as the utilization of community work environments. The superintendents of the
non-funded districts responded especially favorably to community work environments as being offered in their districts as part of the preparation program.

In both Chapter 4 and this chapter the researcher cautioned the reader to be aware of the large number of "don't know" responses. Closer examination of the indicators within each questionnaire section found that when the questions were posed to which the teachers had not been directly involved, the number of "don't know" responses greatly increased. Examples in point were: provisions within the career guidance plan to provide services to all levels of career development, and awareness of individual programs for students.

Another point of discussion offered by the researcher is in regard to the perceptions of the funded district personnel supporting the indicators set forth in the Administration section of the questionnaire and fewer "yes" responses for the remaining sections. Because of training and involvement with career education, these role groups may have developed more in-depth understanding of career education concepts. That knowledge level may have inhibited the respondents affirmative answers to questions whereas other respondents' "yes" responses in comparisons may be invalid.

Rather than limit the sample or balance the number of respondents for the various role groups, the researcher
elected to maintain a study which was representative of a typical district organization. The responses, therefore, represent the result of the one person-one vote data gathering process. While the sample portrays a normal school district organization, the large number of teacher respondents skews the results when total responses within sections are used for data analysis. The outcomes of this study more accurately reflect teacher perceptions of the current status of career education.

The researcher points out that the responses of the various educational role groups that participated in this study are perceptions. Since perceptions are based upon one's level of understanding or awareness the reader is reminded of the various degrees of understanding and the impact those degrees of understanding have on choices of respondents. The questions are based upon the awareness of the respondents to certain indicators of premises necessary for career education program development.

Conclusions

The following conclusions are established based upon the data analysis presented:

Null hypothesis I stated there is no difference in the current status of career education in the funded and non-funded districts. The Student's t-test for independent samples was used to examine differences between the two
samples on the four sections of the questionnaire. The null hypothesis was rejected for two questionnaire sections: A, Administration, and D, Curriculum. Personnel in funded school districts perceived their districts to have achieved the Administrative indicators to a greater degree than personnel in non-funded districts identified for development of a career education program. Indicators included a needs assessment, written career education plan, implementation and evaluation of the plan, organizational arrangement for coordination, identification of resources, and administrative techniques. For Section D, Curriculum, the Y/N ratios of the non-funded districts were higher than the Y/N ratios of the funded districts, an unexpected result. The null hypothesis was retained for the other two sections of the questionnaire: B, Personnel, and C, School and Community Relations. The reader is cautioned with the findings of the t-tests due to the small sample of superintendents, principals and counselors as well as the large percentage of "don't know" responses not included in the calculations.

Null hypothesis II stated there would be no differences among the perceptions of the superintendents, principals, counselors and teachers concerning the status of career education in districts which received funding. This null hypothesis was tested with one-way analysis of variance to determine differences among the four questionnaire sections by role groups within the funded districts. The
null hypothesis was rejected for two educational groups, principals and teachers, and retained for two groups, superintendents and counselors. Follow-up analysis with t-tests described the specific section differences.

Null hypothesis III stated there would be no difference among the perceptions of the superintendents, principals, counselors and teachers concerning the status of career education in districts which had never received funding. This null hypothesis was also tested with a one-way analysis of variance to determine differences among the four questionnaire sections by role groups within the non-funded districts. The null hypothesis was rejected for two educational groups, superintendents and teachers and retained for two groups, principals and counselors. Follow-up analysis with t-tests described the specific questionnaire section differences.

Null hypothesis IV stated there was no difference in the current status of career education in funded school districts as perceived by school related personnel who were and still are employed at the time when funding occurred and those who have been employed and are still employed since the funding ceased. This null hypothesis was accepted. Four two-tailed t-tests for independent samples were completed to make the comparisons. No significant differences were reported. The number of "don't know" responses for personnel in "time period one" was only
slightly less than the selection, "don't know", by "time period two" employees.

Further conclusions relate to the issue of "seed money." The Career Awareness and Exploration (CA&E) effort had an effect in stimulating local education agencies to undertake projects that were generally consistent with the Department of Public Instruction guidelines for administration but not curricular guidelines. This local response resulted from the availability of "seed money" and from guidelines that encouraged specific behaviors. But the involvement in the CA&E project did not insure successful implementation; moreover, successful implementation did not guarantee long run continuations. The difficult and uncertain processes of successful implementation and long run continuation depend upon the characteristics of the school districts and the choices made by them. In sum, the net return to the Department of Public Instruction was the undertaking of many career education innovations.

Implications and Recommendations

The great number of "don't know" responses of teachers in the study due to non-involvement and/or lack of information restricted the research implications. The other limiting factor was the skewing of results by a large number of teacher respondents when total responses were the basis of comparison. Further research should investigate
the lasting effects of "seed money" on career education.

While some of the findings of this study may not be what one might have expected, given the complexities inherent in implementing the Career Awareness and Exploration (CA&E) grants on a K-12 basis and in a three year funding time line, the districts may have attempted too much too soon. The CA&E grants attempted a comprehensive innovation that spanned many grade levels. Further research should investigate the perceptions of respondents by school organization, for the results may yield findings of successful efforts at one or more organizational level within the K-12 structure.

The findings of this study have limited implications for reinstituting the Career Awareness and Exploration (CA&E) grants. Support was found for the belief that outside funding makes a difference in the initiation of career education program development. It is doubtful in the era of limited budgets that Career Awareness and Exploration education would have gotten off the ground without "seed money."

The findings of this study suggest other areas for further research. Replication of the study with districts before participation in a like grant program as a pre-measure and upon completion would add to the knowledge about change as a result of "seed money." The study could be replicated four years after funding ceased. A traditional pre- and post-measurement effort would provide the
research with more valid information.
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APPENDIX A

QUESTIONNAIRE OF THE SUPERINTENDENTS, BUILDING ADMINISTRATORS, COUNSELORS AND TEACHERS PARTICIPATING IN THE STUDY
J-ASK Career Education Survey

Instructions: Please complete the questions which follow. Use a pen or pencil and mark all of your responses on this questionnaire. Circle the response which best describes your answer: Y yes; N no; DK Don't Know.

Administration

1. Does your district have a written plan specifying the district's commitment to career education? Answer the following if the answer was yes.
   1a. (Supt.) Have you presented a written plan to members of the Board of Education for endorsement? (Bldg. Admin.) Has your superintendent presented a written plan to members of the Board of Education for endorsement? (Couns. & Teachers) Has your local school administrator presented this written plan to members of the Board of Education for endorsement?
   1b. Is the Career Education plan utilized by you and your administrative team to direct instructional programs?
   1c. Are procedures for implementing career education suggested within your district's plan?
   1d. In your opinion, can the plan for implementation be accomplished within three years?

2. Has your school district written or selected career education goals and objectives? Answer the following if the answer was yes.
   2a. Were the district level career education goals and objectives determined through a needs assessment?

3. Has your school district conducted a needs assessment related to career education? Answer the following if the answer was yes.
   3a. What group(s) were included in that survey:
      a. Student?
      b. Staff?
      c. Community?

4. Is the career education approach:
   a. Comprehensive? (K-12)
   b. Partial? (only some grades or teachers)

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Has your district adopted a plan for evaluating the effectiveness of career education?
Answer the following if the answer was yes.

5a. Is this plan written?
5b. Is this evaluation plan being implemented?

Does your district have an ongoing career education task force/career education coordinating committee?

Has a person at the district level been given the responsibility to coordinate the planning and implementation of career education?
Answer the following if the answer was yes.

7a. Has that person received specific training for the assigned career education responsibility?

Has your district hired an additional person to be the career education coordinator?
Answer the following if the answer was yes.

8a. Is that person still employed in that position?

(Supt.) Has a person at each school in your district been given the responsibility for coordinating career education?
(Bldg. Admin.) Has a person in your school been given the responsibility for coordinating career education?
(Couns. & Teachers) Has a person in your school been given the responsibility for coordinating career education?
Answer the following if the answer was yes.

9a. Has that person received training in career education?

(Supt.) In your opinion, are appropriate facilities and equipment available within the district to properly support career education?
(Bldg. Admin., Couns., Teachers) In your opinion, are appropriate facilities and equipment available within your building to properly support career education?

In your opinion, are existing facilities and equipment utilized to carry out career education instructional objectives?

Are there provisions in your local budget to support:

a. Extended contracts for career education?
b. Staff in-service for career education?
c. Purchase of resource materials for career education?
d. Field trips for career education?
13. Did the impetus for involvement in career education come from:
   Y N DK  a. Code of Iowa (Chpt. 280.9)?
   Y N DK  b. Outside Agency?
   Y N DK  c. Another project?
   Y N DK  d. Availability of funds?
   Y N DK  e. Superintendent?
   Y N DK  f. Building administrator?
   Y N DK  g. Counselor?
   Y N DK  h. Teacher staff?
   Y N DK  i. Community?
   Y N DK  j. Board of education?

14. (Supt.) Has Chapter 280.9 (Career Education mandate within the Iowa School Code passed in 1975) affected your Board's support for career education?
   (Bldg. Admin.) Has Chapter 280.9 (Career Education mandate within the Iowa School Code passed in 1975) affected your Board's support for career education?
   (Couns. & Teachers) Has Chapter 280.9 (Career Education mandate within the Iowa School Code passed in 1975) affected the administrative support for career education?

15. (Supt.) Do you give active support to career education?
   (Bldg. Admin.) Does your superintendent give active support to career education?
   (Couns. & Teachers) Does the school superintendent give active support to career education?

Personnel

16. (Supt.) Have any of your staff identified specific career education outcomes for students in their program area(s)/level(s)?
   (Bldg. Admin.) Have any of your staff identified specific career education outcomes for students in their program area(s)/level(s)?
   (Couns. & Teachers) Have you identified specific career education outcomes for students in your program area(s)/level(s)?
   Answer the following if the answer was yes.
   17a. Are these student outcomes in the areas of:
   Y N DK  a. Career education concept development?
   Y N DK  b. Career education skill development?
   Y N DK  c. Career education attitude development?

17. In your opinion, does your professional staff have the ability to integrate career education objectives (concepts, skills and attitudes) into their program area(s)/level(s)?
18. In your opinion, is there a willingness and effort on the part of your staff to fully integrate career education objectives into their curriculum program area(s)/level(s)?

19. Are all teaching and counseling staff involved in implementing career education?

20. Are teachers in the academic areas incorporating career education into their courses of study?
   a. Math?
   b. Social science?
   c. Science?
   d. Language arts/English?

21. Have career education topics been included within your district's staff inservice program within the last school year?
    Answer the following if the answer was yes.
    21a. Has the staff inservice been based upon an assessment of:
       a. Staff's professional needs?
       b. Current trends in career education?

22. (Supt.) Have there been formal discussions in your district regarding the relationships and dependencies (articulation) of K-12 career awareness, career exploration and career preparation activities? (Bldg. Admin., Couns., Teachers) Have there been formal discussions in your building regarding the relationships and dependencies (articulation) of K-12 career awareness, career exploration and career preparation activities?

23. Has your school district utilized technical assistance from other agencies or individuals for career education planning or implementation?

   School and Community Relations

24. Does your school district have a community advisory council for career education?

25. Have community people been identified who can serve as resources to teachers and students in the classroom?

26. Are students taken to community sites on field trips?

27. Does your district have a career cluster program which utilizes community sites for job shadowing and exploration activities?
28. Does your district have vocational programs which utilize community sites for entry level job preparation?

29. Are a variety of sources used for disseminating information on the career education efforts of the district?

30. Do the parents of your students have a general understanding of career education?

31. In your opinion, is your community open minded and accepting of innovative educational ideas?

32. In your opinion, is your community adequately supportive of:
   a. Innovative programs?
   b. Traditional programs?

Curriculum

33. Has a plan been written which specifies your district’s commitment to K-12 career guidance services? Answer the following if your answer was yes.

   33a. Does the career guidance plan provide services to all levels of career education (career awareness, career exploration, career preparation)?

34. Are a variety of student opportunities provided for career development?

35. Has your staff received inservice on available career guidance information/services?

36. (Supt., Bldg. Admin.) Do your guidance and instructional staff work together to:
   a. Plan career education activities?
   b. Implement career education activities?
   c. Evaluate career education activities?

(Couns.) Do you work with the teachers to:
   a. Plan career education activities?
   b. Implement career education activities?
   c. Evaluate career education activities?

(Teachers) Does the guidance staff work with you to:
   a. Plan career education activities?
   b. Implement career education activities?
   c. Evaluate career education activities?

37. Does your district's curriculum design include career education objectives?
38. Do your district's instructional programs have a direct relationship to career education concept development?

39. Have student career education objectives been chosen for the following three phases of career development?
   Y N DK  a. Career awareness?
   Y N DK  b. Career exploration?
   Y N DK  c. Career preparation?

40. Is there evidence of continuity throughout these three phases of career development?

41. Do learning experiences include combinations of classroom activities and onsite learning experiences to assist your students in achieving their career education objectives?

42. Are the services of local resource people for supplementary instruction an integral part of the district's overall instructional program?

43. Are the community work environments utilized as part of your district's instructional program?

44. Are individual programs based upon student career education assessment information?

45. Are there specific efforts being undertaken to meet the needs of:
   Y N DK  a. Handicapped?
   Y N DK  b. Women?
   Y N DK  c. Ethnic minorities?

Please return this completed questionnaire to the designated representative or to Jo Shaw Kiley, 1601 Casady Drive, Des Moines, Iowa, 50315.

Thank you.
APPENDIX B

QUESTIONNAIRE COVER LETTER
October 27, 1980

Dear Colleague:

During the school years 1973-74 through 1977-78, the Department of Public Instruction offered Career Awareness and Exploration (CA&E) Grants to Iowa school districts as part of a national thrust for career education.

A follow-up study is being conducted to assess the status of career education in the first group of schools which received the "seed money" matched with comparable school districts which did not receive financial assistance. This study should provide an indication of the effectiveness and impact of the Career Awareness and Exploration Projects.

Four groups of education related personnel within those identified districts are being invited to respond to the questionnaire. These groups are: superintendents; building administrators; counselors; and teachers. It would be appreciated if you would take a few minutes, complete the attached questionnaire, and return it to the designated person within a week of receipt.

Your responses will be treated with the total groups and will not be individually identifiable in the final report. Your participation is very important to the accuracy of the findings of this study.

Thank you for your contribution.

Sincerely,

Jo Shaw Kiley
Doctoral Student
Consultant
Dept. of Public Instr.

[Signature]

Dr. Richard Brooks
Professor & Chair
Education Administration
Drake University