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ABSTRACT

More than 100 school districts participated in this three-year career education program. On a statewide basis, two major objectives were to be accomplished: (1) Help all public and private schools in South Dakota implement career education programs, and (2) provide every student an opportunity to develop self awareness, a favorable attitude toward work, and to develop and practice decision making skills. The project was designed to serve the K-14 student enrollment; in addition, the project worked with post-secondary vocational-technical schools in the area of placement. There were five major components in the project: Guidance and counseling, elementary career awareness, junior high-middle school, job preparation (Grades 10-14), and placement activities. In-service seminars for counselors were conducted and follow-up sessions were held with participating schools after in-service sessions had been completed with time allowed for the schools to begin implementation. Program evaluation focused only on student outcomes, while more direct facets of the program received wide support throughout the state. It was concluded that the direction of career education in South Dakota has been established at all levels of education and that certain phases of the project had an identifiable student impact.

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FINAL REPORT

Project No. 502A850004
Grant No. OEG-8-74-0027

Statewide Implementation of K-14
Project of Career Education,
Occupational Counseling, and
Bridging the Gap Between School and Work

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

Clayton D. Carlson
South Dakota State Board of Vocational Education
Division of Vocational Education
Pierre, South Dakota 57501

September 1976

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"SDCE - - - South Dakota Career Education"

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Schools Visit Project

Presentations Given By SDCE Staff

Plan Would Link Education, Work

Career ed
rolling along
at Parkston

Grading, Enthusiasm Key Factors In Selby Career Research Program

CE/VIEW

November 1974

Program
Has Staff
Of Five

**8 Schools
In Winner
CE Session**

In Senior High

Lennox Pinpoints Individual Needs

42 Schools Respond to CE Invitation

To CE Program Site

School Teams Begin Visits

Career ed
resources
at Mitchell

Inservice sessions

Action brisk in SDCE offices

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Clayton D. Carlson
South Dakota State Board of Vocational Education
Division of Vocational Education
Pierre, South Dakota 57501

September 1976

"SDCE - - - South Dakota Career-Education"

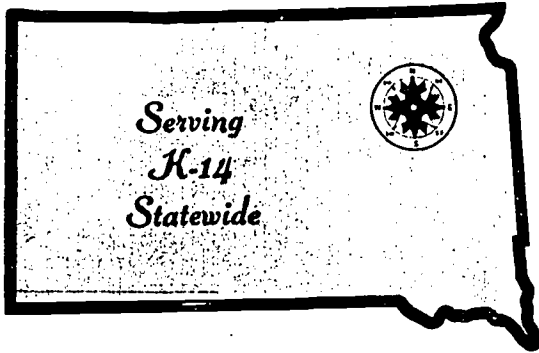
PREFACE

The career education movement has spread over the state in the last six years, beginning with and fostered by a concern in the U. S. Office of Education to make education more relevant to the needs of students.

At long last educators are beginning to develop the career education concept of combining academics with the working world, veering away from education for education's sake. Young people are more willing to learn when they are helped to see the relationship between the classroom and the working arena they will soon enter as participants. This demands that educators use such community resources as senior citizens, parents, businessmen, and workers of all kinds.

This project has provided the framework for educators in South Dakota to develop a more relevant approach to learning. And career education ties curriculum and guidance into a personalized, meaningful, and desirable package for each student.

As this project is phased out, the burden for continuing K-12 career education in South Dakota falls upon the shoulders of the personnel in the schools across the state. But it has been the experience of the project staff that the enthusiasm for career education observed in teachers, counselors, and administrators will continue to infuse new life and growth into this vibrant movement in public education.



Career Education

120 Third Street Southwest
Watertown, South Dakota 57201

September 10, 1976

L. E. Bak, Program Officer
Vocational-Technical Education
Department of Health, Education, & Welfare
Region VIII
Federal Office Building
19th and Stout Streets
Denver, Colorado 80202

Dear Sir:

I am herewith submitting the Final Report of the Part D South Dakota Career Education Program.

The Project staff has worked with more than 100 school districts over the 3-year life of the project. Changes in attitudes and ideas have been observed in individual teachers and administrators and in entire school systems as career education concepts have been adopted and developed.

An improved system of education has evolved in many of the schools involved in this exemplary program -- a system more meaningful to students and parents; more adaptable to the individual student, and highly acceptable to the community.

However, without the personnel in the participating schools seeing the value of career education, taking hold of the concept, and acting upon it, little could have been accomplished.

The activities that are being provided for young people by many teachers across the state are the key to the future of career education in our communities as this project concludes.

Respectfully,

A handwritten signature in dark ink, appearing to read "Clayton D. Carlson".

Clayton D. Carlson
Director

CDC:rr

CONTENTS

SUMMARY OF THE REPORT

| | |
|--|---|
| (A) Time Period Covered | 1 |
| (B) Goals & Objectives | 1 |
| (C) Procedures Followed | 1 |
| (D) Results & Accomplishments | 1 |
| (E) Evaluation | 2 |
| (F) Conclusions, Implications, & Recommendations | 2 |

BODY OF THE REPORT

| | |
|--|----|
| (A) Problem Area | 3 |
| (B) Goals & Objectives | 6 |
| (C) Procedures Followed | 7 |
| (D) Results & Accomplishments | 13 |
| (E) Program Evaluation | 36 |
| (F) Conclusions, Implications, & Recommendations | 67 |

REPORT SUMMARY

A. Time Period Covered

This report covers the period from September 13, 1973 through September 12, 1976.

B. Goals & Objectives

Two major objectives were to be accomplished on a statewide basis: (1) Help all public and private schools in South Dakota implement career education programs, and (2) provide every student in the state an opportunity to develop self awareness, a favorable attitude toward work, and develop and practice decision making skills.

C. Procedures Followed

The project was designed to serve the entire K-14 enrollment of the state's public and private schools. All of the state's 186 school districts and the private schools operating secondary programs were given opportunity to participate. A total of 104 school systems took part over the three-year period. Invitations to participate were issued on the basis of interest in forming multi-district vocational high schools and geographic distribution.

Inservice workshops were conducted for the staffs of the participating schools. These included an overview of the career education concept. The schools would then select a team, typically comprised of an elementary teacher, a secondary teacher, a counselor, and an administrator, to visit the project offices in Watertown for an in-depth day of inservicing. Followup visits were made to many of the participating schools near the end of the school year by project personnel.

D. Results & Accomplishments

In addition to extensive involvement with the 104 participating schools, the project staff held more than 30 workshops and presentations for a variety of groups, agencies, and college classes.

The impact of the project was expanded through project cooperation and involvement with various other agencies, including the South Dakota Vital Information for Education and Work (VIEW) project; the various departments in the state's Division of Elementary and Secondary Education; the State Vocational-Technical Education Division and the Vocational-Technical Schools in the state; the Division of Education and Cultural Affairs, which encompasses the two foregoing divisions and the state-supported college and university system; the guidance and counseling departments of most of the colleges and universities; various social service agencies; and counselor and teacher organizations.

E. Program Evaluation

Certain phases of the Career Education Project had an identifiable student impact. The evaluation focused only on student outcomes, while more direct facets of the program received wide support throughout the state. The impact of the total three-year program appears to have made an important contribution to the development of improved education for the students in South Dakota schools.

F. Conclusions, Implications, & Recommendations

It seems evident that the project provided a vital service to education in the state, and that future efforts in career education in South Dakota will have a solid foundation to build upon.

The career education concept has been given lasting impetus in South Dakota, and many schools have CE programs in various stages of development as a result of this project's efforts. The direction of career education in South Dakota has been established at all levels of education in the state.

A. PROBLEM AREA

The problem area for this project in career education was outlined in the Project Proposal, submitted December 8, 1972:

"In the past, and at the present time, great emphasis has been placed on academic education and little on vocational education and career development (in South Dakota).

"South Dakota and the U. S. Office of Education have previously funded several programs which addressed themselves to a total program of vocational education and career education. These exemplary programs were designed to have been implemented to review current literature on the subject of K-12 Career Education and other concepts and to develop a system of integrating occupational information into individual project school's existing curriculum. These programs have had considerable success in their restricted areas, but have not been in a position to provide a program of inservice education to staff members on a statewide basis.

"In addition, scant attention has been paid to the job placement aspect. Currently graduates are placed into programs of vocational training or academic training or academic training with no consideration given to personal qualifications of either the individual or the unique requirements of the job.

"Presently counselors are academically oriented and tend to think in academic terms. There is a need for a program to assist them to see the overall benefits in meeting the total needs of young people. In-depth, inservice programs for present guidance counselors are necessary. This project will also serve the institutions that presently train guidance counselors.

"The elementary curriculum is designed to glorify the profession. Academics are of prime importance. Again the inservice work with elementary teachers and the introduction of new materials on occupations and career awareness are needed.

"The secondary curriculum includes some work in industrial arts. These courses have generally not been meeting the needs of students because of their lack of the work-related concepts. The glamour of the college degree overshadows the worth of work. Inservice education to emphasize the needs of students in all areas of work, the availability of resource materials covering all occupations and general classes in preparing students for careers after high school completion are needed.

"Dropouts are not a great problem. However, a certain percentage occur regularly, more from disinterest than from lack of ability. A program designed to encourage enrollment in other than academic pursuits is essential. Meaningful course content needs to be designed to retain the dropout and the potential dropout.

"All students need an introduction to many fields of careers, both on the professional level and the technical level. Appreciating every area of endeavor is essential.

"To culminate the activity of guidance and counseling, direct interest needs to be taken in graduating students or students leaving school at both the secondary level or at the post-high school level. Special preparation such as placement, apprenticeship programs, and post-secondary opportunities should be given each student.

"School should provide an opportunity for each student to secure a background for the world in which he lives. A broad experience, an encouragement to consider all areas enabling him to work is essential. He should be aware of what is needed for him to succeed in the occupation he prefers, how he would contact the type of work he would like, and what opportunities are in the field. The great variety of opportunities will be of benefit to him only if he knows of their existence and how to utilize them.

"As students begin to develop self established career goals, guidance and counseling services should be provided to help each individual plan an educational path toward the tentative goal which he has set."

This path may take him through a secondary school career preparation program enabling him to enter a job immediately upon graduation from high school. On the other hand, the path may take him through a two year post-secondary occupational preparation program, enabling him to enter work in a technical-level job. For still other students, the path may involve going through a four year college in preparation for a professional type job.

Problem Area Redefined

Greater emphasis is being placed on career education in school systems across South Dakota as the impetus for this concept is felt from federal, state, and local levels. The need now is to supply career education expertise and resources to the schools on a continuing basis. This is particularly true of the schools that this program has worked with over the past three years, and which now feel and express a need for continued assistance in implementing and conducting career education programs.

There are now few counselors in the state who have been exposed to career education concepts through inservice programs or summer workshops conducted by SDCE, and through pre-service training. There is a swing away from traditional counseling to meeting the total needs of all students. This is covered more fully under RESULTS AND ACCOMPLISHMENTS.

Although progress has been made integrating career education into the existing curriculums of the schools, more intensive work is needed in this area, both through in-service and pre-service training. However, the availability of resources from both commercial and public sources has greatly increased during the past three years, enhancing implementation efforts. Students at all levels in many school systems are now being introduced to various aspects of a wide variety of careers.

B. GOALS AND OBJECTIVES

Two major objectives were to be accomplished on a statewide basis: (1) Help all public and private schools in South Dakota implement career education programs, and (2) provide every student in the state an opportunity to develop self-awareness, a favorable attitude toward work, and develop and practice career decision making skills.

In addition, the following specific objectives were called for:

- Develop programs of career awareness in the elementary schools, and career orientation and exploratory experiences in the junior high schools.
- Provide job preparation in grades 10-14 with special emphasis on work experience and cooperative education opportunities.
- Design programs to insure placement of students in a job, in a post-secondary occupational program, or in a baccalaureate degree program.
- Insure adequate occupational guidance and counseling programs in all South Dakota schools over a three year period.

Goals are outlined as follows in the Project Proposal:

- Develop and implement an inservice program for counselors, on a statewide basis, on occupational counseling to increase their ability to serve the needs of all students.
- Develop a program to integrate occupational information and career awareness into the K-6 curricula of all participating schools.
- Implement a program of occupational information, orientation, and exploration for secondary students (7-9) to increase their knowledge of the world of work, to facilitate their exposure to unfamiliar occupations, and to increase their participation in hands-on exploratory experiences.
- Implement procedures in each participating secondary school (10-14) to insure the maximum availability to students of job observation, work experience, and cooperative education experiences.
- School administrators, guidance counselors, and teachers will develop a commitment to provide adequate placement services for all students, and each participating school will construct a program to accomplish this end.

C. PROCEDURES FOLLOWED

This project superseded the Career Development Project which functioned from 1970 to 1973 in the Watertown School System. Many features of the 1970-1973 project were retained in this project, and five of the seven staff positions were retained: director, elementary curriculum specialist, secondary curriculum specialist, guidance and counseling specialist, and information specialist.

Personnel from school districts throughout the state visited the project site, and Career Education staff members visited and conducted workshops in these schools to help them devise and implement career education programs. Materials and information developed and acquired in both the old and new programs were disseminated to the participating schools.

The project was designed to serve the entire K-12 enrollment of the state's public and private schools, which had an enrollment of 166,634 students last school year. Of this number, 14,757 were American Indian students. In addition, the project worked with grades 13 and 14, principally in the post-secondary vocational-technical schools, in the area of placement.

The thrust of the program was two-fold: to help public and private schools implement career education programs, and to give students an opportunity to develop self awareness and a favorable attitude toward work, and develop decision making skills.

The project was designed to serve all schools in South Dakota, with approximately one-third of the total number given opportunity to participate during each year of the project. The following criteria were used to establish priorities for participation:

Year One: The participating schools were chosen from those indicating the strongest interest in forming multi-district associations, with final consideration based on the following factors:

1. Geographic distribution
2. Ethnic distribution
3. Existing vocational-technical facilities

Year Two: Priority continued to be given to those schools indicating interest in multi-district associations along with consideration of the other three factors.

Year Three: Schools not asked to participate the first two years were the focus of attention during the third year. Some 30 schools were identified for participation during the third and final year. As in the first two years, some of the targeted schools chose not to participate.

There were five major components in the project:

Guidance and Counseling This aspect of the program was designed to help counselors see the overall benefits of meeting the total needs of young people. This effort involved inservice workshops in occupational counseling.

Elementary Career Awareness Career awareness and exploration, rather than career selection, was emphasized. Occupational information was integrated into the K-6 curriculum in a variety of ways -- field trips, materials relating career education concepts to all facets of the curriculum, interest surveys, and a study of the career life models of a variety of people -- to mention a few.

Junior High - Middle School This phase of Career Education activities opened up exploration of many kinds of careers through exposure to career clusters and kinds of preparation necessary to enter various kinds of work. While more specialized, each student's course of study was still designed to allow latitude in learning more about self in relation to work.

Job Preparation - Grades 10-14 Senior high school students explored one or more of 13 career clusters in depth, and focused on specific decision-making situations. As students began to develop self-established career goals, guidance and counseling services were provided to help each individual make an educational plan toward tentative goals. On-the-job observation programs were provided through existing and developing vocational-technical offerings in the participating schools. Special programs were designed to bring community resources and interested groups of students together. This part of the program also included released time for secondary students for on-the-job observation.

Placement Activities A systems approach to placement helped students in contacts with professional workers, laymen, and parents. Each school determined its own priorities, and the local guidance department was encouraged to give leadership. The systems approach encourages the counselor to do more group guidance work, recognize the role to parents, and establish more teacher involvement in the guidance program. Counselors were encouraged to review testing programs, develop greater community involvement, obtain better sources of occupation information, and develop an attitude of helping students who need help most. A placement model includes such activities as preparing students for meetings with employers, involving students in the operation of a job placement service, and establishing an advisory council representing business, industry, labor, community agencies, teachers, administrators, students, and parents.

A special provision was to provide \$200 to each participating school system to help them secure materials and information for implementing a career education program.

An extensive review of the literature relating to career education was conducted by the project staff, and many of the most workable ideas were incorporated into a plan of action for the South Dakota schools. Visits by staff members to other career education programs in the nation, and with leaders in career education added to the body of information used during the program.

Staff planning was geared to selecting the participating schools and holding workshops and follow-up sessions for these schools.

Method of Presentation

A general overview of career education was given at inservice workshops in the schools. This was followed by an invitation to the administration of the host school to allow selected elementary and secondary teachers and a counselor, or any team of staff members exhibiting a strong interest in career education and who would be innovators or opinions leaders in their setting, to visit the Career Education offices in Watertown for a one-day, in-depth career education experience.

This approach proved most satisfactory, and resulted in the CE staff working with people whose level of interest was high and whose attitude toward career education was positive. This approach also provided the time and means to conduct an effective and detailed presentation on ways to implement career education at all levels. In these small workshops, the elementary curriculum specialist worked with the K-6 teachers and administrators, the secondary curriculum specialist worked with 7-12 teachers and administrators, and the guidance counselor worked with the school's counselor delegate.

Schools sending a team to Watertown provided their own substitutes or otherwise arranged a system for teacher release for inservice training. The CE program payed for mileage and meals.

The usual procedure followed with schools was:

- Orientation of the faculty to the career education concept.
- Inservice workshops at Watertown geared to elementary curriculum, secondary curriculum, and guidance and counseling.
- Provision of a broad selection of career education materials to a school on a loan basis.

- Provision of career education bibliographies and free materials to schools on a loan basis.
- Provision of \$200 to each participating school for the purchase of approved Career Education materials.

The inservice workshops at Watertown seemed to be particularly worthwhile to the five or six participants coming from each school. They appreciated the individualized treatment they could be given in suggested lesson techniques for their particular areas and were stimulated by experiences in various Watertown schools.

The school utilized the most for elementary-junior high people was Mr. Francis McCarthy's McKinley Elementary School.

Both he and his teachers were very effective in demonstrating and telling about teaching techniques and adjusting their class schedules to benefit professional visitors. Secondary personnel visited the Multi-District Career Center and the Lake Area Vocational Technical Institute, and learned what they could do from a wide variety of career education guides from other projects.

The in-school workshops were usually conducted by three members of the Career Education staff. An overview of the career education concept was presented to the entire professional staff. This included a slide presentation with commentary. The group was then usually divided elementary-secondary, with the curriculum specialists in those areas working with their respective groups. The specialists enlarged upon the career education concept, demonstrating how career education can be integrated into the existing curriculum. A wide range of career education resource materials, including up-to-date bibliographies, were shared with the teachers. These served to stimulate ideas and discussion, and are a guideline for using the \$200 made available to each participating school for career education materials.

The project director or the information specialist usually accompanied the curriculum specialists on the workshops, and gave the initial presentation. This individual usually discussed career education procedures in depth with the administration of the host school.

A set of elementary curriculum guides and a field trip guide, both developed in the original exemplary career education program, were left with each school system during the workshops for teacher reference and duplication. A slide presentation showed teachers activity ideas oriented toward career education, yet integrated into the elementary curriculum. A wide range of curriculum materials were shared with the elementary teachers.

The secondary curriculum specialist discussed materials and procedures for implementing career education at the secondary level. It was emphasized to secondary staffs that career education is not a

rigidly defined program with a specific end point, but rather a process aimed at career decision making so students can choose and train for a career, and be free and prepared to choose again later in life.

The counseling specialist worked on an individual or small group basis with the counselors from the participating schools.

Traditionally, much of the guidance done in high schools has centered around the college-bound student. Guidance counselors, in order to better serve students, need to have more expertise in the areas of occupational counseling, career preparation, and decision-making processes.

Visitation Program

An invitation was given to the administration of the host school for a selected group to visit the Career Education offices in Watertown for an in-depth career education experience. The suggested makeup of a visiting team were teachers from both elementary and secondary areas who exhibited a strong interest in career education, and who would be innovators or opinion leaders in their schools; a guidance counselor; and an administrator. This method permitted the CE staff to work with people having a high level of interest in career education.

In-School Resources

The in-school resources available for the guidance and counseling component consisted of a wide range of resources available within the CE Project, both free materials from business and associations across the nation, and commercial materials. The latter included such staples as the Occupational Outlook Handbook and the College Handbook. In addition, a number of instruments, such as a post-high school opportunities poster, a college curriculum poster, and a counselor's workbook have been developed. These are discussed under RESULTS AND ACCOMPLISHMENTS.

Out-of-School Resources

The state's Vital Information for Education and Work (VIEW) program provided microfilm aperture cards covering occupations, apprenticeship post-high institutions, armed services, financial aids, and special needs for the mentally handicapped. Among the services offered by the State Employment Service are a statewide computerized job finding network and various resource publications.

Various informational tools for using the Educational Resources Information Center (ERIC) are available. The entire ERIC library is accessible through the University of South Dakota, and the project had some 200 ERIC titles pertaining to career education.

Information from other career education programs in the nation proved to be a valuable resource. The State Division of Elementary and Secondary Education provided resources and services in guidance and counseling.

Each participating school determined its own placement priorities for exiting students based on its needs, budget, and existing activities. The guidance department was encouraged to act as the leader in this process. The goal was total placement of students in occupations, colleges or universities, or vocational-technical schools. Counselors were encouraged to review testing programs, develop greater community involvement, and improve upon sources of occupational information. The goal was for each student to be provided a series of comprehensive career development activities aimed at broadening relationships between the student, school and community. The intent, however, was not to structure a rigid placement model, but for each school to develop a program suited to the needs of its people and resources.

Other Procedures

This project cooperated with state agencies and universities in conducting week-long seminars for counselors. These seminars served both an inservice and a pre-service function in career education.

Follow-up sessions were held with participating schools during the spring of 1975, after inservice sessions had been completed with time allowed for the schools to begin implementation. This technique was found to be successful, and was continued and intensified during the third year.

D. RESULTS & ACCOMPLISHMENTS

The Secretary of the Department of Education and Cultural Affairs and the heads of two of the Department's division, the State Superintendent and the Director of Vocational-Technical Education, were kept abreast of the activities of the project. These leaders in South Dakota education back the career education concept and cooperated in career education planning at all levels of education.

The project staff accepted an invitation from the Division of Elementary and Secondary Education at Pierre in December, 1973 to make an inservice career education presentation to the DESE staff. This opportunity was followed by other invitations for staff participation in programs and events, resulting in widespread recognition of the project and acceptance of career education concepts by educators.

South Dakota colleges and universities expressed interest in career education at two levels: (1) implanting the career education concept during the teacher training phase, and (2) career planning with college students.

Inservice workshops were conducted for the staffs of 104 school districts during the project. Most of these were individual in-school workshops; in a few cases, two or more schools met together for the session.

This phase of the inservice program involved 4,646 teachers, counselors, and administrators. K-12 enrollment of the school systems totaled 61,835.

Most of the schools where workshops were held sent a total of 350 staff members to Watertown for more in-depth inservice sessions. Typical composition of a visiting group was an elementary and a secondary teacher delegate, a guidance counselor, and an administrator. There were 430 visitors to the project offices over the three year period.

Project members made followup visits to the participating schools to assess the progress of career education and to reinforce those staff members who were implementing career education into their portion of the school program.

In addition to the involvement of the project staff with the participating schools, numerous other workshops were conducted by staff members by request of various schools, agencies, and individuals.

Region VIII Workshop

A workshop involving personnel from projects in Region VIII was held at the Game Lodge in Custer State Park where project personnel from Colorado, Montana, North Dakota, South Dakota, and Utah exchanged views on career education techniques while directors of projects shared common concerns under the leadership of LeRoy Swenson of the Denver office of USOE.

BEOG Workshops

The project cooperated with the Lake Area Vocational-Technical School and the Mitchell Area Vocational-Technical School during the spring of 1976 in planning the Beog program workshops with area counselors. Counselors were made aware of the education materials available for their use, some of which were developed by project specialists and some by other career education authorities.

Working with Indian Schools

Eagle Butte - Among Indian populated schools that were presented workshops were Eagle Butte, Brow Creek Reservation High School at Stephan, St. Francis Indian School and Pine Ridge Indian Reservation schools.

On August 18 and 23, 1975 Mr. Skoglund and Mrs. Dickson went to Eagle Butte to assist Dr. Ferguson in both a large and small workshop with teachers of Indian children. Aides were also included in the implementation efforts. A follow-up call was made by Mrs. Dickson on Spetember 23.

Dr. Ferguson involved high school students in economics awareness and an experience in distributive education.

Crow Creek Indian Reservation High School at Stephan - Mr. Anderson, and Mr. Skoglund held a workshop at the Crow Creek Indian Reservation high school at Stephan on August 28.

St. Francis Indian School - September 25 and 26, Mr. Anderson and Mr. Skoglund held a general overall workshop and Mrs. Dickson joined them in working with elementary teachers at St. Francis Indian School.

Pine Ridge - Late in 1975 Mrs. Dickson went to the Pine Ridge Indian Reservation, invited there by Robert Halverson, federal programs officer, who set up a morning session with administrators, and a large afternoon workshop with Junior High School teachers. Senior High School teachers met with her in individual conference sessions in the following morning. The Elementary teachers and aids met in full session in the second afternoon. They were all apprised of ways to implement career education as well as of concepts and how to work with them, field trips and how to handle them. Communication was somewhat of a barrier, and it required a great deal of skill and sensitivity to reach the audience with the ideas necessary for their understanding.

Pierre Indian Learning Center - Another Indian School contact was made with the Pierre Indian Learning Center through Miss Jane Hermann, career education person, who made a one-day visit to the office on December 8th, 1975. She borrowed many instructional materials and appeared to be very grateful for the use of them. She followed her visit with phone calls and letters, both requesting help and thanking the staff for assistance.

Orientation Seminars

At the beginning of the third year, in accordance with the Proposal for this project, schools which had not been asked to participate during the first

two project years were invited to take part. These schools are geographically distributed in the state in the Rapid City, Aberdeen, and Sioux Falls areas. One-day orientation sessions were organized at these three locations during the first week of August, and the superintendent or a delegate from each interested school was asked to attend. The project staff gave an overview of the career education concept and program at these sessions, and demonstrated to the participants how the project staff would work in and with their respective school systems. Invitations to participate in project activities for the 1975-76 school year were again extended to the schools represented at the seminars, as well as to those schools which had indicated an interest in career education, but were not represented.

Workshop for Opinion Leaders

Director Clayton Carlson conducted career education workshops for legislators and other opinion leaders in the state in Pierre early in 1976. These sessions were conducted with funds received in a grant by Mrs. Judy Olson, a member of the State Board of Education, from the Ford Foundation and administered through George Washington University. The purpose of the grant was to disseminate career education information to opinion leaders throughout the state.

The first meeting was held in Pierre on January 13 with 35 in attendance. Participants were state legislators who comprise the Education Committee; members of the State Board of Education; the Secretary of Education and Cultural Affairs; and the division heads from Higher Education, Vocational and Technical Education, and the Division of Elementary and Secondary Education. The second meeting, held in Pierre March 22, was attended by representatives of business and industry.

Objective A. Develop and implement an inservice program for counselors, on a state-wide basis, on occupational counseling to increase their ability to serve the needs of students.

The guidance component of the South Dakota Career Education Project emphasized consultative assistance to school counselors and the development of career education materials for use in career counseling and guidance activities in the contact schools.

The consultative assistance was in the form of direct contact with counselors from the schools involved in the Career Education Project. Assistance was given in career guidance program development and the utilization of career information and decision-making materials in the total school guidance process.

Through the guidance component a number of career materials were developed to assist the school counselor in personalizing the career development process according to individual student needs. Materials developed and implemented in many of the contact schools included the following:

1. Guidance Information Center - This resource was developed to assist small schools that are not able to set aside a room for a Guidance

Information Center. A model portable career laboratory was built by students as a group industrial arts project for approximately \$20. This lab was exhibited at career development workshops, and a blueprint and materials list was given to schools interested in building the lab. An additional incentive for the development of more extensive and relevant career guidance informational programs was the provision of \$200 to each school for the purchase of career development materials to augment the guidance information center.

2. Career Clusters and Job Families - The career cluster concept was adapted to South Dakota career guidance needs. Thirteen career clusters were identified. Each cluster was sub-divided into job families.
3. Career Cluster Directories - South Dakota Career Education and Vital Information for Education and Work (VIEW) Project jointly produced two Cluster Directories, a student handbook and a counselor handbook. The directories contain jobs representative of each career cluster and job family. No attempt was made to cluster all careers. However, the occupations that are listed in the directory can serve as guides for careers not clustered. The Directories were designed to be used with the Cluster Interest Inventory, the VIEW Program, and the Educational Opportunities Poster. The directories were distributed to all South Dakota school counselors at no charge.
4. Cluster Interest Inventory - A locally designed interest inventory was devised to assist students in their investigation of the world of work. The inventory directs the students to indicate likes or dislikes of jobs representative of each cluster and each job family. The inventory also assists students in exploring their interest in hobbies, sports and school subjects. The inventory is designed to narrow the over 30,000 career possibilities into two or three high interest clusters for the student to explore in depth.
5. Career Clusters and the VIEW Program - The counseling specialist worked with the Vital Information for Education and Work Project to implement changes in the format of the VIEW deck. The deck has been clustered and is now useful as an exploratory tool.
6. Educational Opportunities Poster - An educational opportunities poster was developed containing the offerings of public and private colleges and universities in South Dakota. The poster is designed to help students find the institutions that offer programs in their high interest clusters. The posters were distributed at no charge to South Dakota counselors.
7. After High School What? Poster - This poster was designed to give students sources of information on career opportunities. The poster was designed as an awareness tool to familiarize students with the less publicized career paths. Information on the career paths includes sources of additional information, cost or pay, length of training, type of training, positions available, requirements, and additional information. The poster was distributed to all South Dakota counselors.

8. Counselor's Workbook - The counseling specialist, in conjunction with the Pupil Personnel Services Division of the Department of Elementary and Secondary Education and South Dakota State University, developed a counselor's workbook to assist the counselor in developing a well-balanced guidance program based on the South Dakota accountability model and a corresponding needs assessment instrument. The Counselor's Workbook contains objectives and suggested activities for 16 student needs areas including career awareness, career exploration, career planning, and career placement. The workbook is made available on a yearly basis through the South Dakota Department of Elementary and Secondary Education.
9. Financial Aid Directory - To assist students in planning career paths, a financial aids directory was developed as a joint project with the Youth Services System and the South Dakota Association of Student Financial Aid Administrators. The directory, entitled Dollars and Sense, contains information on Federal and State Aid Programs, and general financial aid background.
10. Student Guidance Survey - This instrument determines the needs of students in the areas of guidance, counseling, and placement. It was developed by the counseling specialist in cooperation with the Division of Elementary and Secondary Education.
11. Job Characteristics Worksheet - Developed for use with the Occupational Outlook Handbook.
12. Job Characteristics Inventory - Utilizes the format of the Occupational Outlook Handbook, and designed for use in conjunction with the Handbook and other resources.

Summer Seminars

Two Summer Seminars in Counseling, Guidance and Placement were sponsored by the South Dakota Career Education Project. The seminars were held at Camp Lakodia, Madison, South Dakota from June 3 to June 7, 1974 and at Cheyenne Crossing, Lead, South Dakota from July 29 to August 2, 1974. The seminars were jointly sponsored by South Dakota State University, the South Dakota Division of Elementary and Secondary Education, and the South Dakota Department of Vocational-Technical Education.

The seminars combined the presentation of information on a wide variety of career development, life/career planning, and resource development and utilization programs with counselor work sessions devoted to the development of guidance, counseling and placement programs according to a student needs assessment model and a counselor program development workbook.

Workshops components included the following speakers, discussions, and activities:

1. A keynote presentation on life/career guidance by Dr. Norman Gysbers at the Camp Lakodia Seminar and by Dr. Earl Moore at the Cheyenne Crossing Seminar. Both speakers are prominent counselor educators at the University of Missouri.
2. A discussion of a proposed youth services guide was discussed at the workshop by the Division of Elementary and Secondary Education's Youth Development/Delinquency Prevention staff.
3. A comprehensive presentation of the services and programs of the South Dakota Career Education Project. Two unique counseling aids developed by the Career Education staff were explained during this session. These aids were the Decisions for Living booklet and the Career Cluster Inventory.
4. A special presentation of a life/career planning model which incorporated creative job seeking skills and career development processes.
5. A mini-post high school opportunities workshop was held to familiarize seminar participants with a number of student career choice possibilities. Representatives from the Armed Services, Federal Civil Service, the State Bureau of Personnel, and the Bureau of Apprenticeship and Training were present for a discussion of the services of these agencies.
6. Explanations of the development of community resource utilization, and the use of the South Dakota Vital Information for Education and Work (VIEW) program materials.
7. A discussion of recent changes in financial aids programs was presented. The Financial Aids Directory was distributed.
8. A presentation was given on the Exploring Careers Scouting Program.

9. The South Dakota Employment Service and the South Dakota Division of Vocational Rehabilitation presented information on student related programs.
10. A demonstration of the Occupational Formboard, a device for career exploration, was presented.
11. A presentation and discussion was held on designing a student centered guidance program based on student needs assessment data.
12. Individual and small group program development activities were conducted to assist each counselor in re-assessing and developing a guidance program for her/his local school.
13. A presentation of the South Dakota Counselor's Workbook was made. The handbook was utilized in assisting the counselors in the development of program objectives and activities based on student needs.

Overall workshop evaluation ratings were very positive. On a rating scale of a highest possible evaluation of 5, the Camp Lakodia seminar received a mean rating of 4.86 as to its importance and 4.65 in its effectiveness. The Cheyenne Crossing seminar was rated 4.78 in importance and 4.68 in effectiveness.

The four open-ended questions of the evaluation instrument were subjected to a content analysis. This analysis identified insights and ideas that could be applied from the workshop, additional inservice needs of the school counselors, suggestions for further assistance through the South Dakota Career Education Project, and recommendations concerning the seminar.

Additional Inservice Needs

Suggestions by the workshop participants in response to the question, "Using the student need areas of the South Dakota Counselor's Workbook as a guide, indicate specific inservice needs that would be helpful in assisting you to further develop your competencies and program needs," included a number of specific inservice educational needs.

Three inservice suggestions received the most attention by the participants. The first suggestion was that a yearly workshop, similar to the one being evaluated, be offered. The counselors indicated that there was a need to share ideas, concerns and program needs. They felt that a yearly exposure to the needs assessment and program development process would assist immeasurably in the improvement of school guidance programs. The second inservice suggestion was a desire for career counseling aids and information. The third inservice need was for the development of increased skills in group counseling processes and activities including small group activities, values clarification, and awareness activities.

Other suggestions for inservice educational programs included: human sexuality workshops, community resource utilization, self-concept

development, reaching the non-motivated student, crisis counseling techniques and financial aids.

Assistance from South Dakota Career Education

The following is a list of specific suggestions by the seminar participants of ways that the South Dakota Career Education Project could assist school counselors:

1. Continual updating and dissemination of information.
2. Consultative assistance to local schools and counselors.
3. Publish a list of materials being used and programs in practice.
4. Development and sponsorship of workshops.
5. Listing of resource people for areas of the state.
6. Presenting workshops for school administrators.
7. Presenting in-school workshops for teaching staff.

Based on the data collected, the following conclusions and recommendations were made:

1. The seminars were extremely well-received by the participants. The high ratings of the seminar components and the enthusiasm demonstrated by the participants to apply the seminar results to their local schools indicated that the seminar was very successful in meeting the needs of the participants.
2. The needs assessment approach to guidance program development was effective in stimulating the participants to reassess and develop guidance programs that are unique to the local student needs. The Counselor's Workbook, in conjunction with the Decisions for Living and the Career Cluster Inventory and Directory, proved to be valuable, concrete tools for program development.
3. Due to the acceptance and usefulness of the seminar as assessed by the participants, careful consideration should be given to the implementation of a follow-up seminar for school counselors. Repeatedly, counselors requested that a yearly seminar be established to keep abreast of developing program and inservice needs.

Needs of Students, Counselors

An analysis of student needs in grades 9 and 11 indicates many needs in the areas of career guidance, counseling, and placement. The samples consisted of 1088 9th grade and 1204 11th grade students. Table I gives the mean for the 16 subscales for the 9th grade sample. Fifteen of the 16 subscales were classified as indicating a moderate need. One subscale, understanding the guidance program, was classified as a weak need.

Table I
ANALYSIS OF STUDENT NEEDS (1973-1974)

| Strength of Need | | Student Need (9th Grade) |
|------------------|----------|--|
| Mean | Range | |
| 3.187 | Moderate | Making post high school plans |
| 3.161 | Moderate | Assessing self |
| 3.154 | Moderate | Making decisions |
| 3.140 | Moderate | Finding jobs and careers |
| 3.124 | Moderate | Developing career awareness |
| 3.040 | Moderate | Developing responsibility for self |
| 3.019 | Moderate | Planning careers |
| 2.985 | Moderate | Understanding and accepting self |
| 2.856 | Moderate | Relating to others |
| 2.833 | Moderate | Understanding others |
| 2.806 | Moderate | Being understood by others |
| 2.760 | Moderate | Understanding sexual identity |
| 2.705 | Moderate | Selecting courses & making educational plans |
| 2.662 | Moderate | Exploring careers |
| 2.629 | Moderate | Clarifying values |
| 2.179 | Weak | Understanding the guidance program |

Table II
ANALYSIS OF STUDENT NEEDS (1973-1974)

| Strength of Need | | Student Need (11th Grade) |
|------------------|----------|--|
| Mean | Range | |
| 3.303 | Strong | Making post high school plans |
| 3.175 | Moderate | Finding jobs and careers |
| 3.159 | Moderate | Planning careers |
| 3.141 | Moderate | Developing career awareness |
| 3.137 | Moderate | Making decisions |
| 3.119 | Moderate | Developing responsibility for self |
| 3.098 | Moderate | Assessing self |
| 3.084 | Moderate | Exploring careers |
| 3.055 | Moderate | Understanding others |
| 3.045 | Moderate | Understanding and accepting self |
| 2.840 | Moderate | Being understood by others |
| 2.809 | Moderate | Selecting courses and making educational plans |
| 2.746 | Moderate | Relating to others |
| 2.672 | Moderate | Understanding sexual identity |
| 2.631 | Moderate | Clarifying values |
| 2.231 | Weak | Understanding the guidance program |

Table III
ANALYSIS OF COUNSELOR NEEDS (1975)

| Strength of Need | | Counselor Need for Inservice Training |
|------------------|----------|--|
| Mean | Range | |
| 2.953 | Moderate | Developing career awareness |
| 2.814 | Moderate | Relating to others |
| 2.782 | Moderate | Making decisions |
| 2.767 | Moderate | Finding jobs and careers |
| 2.741 | Moderate | Clarifying values |
| 2.733 | Moderate | Understanding others |
| 2.723 | Moderate | Assessing self |
| 2.682 | Moderate | Exploring careers |
| 2.593 | Moderate | Being understood by others |
| 2.560 | Moderate | Developing responsibility for self |
| 2.476 | Weak | Understanding and accepting self |
| 2.422 | Weak | Planning careers |
| 2.395 | Weak | Making post high school plans |
| 2.383 | Weak | Understanding the guidance program |
| 2.267 | Weak | Understanding sexual identity |
| 2.247 | Weak | Selecting courses & making educational plans |

Table II lists the 16 subscale means for the 11th grade sample. One subscale, making post high school plans, was classified as a strong need and one other subscale, understanding the guidance program, was classified as a weak need. The other 14 subscales were classified as moderate needs for the 11th grade.

For both samples the career development areas were generally among the top needs. Making post high school plans was the highest need for both groups. Developing career awareness and finding jobs and careers were among the top five student needs. Planning careers was ranked seventh for 9th grade and third for 11th grade. It should be noted that since there is little difference between any of the means, considerable caution should be exercised in prioritizing needs.

Another state-wide study was conducted to determine counselor inservice need in the 16 student need areas. Information for this study was compiled in 1975 from 90 counselors who responded to an inservice questionnaire. Table III presents the strength of the counselor's needs. Ten of the 16 subscale means were classified as moderate inservice needs and six were classified as weak inservice needs.

Correlations were compiled between counselor inservice need and 9th grade need, and counselor inservice need and 11th grade need. The correlation between counselor inservice need and 9th grade was +.36, while for the 11th grade it was +.31.

SDCE cooperated with the Vital Information for Education and Work (VIEW) project to change the format for the VIEW microfiche deck. The deck is now in a 13-cluster format and is an informational as well as an exploratory system. All public high schools in the state have the VIEW software and reader.

Objective B. Develop a program to integrate occupational information and career awareness into the K-6 curriculum of all participating schools.

At the inservice presentations, the elementary curriculum specialist gave basic career education philosophy and curriculum assistance to help facilitate integrating career education into the existing curriculum. Teachers visiting the project site received an individualized career education experience through exposure to exemplary lessons and to career education practitioners in the classrooms. The visitors examined curriculum guides and reviewed other available career education materials.

A set of elementary awareness curriculum guides was left with the participating school, along with material outlining the eight areas of awareness in career education. Other materials supporting the career education concept and demonstrating its implementation were also given to the schools. The project staff found it essential to place materials in the hands of teachers implementing career education in their classes to assist and reinforce their efforts. A continued flow of materials to these teachers was vital, since the CE staff had but a limited number of contacts with them.

Materials explained and distributed at these one-day workshops included:

1. Elementary Awareness Guides which had been produced and field tested by Watertown teachers in the Career Development Project.
2. Goal Statements based upon the Elementary Awareness Guides. These outline a scope and sequence for career education.
3. Career Explorations, Designs for Field Trip Reporting.
4. Shopper's Flyer for Elementary School Career Education Curriculum Materials.
5. K-6 Self Awareness and World of Work Language Arts lessons for instructional use by teachers immediately after the workshops.
6. Written definitions of career education.
7. Strategies for utilizing career education in classroom situations.

At first year workshops, evaluation forms were completed by the participants and were made available to the evaluation team. Information from these evaluation forms and from the workshop teams indicated that the instruction and materials were well received. As one might expect, there seemed to be a close relationship between those who believed career education to be more than a "passing fad" and those who gave high ratings to the workshops. Many comments indicating pleasure and value in the workshops were evident on the evaluation forms. Typical expressions were, "I gained many new ideas and it refreshed my outlook on education" and, "I'm very glad I came". Questions pertaining to content, organization, and time of these inservice workshops were generally checked as "adequate" or "very adequate".

During April of the first project year. "Elementary Teacher Survey" sheets were mailed to the school contact persons. Instructions were to have these completed by five or ten teachers, depending upon school size. This random sample survey was then returned to the career education office where they were made available to the evaluation team.

Since there was no base from which one may make comparisons, the value of this survey was more in the idea that it was a follow-up for those who had already attended a workshop.

The survey was slanted toward many of the concepts of career education. In general, the person who favors career education should respond with "agree" or "strongly agree". An analysis of the eighty-five "Elementary Teacher Survey" sheets indicated the following:

- (1) 54.6% responded by "agree"
- (2) 33.3% responded by "strongly agree". In other words, 87.9% were positive toward these career education concepts.
- (3) 8.2% responded as "undecided".
- (4) 3.9% disagreed with an insignificant three out of a possible 1700 indicating "strong disagreement".

The respondents indicated unanimous agreement with the concept that a teacher should assist students in developing the ability to get along with people. Like treatment was indicated for the concept that students should learn the value of work through their entire educational experiences. Some of the areas of disagreement with the percentage of those disagreeing or undecided are included in the following:

- (1) 29% questioned financing career education from local school budgets.
- (2) 22% were opposed to the concept that teachers should have work related experiences to increase teacher understanding of other vocations.
- (3) 29% did not feel that teaching responsibilities should increase due to the emphasis of career education in the schools.
- (4) 35% felt that those in career education oriented programs might not do as well on standardized tests as students in regular classes.

Forty percent of the respondents indicated that career education is basically another term quite similar in meaning to vocational education. An analysis of the attitude concepts checked by those who equated career education with vocational education did not indicate that this misconception reflected upon their attitudes toward career education.

The counselors and administrators at the outset of the project attended one-half day of which teachers geared to major goal statements that reflected some of the significant lessons in the Elementary Awareness Guides.

The guides, developed by the curriculum specialist, contain a series of occupational reference materials planned, written, and taught by Watertown area teachers.

They contain extensive information about the world of work. Knowledge which teachers lack due to the newness of career education is contained in the series.

After exposing counselors and administrators to demonstration lessons, the groups personnel sent to the project for briefing often requested to attend the school and demonstrated considerable interest in securing a set of guides for their school as well as a Goal Statement Chart.

As a follow-up to the demonstration school visit, teachers viewed curriculum materials and audio visual aids, and were taught the use of a curriculum form which assists them in integrating their own curriculum through strategies geared to teach specific awareness, concepts, and generalizations. One of the teacher's own lessons was then produced with that curriculum form as a basis.

Since many more guides than the one set with which they were provided were often requested by teachers, and the project funds for its reproduction were limited, they could be ordered from the ERIC system. The guides were also being incorporated on microfilm into the South Dakota VIEW Program.

Primary and intermediate demonstration lessons, and conferences with elementary teachers and principals, were arranged for the groups selected by their schools for a day of intensive career education inservice at Watertown. The McKinley Elementary School in Watertown served as a demonstration site. An example of a special activity arranged for visiting groups was a careers in government lesson in McKinley's sixth grade. The lesson began with a student being served papers by the county sheriff for a hypothetical offense, moved to "trial" before the circuit court judge in the Codington County Courthouse, and culminated in a tour of the courthouse offices, noting the various careers and duties of the employees.

An expansion of the Vital Information for Education and Work (VIEW) Program was introduced to the schools by Mrs. Dickson, elementary curriculum specialist, in workshops at four locations each fall. Mrs. Dickson wrote the curriculum techniques for the program. Workshop participants were told how the elementary VIEW program could be integrated into the existing curriculum and serve as a primary basis of occupational information.

The elementary VIEW materials made available to the schools consisted of a coordinator's directory, a student directory, microfiche aperture cards, and posters.

Other K-6 Activities

Other activities of the elementary curriculum specialist, relative to developing Objective B, included the following:

- . Assigned occupational clusters to grade levels. Clusters were coordinated with a goal statement chart. Instructional objectives are being designed for each goal statement.
- . Completed planning of guide to show teachers how to structure lessons for career education.
- . Compiled book, You and the World of Math. Original lessons were designed and tested in Watertown Junior High School. They are experience-based and oriented to the world of work. The purpose of the math packets contained in the book is to demonstrate the relevancy of mathematics to everyday transactions of the interdependent citizen.
- . Developed sample Indian career-oriented lessons.
- . Developed a life science living museum year-long plan, in cooperation with the Hazel School, as an example of how a course offering can be analyzed and developed into an active experience involving all students.

- Designed a series of posters to use with teachers. Series A demonstrated experience based career education education in the upper intermediate and junior high, with a photo example for each cluster used in South Dakota. Series B is a photo essay of children in activities which answer the question, What Can We Do -- In Reading, In Math, In Social Studies, In Science. The subjects of Series C are South Dakota's Career Doll Lady, and A Senator (Humphrey) Grows Up in South Dakota. Series D is on the Handy Dandy Candy Company, a business enterprise of students in the Hazel School.
- Set up demonstration lessons for a state principals convention showing how career education can be integrated into the curriculum.
- Updated Shopper's Flyer for Elementary School Career Education Curriculum Materials.
- Arranged a research study of career teaching effectiveness for a teacher from the Avon School System, using the Occupational Information Survey for Elementary Career Education Pupils test.

Curriculum Developed and Revised

The elementary curriculum specialist wrote A Workbook Toward Career Education Implementation, for administrators.

A revised goal statement chart contains clusters and sample occupational information, so that at least two lessons in the K-6 scope and sequence were representative of each of the 13 South Dakota clusters of occupations.

She organized, compiled, rewrote and supplied occupational information and arranged for printing You and the Work World of Math, packets of mathematics with career orientation for junior high.

The elementary curriculum specialist wrote Career Orientation for Junior High Grammar Course of Study. Using a Course of Study of pure grammar, the teachers will be able to evaluate its effectiveness with career orientation pupil tasks as suggested.

Miscellaneous K-6 Printed Materials Produced

- Revised Shopper's Flyer
- Addendum to Shopper's Flyer
- Revised and Printed "Career Explorations: Designs for Field Trip Reporting"
- Revised and Printed Awareness Packets
- Revised Curriculum Paradigms
- Devised Curriculum Packets for VIEW Workshops

Objective C. Implement a program of occupational information, orientation, and exploration for secondary students (7-9) to increase their knowledge of the world of work, to facilitate their exposure to unfamiliar occupations, and to increase their participation in hands-on exploratory experiences.

Objective D. Procedures will be implemented in each participating secondary school (10-14) to insure the maximum availability to students of job observation, work experience, and cooperative education experiences.

The means used in meeting both of these objectives is outlined here, since the secondary curriculum specialist geared his portion of the inservice sessions to the school staffs in grades 7-12. There is an overlap with some of the developments and activities discussed under Objective A, particularly in the areas of occupational information and exploration.

The major thrust in the secondary curriculum portion of the program was as follows:

- . Identification and review of outstanding curriculum materials that have been developed nation-wide. The primary purpose of this approach has been to avoid duplication of effort in developing materials, and to make the best of the materials available to South Dakota schools. Many of these materials have been displayed at the inservice workshops. A comprehensive bibliography has been developed.
- . Conducting the 7-12 portions of the workshops, where teachers are presented the concepts of career education, methods of implementation, and where to locate additional information.
- . Conducting the secondary portion of the return visit sessions with interested teachers.
- . Developing mini-ideas for use in math, science, English, and social studies. Hand-on activities were emphasized.
- . Establishing a school loan service for a series of 13-15 minute 16mm career education films provided this office by the Department of Defense. These films explore various career clusters, and suggest alternatives for entering an area of employment.
- . Establishing a curriculum guide loan service.
- . The CE Project made \$200 available to each participating school for the purchase of material. Many of the materials purchased were identified in the materials displayed in the workshops by the secondary curriculum specialist.
- . Evaluation of Decisions for Living books, which were provided to schools requesting them for their students. Distribution of this book during the project totaled more than 8500 copies. The results of this evaluation follow.

Decisions For Living Evaluation

As an evaluation tool for Decisions for Living, questionnaires were sent to 47 schools which received copies of Decisions for Living during the 1974-75 school year. Twenty-eight of the questionnaires were returned.

The questionnaire contained 28 items to be evaluated. Educators were asked to rate each item for usefulness on a scale of one to five with one being "not useful" to five being "very useful." The results in up-dating and refining Decisions for Living.

In addition to the 28 items scored, 11 section scores are reported. The sections are Personal Information, Individual Values, Finding a Job, Letter of Application, The Application Form, Preparing a Resume, The Job Interview, Handling the Job, Career Planning Information for Juniors and Seniors, Insurance, Taxes and Financial, and Local Government.

For each section space was provided for comments or suggestions. The final section requested information on how Decisions for Living was being used in representative school systems.

The following guidelines were established to indicate usefulness.

- 1.00 - 2.33 = not useful
- 2.34 - 3.66 = moderately useful
- 3.67 - 5.00 = very useful

SAMPLE MEANS OF QUESTIONNAIRE ITEMS

| <u>MEAN</u> | <u>ITEM</u> |
|-------------|---|
| 4.78 | Where to look in the courthouse |
| 4.73 | Job interviews |
| 4.73 | Writing the letter |
| 4.71 | Follow-up letter |
| 4.70 | Example of a resume |
| 4.68 | Writing the resume |
| 4.68 | Taxes and financial |
| 4.65 | Completing an application |
| 4.52 | The envelope |
| 4.50 | Example of an application form |
| 4.47 | What to do on the job |
| 4.47 | Body of letter |
| 4.40 | Getting a raise or promotion |
| 4.40 | How to leave a job |
| 4.38 | Insurance |
| 4.35 | How to determine take-home pay |
| 4.35 | Balancing a monthly budget |
| 4.33 | Legal and consumer terms |
| 4.30 | Where to look for work |
| 4.22 | What to expect on the job |
| 4.22 | Looking at what's important |
| 4.20 | Graduation requirements plan and course selection guide |
| 4.16 | Charting your post-graduation plans |

| <u>MEAN</u> | <u>ITEM</u> |
|-------------|------------------------------------|
| 4.15 | Information of interest to juniors |
| 4.00 | Personal data file |
| 4.00 | Recording information |
| 3.80 | Test record |
| 3.75 | Homeroom observation |

Findings indicate 27 items very useful and one item, homeroom observation, moderately useful.

SAMPLE MEANS OF QUESTIONNAIRE CATEGORIES

| <u>SECTION</u> | <u>MEAN</u> |
|---|-------------|
| I Personal Information | 4.00 |
| II Individual Values | 3.92 |
| III Finding a Job | 4.30 |
| IV Letter of Application | 4.57 |
| V The Application Form | 4.57 |
| VI Preparing a Resume | 4.69 |
| VII The Job Interview | 4.72 |
| VIII Handling the Job | 4.36 |
| IX Career Planning Information for Juniors and Seniors | 4.16 |
| X Insurance, Taxes and Financial | 4.52 |
| XI Local Government | 4.56 |

The overall mean of the 11 sections is 4.37 indicating very useful.

The career education objectives for secondary schools were: (1) conducting a program of inservice training for teachers and administrators; (2) developing and assembling materials which contribute to career orientation and career exploration in the junior high school; (3) developing and assembling materials that would assist the students to increase their self-awareness, to gain a favorable attitude toward work, and to develop and practice appropriate career decision-making skills; and (4) stressing the importance of job preparation in grades 10-14 with emphasis on work experience and constructive educational opportunities.

Objective I: Inservice Training

Inservice workshops had two major thrusts: to explain basic concepts of career education and to concentrate upon the task of implementing career education in the established curriculum.

At the junior high level, three elements were emphasized: (1) career exploration, (2) mastery of skills as a precondition to any career, and (3) by the ninth grade students will begin instruction in reasoned career choice.

At the senior high level (grade 10-12), emphasis was on (1) developing skills necessary for the tentative career path, (2) continued exploration and (3) a combination of career preparation for a very tentative career path and career exploration.

A secondary teacher survey was distributed to a sample of 78 teachers in order to determine present attitudes to career-related aspects. This provided an opportunity to note present attitudes.

Also, a sample of 4 first year career education workshops were evaluated as to general teacher attitudes toward career education and an evaluation of the workshop.

The results indicated that there was a very strong interest in career education, and they believe it should receive a much stronger emphasis. It also pointed out lack of experience and training for implementing a career education curriculum in local schools.

The workshops received a highly favorable evaluation.

During the course of the first year, a change was made in the format of conducting the workshops. Instead of dealing with in-depth presentations to all teachers, overviews were given to all, and in-depth presentations were given to a lesser number of teachers and administrators who indicated a great interest. It appears that the latter method is much more effective.

Objective II: Career Orientation and Career Exploration in Junior High

This objective was met by developing career exploration curriculum materials in certain areas and distributing them to the project schools, and by emphasizing the importance of career exploration to the teachers and administrators at workshops.

Guides were produced in the areas of Music, Health, American History, and Language Arts. These materials were evaluated as a group by a new instrument called "Assessment of Career Education Materials."

Although career materials were not developed in some subject areas, information was provided about the acquisition of career education materials from other sources. All of the participating schools were made aware of these materials and how they might be obtained. Although these materials are of varying quality, they served to provide the teacher with a great number of career exploration possibilities.

Each school was provided with A Very Selective Annotated Career Education Bibliography. This document served as a basic reference document which could be used as a further reference document and also to serve as an aid to purchase career education materials from the \$200 each school received from the project for this purpose. The bibliography is divided into five sections: (1) basic literature on career education, (2) career education bibliographies, (3) printed curriculum materials, (4) audio-visual software, and (5) simulation and instructional games.

Objective III: Career Decision Making Skills

The objective was not to have students choose their career in junior high but to have the students realize that they arrive at a career choice as a result of a reasoned effort. It also attempts to help students gain an awareness of the beginning competency skills and procedures which can contribute to intelligent decision making.

Objective IV: Emphasizing the Importance of Job Preparation in Grades 10-14

Grade levels 10-14 received the least emphasis during the first year of the Career Education Project. This was because of deliberate choice because it was reasoned that the most critical--and least developed--area in secondary curriculum was grades 7 through 9. Efforts were made to make secondary teachers and administrators aware of career possibilities.

Emphasis was placed on the value of the Multi-District Vocational Career Center, particularly in rural areas.

Many of the curriculum and instructional materials cited in the secondary school career education bibliography are designed specifically for grades 10, 11, and 12.

Objective E. School administrators, guidance counselors, and teachers will develop a commitment to provide adequate placement services for all students, and each participating school will construct a program to accomplish this end.

The components for a model of placement activities were furnished to each participating school in the following format:

"Decisions for Living" books. This guide for personal planning was furnished in quantity to schools requesting them for individual student use. All involved school districts received at least enough copies for teacher use, and some schools have duplicated their own. It is designed to help tie school work together and relate it to life. It also contains basic information needed for day-to-day living. The manual deals with recording and using personal information, exploring individual values, looking for work, writing application letters and completing application forms, preparing resumes, job interviews, handling the job, insurance, taxes, and financial, local government, and career planning information for juniors and seniors. The evaluation of this manual in this section gives some insight into its use and usefulness.

Vital Information for Education and Work (VIEW). Conducted by the Division of Vocational-Technical Education, VIEW makes job information available to elementary and secondary school students on microfiche in a 13-cluster format. This format enables students to explore careers in their high interest areas. All secondary schools have complete VIEW decks and a reader. The elementary VIEW is available to elementary schools.

Career Clusters and Job Families. The cluster format introduced to South Dakota schools helps students study the thousands of career options open to them. This format establishes an orderly classification system based on the similarity of 13 work environments. Each cluster is sub-divided into job families, each family consisting of hundreds of specific occupations requiring varying amounts of preparation. In most clusters students will find a few jobs that require less than a high school education and some which require seven or more years of post-secondary preparation.

Career Cluster Directories. This project worked with VIEW to produce two cluster directories: a student handbook and a counselor handbook. The counselor handbook contains background information and a directory. The directory names jobs representative of each career cluster and job family. Each job is identified by its D.O.T. number and title. Careers in the VIEW deck are also identified. The directories can be used with the Cluster Interest Inventory, the VIEW deck, and the Educational Opportunities Poster. All counselors have these handbooks.

Cluster Interest Inventory. This four-page instrument directs the students to indicate a like or dislike of jobs representative of each cluster and each job family. It also helps students explore their interest in hobbies, sports, and school subjects. The CII is designed to narrow the 30,000 career possibilities into two or three high interest clusters for in-depth exploration.

Counselor's Workbook. This manual, discussed earlier, helps the counselor build a well-rounded guidance program based on the South Dakota accountability model and a corresponding needs assessment instrument. This format enables the counselor to record needs assessment data, and develop activities and procedures to determine criteria for evaluation. The workbook contains objectives and suggested activities for 16 student need areas including career awareness, career exploration, career planning, and career placement.

Educational Opportunities Poster. To expose students to educational opportunities at the college and university level, this poster was developed in cooperation with the Division of Elementary and Secondary Education. It lists the offerings of public and private colleges and universities in South Dakota. These offerings include one and two year career programs, majors and minors, associate degrees, masters degrees, and doctoral programs. The poster helps students locate institutions that offer programs in their high interest areas. It is designed for use with the Vocational Programs Directory distributed by Vocational-Technical Education.

After High School What? This poster serves as an awareness tool for the less publicized career paths. It gives basic information, and directs students to other sources of information. It gives information on direct employment and on-the-job training, Federal Civil Service opportunities, vocational-technical training, State Merit Council opportunities, apprenticeships, college training, and the armed services. Information on these career paths includes sources of additional information, cost or pay, length of training, type of training, positions available, and requirements.

Financial Aid Directory. This directory helps counselors and students plan career paths. It is a joint project of this project, the South Dakota Association of Student Financial Aid Administrators, and Youth Services. Called "Dollars and Sense," it contains financial and institution information. It is included in the VIEW deck.

Summer Workshops for Counselors. Counselors and graduate students in counselor training attending these week-long summer sessions worked with the various instruments discussed here. Through the use of these instruments, the input of counselor educators, and the development and exchange of ideas, they are encouraged to develop a systems approach to placement that will result in placement of all students.

Since each school system is encouraged to develop its own placement model, adapting the instruments and assistance provided by this project to meet the needs of their own situation, it is difficult to pinpoint the extent of community involvement of each school. The use of community resources by some of the schools is extensive while others make only limited use of the business, industry and public resources available within their communities. The following three are cited as resources readily available to all and used by many schools. These are examples, and not an exhaustive list.

South Dakota Job Service. This state employment agency cooperates with the project and with the schools through its administration of the GATB test, employment counseling, and the Job Bank.

Bureau of Apprenticeship and Training. This Federal agency cooperates with this project and with schools requesting its services, which are made known to school counselors.

Armed Services. This project and many of the participating schools recognize the armed services as a viable career option, and receives the cooperation of the various branches in extending career information to high school juniors and seniors.

Because of the divergent needs and circumstances of each school system, a guidance model per se was not handed them. Each school combines and uses the components available to them in a different way. An eighth grade class at Parkston, for example, undertook an extensive written and photographic survey of local occupational opportunities. Bonesteel has developed a released-time work program for juniors, after the cooperation of teachers and employers was secured.

All of these instruments and services were made available to the vocational-technical schools in the state to assist in the placement of students in grades 13 and 14. Extensive inservice work was done with the counselor in the Lake Area Vocational-Technical Institute at Watertown. The counselor from the Black Hills Area Vocational-Technical School at Rapid City attended a one week counselor workshop, and contacts were made with the counselors in the vocational-technical schools at Mitchell and Sioux Falls.

It was the philosophy of this project that placement is not confined to the counseling and guidance office, but is ingrained in the total school

program from kindergarten through high school. An understanding of the relevance of school to employment broadens as students move through the grades and identify their interests as their self-awareness and awareness of the world of work develop. Involvement of the students with the community and the community with the school is vital in this process.

Each school, however, was encouraged to determine its priorities in placement based on its needs, existing curriculum and activities, and budget. The guidance counselor was encouraged to serve as a catalyst in this process.

Dissemination

Production of a career education newsletter called Viewpoint was begun in January, 1974 and four issues were produced during the year. The newsletter was published cooperatively with the Vital Information for Education and Work (VIEW) project at the University of South Dakota at Springfield. The newsletter was distributed to a mailing list of some 1100 educators in South Dakota and in other states, and proved to be a valuable means of disseminating current career education information.

Viewpoint contained news from the CE Project and from VIEW, and from the state and national education scenes.

A four-page tabloid newspaper to replace Viewpoint was developed by the information specialist in the fall of 1974 and was published four times during the academic year in cooperation with the VIEW Project. Called CE/VIEW, the publication contained career education news from the state, local, and national scenes. CE/VIEW had a circulation of 1,500 to public and private schools, state and federal agencies, legislators, colleges and universities, and individuals. One copy for every two teachers was sent to all school systems.

Other dissemination was accomplished through newspaper stories, radio and television broadcasts, workshops and seminars, visiting groups, and presentations made to service clubs, guidance associations, and other groups, including the spring conference of the state Personnel and Guidance Association.

Some 935 pieces of printed material produced by the CE Project were sent within and outside the state in response to requests. Nearly 7,500 other pieces of material -- curriculum guides, guidance and counseling posters and booklets, field trip booklets, and various brochures -- were handed out at workshops and to visitors.

Special informational packets, including books and a sound/slide presentation, have been loaned to schools for use with school boards and other selected audiences.

Requests for information came from a wide variety of sources. The many requests for information received from within the state indicate the growing acceptance of the career education concept in South Dakota.

Several project publications have appeared in the ERIC System.

The inservice sessions conducted for school staffs, and special workshops conducted by staff members, in addition to the conferences and other events in which CE staff members played an active part, served as the primary means of disseminating career education concepts and information.

Tie-line, a telephone service which links state residents with appropriate public agencies able to serve their needs, constituted a useful telephone link between teachers, counselors, administrators, and project staff members.

William Anderson, information specialist, made numerous contacts with school superintendents in the state concerning their participation in the CE Project. He also developed and responded to requests for career education information, developed and made career education presentations, wrote reports, assisted staff members in developing materials, and assisted an independent evaluation team and other visitors to the program. In addition, he took numerous colored slides of career education classroom situations and of instructional materials, developed slide presentations for the CE Project and for the Multi-District Career Center, wrote news stories, and assisted with the planning of program activities.

Extensive use was made of slide and slide/tape presentations,

Career Education Proposals

The CE staff had input into a state career education proposal that was submitted to and subsequently funded by the U. S. Office of Education. This plan coordinated the career education efforts of the Division of Higher Education, the Division of Elementary and Secondary Education, and the Division of Vocational and Technical Education. It was designed to integrate career education concepts into all levels of the educational system in South Dakota. The project staff also planned and wrote a proposal for Experience Based Career Education.

E. EVALUATION

Final Evaluation of K-14 Project of
Career Education, Occupational Counseling, and
Bridging the Gap Between School and Work

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

Project No. 502A850004
Grant No. OEG-8-74-0027

prepared by

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Evaluation Report

South Dakota Career Education Project July, 1976

The plan for evaluating the 1975-1976 final project year of the South Dakota Career Education Project focused on the assessment of student outcomes. The South Dakota Career Education Project has continually emphasized the application of its in-service education and school staff consultation services to improve curriculum and opportunities for students to examine self in relationship to career development, to learn about the nature and components of the work process, and to develop resources and competencies in career decision-making skills. Thus the evaluation design was planned to obtain a measurement of the following three specific student outcomes of the project:

1. Self-awareness development
2. Awareness of and knowledge about work
3. Competency in career decision-making skills

The evaluation plan extended the 1974-1975 evaluation process with specific emphasis on schools which had received no direct services from the South Dakota Career Education Project. The results of the treatments received by the identified schools were compared with a previously established control group utilized in the 1974-1975 data analysis. In addition to this comparison, a school which had received extensive services from the South Dakota Career Education Project since the project's initial development was compared with the control group at applicable grade levels. The use of the 1974-1975 evaluative data for the control group was necessitated by the nature of the South Dakota

Career Education Project. This project has been designed to reach virtually all schools in South Dakota by the end of the final project year. Thus it was not possible to identify a control group within the state for comparison purposes for this final project year evaluation.

STUDENT OUTCOME EVALUATION

A treatment-control group quasi-experimental evaluation design was used to assess the student outcomes of the South Dakota Career Education Project. This design utilized a posttest only control group analysis procedure. A sample of 109 third grade students, 142 sixth grade students, 141 ninth grade students and 84 twelfth grade students was selected from three South Dakota public schools that had received in-service assistance from the South Dakota Career Education project during the 1975-1976 project year. A randomly selected control group sample of 128 third grade, 98 sixth grade, 131 ninth grade and 144 twelfth grade students in schools which had not received the treatment prior to the 1975-1976 project year were similarly assessed during the 1974-1975 project year. The results from this assessment were used to make the comparisons with the 1975-1976 sample measurement.

Instruments used to assess the stated objectives of the project were as follows:

1. For the student outcome of self-assessment, the Self-Appraisal Inventory published by the Instructional Objectives Exchange was used for the third and sixth grade samples.
2. For the student outcome of awareness and knowledge about work, the third grade was administered the Knowledge of Careers Test published by the Evaluative Research Associates. The sixth grade sample was administered the Career Education Cognitive Questionnaire published by the Minnesota Coordinating Unit for Vocational Education. The ninth and twelfth grade samples were administered the New Mexico Knowledge of Occupations Test published by Monitor.

3. For the student outcome of career decision-making skills, the ninth grade sample was administered the Career Development Inventory, Scale C authored by Super and Forrest. In addition to the Career Development Inventory, Scale C, the twelfth grade sample completed the New Mexico Career Oriented Activities Checklist published by Monitor.

The tests were administered to the samples during May, 1976. The statistical procedure used in the research design was a t test for independent means. The 0.10, 0.05, 0.01, and 0.001 probability levels were established to indicate differences. A two-tailed test was employed.

EVALUATION RESULTS - SELF-AWARENESS

Third Grade. The Self-Appraisal Inventory (Primary Level) was utilized to obtain an assessment of the self-awareness development of students enrolled in schools which had received the services of the South Dakota Career Education Project in comparison to students enrolled in schools which had not received direct services from the project.

The Self-Appraisal Inventory assesses the student's attitude toward self in general, attitudes toward self in relationship to school, and attitude toward self in relationship to peers. A fourth assessment dimension, attitudes toward self in relationship to family, was not administered due to the sensitivity of the questions at this early age level. A Composite score for the three self dimensions is also provided.

Table I lists the means and t value for the control and treatment groups for the Composite score of the Self-Appraisal Inventory for the third grade assessment group.

TABLE I

A Comparison of Self-Appraisal Inventory
Composite Scores for Third Grade
Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|-------|------|
| Treatment | 109 | 14.97 | 1.35 |
| Control | 51 | 14.39 | |

An examination of Table I reveals that no significant differences existed between the mean for the treatment group and the mean for the control group on the third grade self-awareness assessment Composite score.

Table II lists the means and t value for the control group and the single treatment group which was previously identified as a school which had received continuous project service from the inception of the South Dakota Career Education Project.

TABLE II

A Comparison of Self-Appraisal Inventory
Composite Scores for Third Grade
Single Treatment and Control Groups

| Group | Number | Mean | t |
|--------------------|--------|-------|-----|
| Treatment - Single | 37 | 14.62 | .32 |
| Control | 51 | 14.39 | |

Table III lists the means and t value for the Attitude of Self in Relationship to School subscale of the Self-Appraisal Inventory for the third grade assessment.

TABLE III

A Comparison of Self-Appraisal Inventory -
Attitude of Self in Relationship to School Subscale Scores
for Third Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|------|------|
| Treatment | 109 | 4.36 | 1.11 |
| Control | 51 | 4.16 | |

The t value for the comparison of means between the third grade treatment and control groups on the assessment of Attitude of Self in Relationship to School subscale showed no significant differences between the treatment and control groups.

Table IV lists the means and t value for the control group and the single treatment group. An examination of Table IV reveals that no significant differences exist between the single treatment group and the control group.

TABLE IV

A Comparison of Self-Appraisal Inventory -
Attitude of Self in Relationship to School Subscale Scores
for Third Grade Single Treatment and Control Groups

| Group | Number | Mean | t |
|--------------------|--------|------|-----|
| Treatment - Single | 37 | 4.19 | .10 |
| Control | 51 | 4.16 | |

Table V lists the means and t value for the Attitude of Self in Relationship to Peers Subscale of the Self-Appraisal Inventory for the third grade student assessment.

TABLE V

A Comparison of Self-Appraisal Inventory - Attitude of Self in Relationship to Peers Subscale Scores for Third Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|------|-------------------|
| Treatment | 109 | 4.97 | 1.82 ^a |
| Control | 51 | 4.61 | |

^aSignificant beyond the 0.10 level

On the third grade assessment of Attitudes of Self in Relationship to Peers, the t value was significant at the 0.10 level. The mean for the treatment group was significantly greater than the mean for the control group on this subscale of the Self-Appraisal Inventory.

Table VI lists the means and t value for the Attitude of Self in Relationship to Peers Subscale for the single treatment group and control group assessment. An examination of Table VI indicates that no significant differences existed between the single treatment group and the control group.

TABLE VI

A Comparison of Self-Appraisal Inventory - Attitude of Self in Relationship to Peers Subscale Scores for Third Grade Single Treatment and Control Groups

| Group | Number | Mean | t |
|--------------------|--------|------|-----|
| Treatment - Single | 37 | 4.89 | .76 |
| Control | 51 | 4.61 | |

Table VII lists the means and t value for the Attitude of Self in General Subscale of the Self-Appraisal Inventory for the third grade assessment.

TABLE VII

A Comparison of Self-Appraisal Inventory -
Attitude of Self in General Subscale Scores
for Third Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|------|-----|
| Treatment | 109 | 5.64 | .05 |
| Control | 51 | 5.63 | |

The t value for the comparison of means between the third grade treatment and control groups on the assessment of Attitude of Self in General Subscale showed no significant differences between the treatment and control groups.

Table VIII lists the means and t value for the Attitude of Self in General Subscale for the single treatment group and control group assessment. An examination of Table VIII reveals that no significant

TABLE VIII

A Comparison of Self-Appraisal Inventory -
Attitude of Self in General Subscale Scores
for Third Grade Single Treatment and Control Groups

| Group | Number | Mean | t |
|--------------------|--------|------|------|
| Treatment - Single | 37 | 5.54 | -.30 |
| Control | 51 | 5.63 | |

differences existed between the single treatment group and control group.

Sixth Grade. The Self-Appraisal Inventory (Intermediate Level) was administered to obtain an assessment of the self-awareness development of sixth grade students enrolled in schools which had received the services of the South Dakota Career Education Project in comparison to students enrolled in schools which had not received direct services from the project. Four dimensions of attitude toward self were assess-

ed through this inventory. These dimensions were: general, family, peer and school. A composite score for the total inventory was obtained.

Table IX lists the means and t value for the control and treatment groups on the Composite score of the Self-Appraisal Inventory.

TABLE IX

A Comparison of Self-Appraisal Inventory Composite Scores for Sixth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|-------|--------------------|
| Treatment | 139 | 47.96 | -2.51 ^a |
| Control | 98 | 49.89 | |

^aSignificant beyond the 0.05 level

An examination of Table IX reveals that the t value for the comparison of means for the sixth grade groups on the Composite score of the Self-Appraisal Inventory was significant at the 0.05 level. The mean for the control group was significantly greater than the mean for the treatment group.

Table X lists the means and t value for the Composite score of the Self-Appraisal Inventory for the single treatment group and control group comparison. An examination of Table X indicates that the t value

TABLE X

A Comparison of Self-Appraisal Inventory Composite Scores for Sixth Grade Single Treatment and Control Groups

| Group | Number | Mean | t |
|--------------------|--------|-------|--------------------|
| Treatment - Single | 42 | 47.57 | -1.93 ^a |
| Control | 98 | 49.89 | |

^aSignificant beyond the 0.10 level

was significant at the 0.10 level. The mean for the control group was significantly greater than the mean for the treatment group.

Table XI lists the means and t value for the sixth grade control and treatment groups on the Attitude of Self in Relationship to School Subscale of the Self-Appraisal Inventory.

TABLE XI

A Comparison of Self-Appraisal Inventory - Attitude of Self in Relationship to School Subscale Scores for Sixth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|-------|--------------------|
| Treatment | 139 | 11.66 | -1.72 ^a |
| Control | 98 | 12.16 | |

^aSignificant beyond the 0.10 level

Table XII lists the means and t value for the Attitude of Self in Relationship to School Subscale of the Self-Appraisal Inventory for the sixth grade single treatment group and control group comparison. An

TABLE XII

A Comparison of Self-Appraisal Inventory - Attitude of Self in Relationship to School Subscale Scores for Sixth Grade Single Treatment and Control Groups

| Group | Number | Mean | t |
|--------------------|--------|-------|--------------------|
| Treatment - Single | 42 | 11.02 | -2.48 ^a |
| Control | 98 | 12.16 | |

^aSignificant beyond the 0.05 level

examination of Table XII reveals that the t value for the comparison of means between the sixth grade single treatment and control groups on the assessment of Attitude of Self in Relationship to School Subscale of the Self-Appraisal Inventory was significant at the 0.05 level. The mean for the control group was significantly greater than the mean for the treatment group on this assessment.

Table XIII lists the means and t value for the sixth grade control

and treatment groups on the Attitude of Self in Relationship to Peers Subscale of the Self-Appraisal Inventory. The t value for the compari-

TABLE XIII

A Comparison of Self-Appraisal Inventory -
Attitude of Self in Relationship to Peers Subscale Scores
for Sixth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|-------|-------|
| Treatment | 139 | 11.39 | -1.03 |
| Control | 98 | 11.69 | |

son of means between the treatment and control groups showed no significant differences between the two groups.

Table XIV lists the means and t value for the attitude of Self in Relationship to Peers Subscale for the sixth grade single treatment group and control group comparison. No significant differences existed between the two groups on the basis of the comparison of means.

TABLE XIV

A Comparison of Self-Appraisal Inventory -
Attitude of Self in Relationship to Peers Subscale Scores
for Sixth Grade Single Treatment and Control Groups

| Group | Number | Mean | t |
|--------------------|--------|-------|-------|
| Treatment - Single | 42 | 10.95 | -1.35 |
| Control | 98 | 11.69 | |

Table XV lists the means and t value for the sixth grade treatment and control groups on the Attitude of Self in Relationship to Family Subscale of the Self-Appraisal Inventory. The t value for the comparison of means between the treatment and control group showed no differences between the treatment and control groups.

TABLE XV

A Comparison of Self-Appraisal Inventory -
Attitude of Self in Relationship to Family Subscale Scores
for Sixth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|-------|-------|
| Treatment | 139 | 12.55 | -1.45 |
| Control | 98 | 12.87 | |

Table XVI lists the means and t value for the Attitude of Self in Relationship to Family Subscale of the Self-Appraisal Inventory for the sixth grade single treatment group and control group comparison.

TABLE XVI

A Comparison of Self-Appraisal Inventory -
Attitude of Self in Relationship to Family Subscale Scores
for Sixth Grade Single Treatment and Control Groups

| Group | Number | Mean | t |
|--------------------|--------|-------|------|
| Treatment - Single | 42 | 12.79 | -.25 |
| Control | 98 | 12.87 | |

No significant differences existed between the two groups on the basis of the comparison of means.

Table XVII lists the means and t value for the sixth grade treatment and control groups on the Attitude of Self in General Subscale of the Self-Appraisal Inventory. The t value for the comparisons of means

TABLE XVII

A Comparison of Self-Appraisal Inventory -
Attitude of Self in General Subscale Scores
for Sixth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|-------|--------------------|
| Treatment | 139 | 12.36 | -3.32 ^a |
| Control | 98 | 13.17 | |

^aSignificant beyond the 0.001 level

between the treatment and control groups was significant at the 0.001 level. The mean for the control group was significantly greater than the mean for the treatment group.

Table XVIII lists the means and t value for the Attitude of Self in General Subscale of the Self-Appraisal Inventory for the sixth grade single treatment group and control group comparison. No significant differences existed between the two groups on the basis of the comparison of means.

TABLE XVIII

A Comparison of Self-Appraisal Inventory -
Attitude of Self in General Subscale Scores
for Sixth Grade Single Treatment and Control Groups

| Group | Number | Mean | t |
|--------------------|--------|-------|------|
| Treatment - Single | 42 | 12.81 | -.84 |
| Control | 98 | 13.17 | |

Summary - Self-Awareness. The results of the self-awareness measurement of the third and sixth grade treatment and control groups indicated the following findings:

1. For the third grade total assessment, the treatment group exceeded the control group in positive self-awareness in relationship to peers. No significant differences were found between the treatment and control groups on the remaining dimensions of positive attitude toward self in relationship to school, general positive attitude toward self, and composite self-assessment.
2. For the third grade single group assessment comparison, no significant differences were found between the treatment and control groups. The single group school identified for assessment was the school with the continuous South Dakota Career Development project services throughout the three year period of time serviced by the project.
3. For the sixth grade total assessment, the control group exceeded the treatment group on the assessment dimensions of composite self-awareness, positive attitude toward self in relationship to school, and general positive attitude toward self. There were no significant differences between the treatment and control groups on the dimensions of attitude toward self in relationship to

peers or in relationship to family.

4. For the sixth grade single group assessment comparison, the control group exceeded the single treatment group on composite self-awareness and positive attitude toward self in relationship to school. There were no significant differences between the single treatment group and the control group on the self-awareness dimensions of positive attitude toward self in relationships to peers, family, or general positive self-awareness.

EVALUATION RESULTS - AWARENESS AND KNOWLEDGE ABOUT WORK

Third Grade. The Evaluative Research Associates Career Knowledge Test was administered to obtain an assessment of the career knowledge possessed by students enrolled in schools which had received the services of the South Dakota Career Education Project in comparison to students enrolled in schools which had not received direct services from the project.

The Career Knowledge Test is a 30-item test which measures third grade students' knowledge of job similarities, occupational differences, and the tools used in various occupations. The test provides a Composite score in addition to the three subscale scores.

Table XIX lists the means and t value for the Composite score for the third grade assessment of work awareness. As indicated in Table

TABLE XIX

A Comparison of Career Knowledge Test -
Composite Scores
for Third Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|-------|-----|
| Treatment | 108 | 24.67 | .36 |
| Control | 128 | 24.54 | |

XIX no significant differences existed between the means for the treatment and control groups on the Composite score of the Career Knowledge Test.

Table XX presents the means and t value for the Composite score of the Career Knowledge Test for the single treatment group/control group comparison. The single treatment group for this comparison were third grade classrooms in a school which had received continuous three year services from the South Dakota Career Education Project. An examination of Table XX reveals that the t value for the comparison of means

TABLE XX

A Comparison of Career Knowledge Test -
Composite Scores
for Third Grade Single Treatment and Control Groups

| Group | Number | Mean | t |
|--------------------|--------|-------|-------------------|
| Treatment - Single | 38 | 26.42 | 4.82 ^a |
| Control | 128 | 24.54 | |

^aSignificant beyond the 0.001 level

between the third grade single treatment group and the control group was significant at the 0.001 level for the Composite score of the Career Knowledge Test. The mean for the single treatment group was significantly greater than the mean for the control group.

The means and t value for the third grade treatment and control groups on the Similarity of Jobs Subscale of the Career Knowledge Test

TABLE XXI

A Comparison of Career Knowledge Test -
Similarity of Jobs Subscale
for Third Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|------|-----|
| Treatment | 108 | 7.11 | .75 |
| Control | 128 | 7.01 | |

are listed in Table XXI. An examination of Table XXI reveals that no significant differences existed between the means for the treatment

and control groups on the Similarity of Jobs Subscale for the third grade assessment.

Table XXII lists the means and t value for the Similarity of Jobs Subscale score of the Career Knowledge Test for the single treatment group/control group comparison. An examination of Table XXII reveals

TABLE XXII

A Comparison of Career Knowledge Test -
Similarity of Jobs Subscale
for Third Grade Single Treatment and Control Groups

| Group | Number | Mean | t |
|--------------------|--------|------|-------------------|
| Treatment - Single | 38 | 7.84 | 4.35 ^a |
| Control | 128 | 7.01 | |

^aSignificant beyond the 0.001 level

that the t value for the single treatment group/control group comparison was significant at the 0.001 level. An examination of the means indicates that the single treatment group had a significantly greater mean than did the control group.

The means and t value for the third grade treatment and control groups on the Occupational Differences Subscale of the Career Knowledge Test are listed in Table XXIII. The t value for the third grade assessment on the Occupational Differences Subscale was significant at the

TABLE XXIII

A Comparison of Career Knowledge Test -
Occupational Differences Subscale
for Third Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|------|-------|
| Treatment | 108 | 8.39 | -1.74 |
| Control | 128 | 8.77 | |

^aSignificant beyond the 0.10 level

0.10 level. An examination of the means indicates that the control group had a significantly greater mean than did the treatment group.

Table XXIV lists the means and t value for the Occupational Differences Subscale of the Career Knowledge Test for the single treatment group/control group comparison. An examination of Table XXIV reveals

TABLE XXIV

A Comparison of Career Knowledge Test -
Occupational Differences Subscale
for Third Grade Single Treatment and Control Groups

| Group | Number | Mean | t |
|--------------------|--------|------|-----|
| Treatment - Single | 38 | 8.95 | .30 |
| Control | 128 | 8.77 | |

that no significant differences existed between the means for the single treatment and control groups on the Occupational Differences Subscale.

Table XXV lists the means and t value for the Tools Subscale of the Career Knowledge Test for the third grade work awareness assessment.

TABLE XXV

A Comparison of Career Knowledge Test -
Tools Subscale
for Third Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|------|-------------------|
| Treatment | 108 | 9.17 | 3.73 ^a |
| Control | 128 | 8.76 | |

^aSignificant beyond the 0.001 level

The t value for the comparison of means between the third grade treatment and control groups was significant at the 0.001 level. An examination of the means indicates that the treatment group had a significantly greater mean than did the control group.

Table XXVI lists the means and t value for the Tools Subscale of the Career Knowledge Test for the single treatment group/control group

comparison. The t value for the comparison of means between the single

TABLE XXVI

A Comparison of Career Knowledge Test -
Tools Subscale
for Third Grade Single Treatment and Control Groups

| Group | Number | Mean | t |
|--------------------|--------|------|-------------------|
| Treatment - Single | 38 | 9.63 | 6.35 ^a |
| Control | 128 | 8.76 | |

^aSignificant beyond the 0.001 level

treatment group and the control group was significant at the 0.001 level. An examination of the means indicates that the single treatment group had a significantly greater mean than did the control group.

Sixth Grade. The Career Education Cognitive Questionnaire published by the Minnesota Coordinating Unit for Vocational Education was administered to assess occupational awareness for the sixth grade samples. This questionnaire yields a Composite measurement of student awareness of industries, occupational levels, ability requirements, needs and/or job satisfactions, working conditions, career decision-making process, and employment trends. A total of 54 items are included in the test.

Table XXVII lists the means and t value for the Composite score of the Career Education Cognitive Questionnaire for the sixth grade treatment and control groups. The t value for the comparison of means be-

TABLE XXVII

A Comparison of Career Education
Cognitive Questionnaire Composite Scores
for Sixth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|-------|------|
| Treatment | 142 | 31.90 | -.93 |
| Control | 140 | 32.40 | |

tween the treatment and control showed no significant differences between the means of the two groups.

Table XXVIII lists the means and t value for the Composite score of the Career Education Cognitive Questionnaire for the single treatment group/control group comparison. The t value for the comparison

TABLE XXVIII

A Comparison of Career Education
Cognitive Questionnaire Composite Scores
for Sixth Grade Single Treatment and Control Groups

| Group | Number | Mean | t |
|--------------------|--------|-------|--------------------|
| Treatment - Single | 44 | 30.43 | -.186 ^a |
| Control | 140 | 32.40 | |

^aSignificant beyond the 0.10 level

of means between the single treatment group and the control group was significant at the 0.01 level. An examination of the means indicates that the control group had a significantly greater mean than did the single treatment group.

Ninth Grade. The New Mexico Knowledge of Occupations Test was administered to obtain an assessment of the occupational awareness of the ninth grade sample. This 25-item test measured the students' understanding of the characteristics and requirements of different occupations. The test is divided into two subscales: (1) Knowledge of Job Characteristics, for example, hours of work, play, work environment, tasks, demand; and (2) Knowledge of Job and Personal Requirements, for example, training, abilities and interests. In addition, the test provides a Composite score.

Table XXIX lists the means and t value for the Composite score of the New Mexico Knowledge of Occupations Test for the ninth grade assess-

ment of occupational awareness. An examination of Table XXIX reveals

TABLE XXIX

A Comparison of New Mexico Knowledge of Occupations Test Composite Scores for Ninth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|-------|--------------------|
| Treatment | 141 | 14.24 | -7.02 ^a |
| Control | 123 | 16.13 | |

^aSignificant beyond the 0.001 level

that the t value for the comparison of means between the ninth grade treatment and control groups on the Composite score of the New Mexico Knowledge of Occupations Test was significant at the 0.001 level. An examination of the means indicates that the control group had a significantly greater mean than did the treatment group.

The means and t value for the ninth grade treatment and control groups on the Knowledge of Job Characteristics Subscale of the New Mexico Knowledge of Occupations Test are listed in Table XXX.

TABLE XXX

A Comparison of New Mexico Knowledge of Occupations Test - Knowledge of Job Characteristics Subscale Scores for Ninth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|------|--------------------|
| Treatment | 141 | 6.60 | -9.79 ^a |
| Control | 123 | 8.11 | |

^aSignificant beyond the 0.001 level

The t value for the comparison of means between the ninth grade treatment and control groups on the Knowledge of Job Characteristics Subscale of the New Mexico Knowledge of Occupations Test was significant at the 0.001 level. An examination of the means indicates that the control group had a significantly greater mean than did the treatment group.

Table XXXI lists the means and t value for the ninth grade treatment and control groups on the Knowledge of Job and Personal Requirements Subscale of the New Mexico Knowledge of Occupations Test. The t value

TABLE XXXI

A Comparison of New Mexico Knowledge of Occupations Test - Knowledge of Job and Personal Requirements Subscale Scores for Ninth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|------|-------------------|
| Treatment | 141 | 7.64 | 3.36 ^a |
| Control | 123 | 7.08 | |

^aSignificant beyond the 0.001 level

for the comparison of means between the ninth grade treatment and control groups on the Knowledge of Job and Personal Requirements Subscale of the New Mexico Knowledge of Occupations Test was significant at the 0.001 level. An examination of the means indicates that the treatment group had a significantly greater mean than did the control group.

Twelfth Grade. The New Mexico Knowledge of Occupations Test was administered to assess the occupational awareness of the twelfth grade samples. The test contains 25 items and yields a Composite score as well as two subscale scores entitled, Knowledge of Job Characteristics and Knowledge of Job and Personal Requirements.

Table XXXII lists the means and t value for the twelfth grade treatment and control groups on the Composite score of the New Mexico Knowledge of Occupations Test. The t value for the comparison of means between the twelfth grade treatment and control groups on the Composite score of the New Mexico Knowledge of Occupations Test was significant at the 0.05 level. An examination of the means indicates that the control group had a significantly greater mean than did the

treatment group.

TABLE XXXII

A Comparison of New Mexico Knowledge of Occupations Test Composite Scores for Twelfth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|-------|--------------------|
| Treatment | 73 | 16.51 | -2.16 ^a |
| Control | 144 | 17.18 | |

^aSignificant beyond the 0.05 level

The means and t value for the twelfth grade treatment and control groups on the Knowledge of Job Characteristics Subscale of the New Mexico Knowledge of Occupations Test are listed in Table XXXII. An examination

TABLE XXXIII

A Comparison of New Mexico Knowledge of Occupations Test - Knowledge of Job Characteristics Subscale for Twelfth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|------|------|
| Treatment | 73 | 7.90 | -.83 |
| Control | 144 | 8.06 | |

of the t value for the comparison of means between the twelfth grade treatment and control groups on the Knowledge of Job Characteristics Subscale of the New Mexico Knowledge of Occupations Test showed no significant differences between the treatment and control group.

Table XXXIV lists the means and t value for the twelfth grade treatment and control groups on the Knowledge of Job and Personal requirements Subscale of the New Mexico Knowledge of Occupations Test. The t value for the comparison of means between the twelfth grade treatment and control groups on the Knowledge of Job and Personal Requirements Subscale of the New Mexico Knowledge of Occupations Test.

TABLE XXXIV

A Comparison of New Mexico Knowledge of Occupations Test - Knowledge of Job and Personal Requirements Subscale Scores for Twelfth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|------|--------------------|
| Treatment | 73 | 8.60 | -2.50 ^a |
| Control | 144 | 9.11 | |

^aSignificant beyond the 0.05 level

The t value for the comparison of means between the twelfth grade treatment and control groups on the Knowledge of Job and Personal Requirements Subscale of the New Mexico Knowledge of Occupations Test was significant at the 0.05 level. An examination of the means indicates that the control group had a significantly greater mean than did the treatment group.

Summary - Occupational Awareness. The results of the measurement of occupational awareness of the third, sixth, ninth and twelfth grade samples indicated the following findings:

1. For the third grade assessment, the treatment group exceeded the control group on the Tools Subscale of the Career Knowledge Test. The mean of the control group was significantly higher than the mean of the treatment group on the Occupational Differences Subscale of the Career Knowledge Test. No significant differences between the means of the treatment and control groups were found for the following occupational awareness dimensions:
 - a. Composite score of the Career Knowledge Test.
 - b. Similarity of Jobs Subscale of the Career Knowledge Test.
2. For the third grade single group assessment, the means for the school receiving continuous service from the South Dakota Career Education Project exceeded the means of the control group on the following occupational awareness dimensions:
 - a. Composite score of the Career Knowledge Test.
 - b. Similarity of Jobs Subscale of the Career Knowledge Test.
 - c. Tools Subscale of the Career Knowledge Test.

3. For the sixth grade assessment, a comparison of the means indicated no differences between the treatment and control groups on the Composite score of the Career Education Cognitive Questionnaire.
4. For the sixth grade single group assessment, the mean of the control group was significantly greater than the mean for the single group on the Composite score of the Career Education Cognitive Questionnaire.
5. For the ninth grade assessment, the mean of the treatment group was significantly greater than the mean of the control group on the Job and Personal Requirements Subscale of the New Mexico Knowledge of Occupations Test. The mean of the control group was significantly greater than the mean of the treatment group on both the Composite score and the Knowledge of Job Characteristics Subscale of the New Mexico Knowledge of Occupations Test.
6. For the twelfth grade assessment, the mean of the control group was significantly greater than the mean of the treatment group on the Composite score as well as the Job and Personal Requirements Subscale of the New Mexico Knowledge of Occupations Test. No significant differences were found between the treatment and control groups on the Knowledge of Job Characteristics Subscale of the New Mexico Knowledge of Occupations Test.

COMPETENCY IN CAREER DECISION-MAKING SKILLS ASSESSMENT

An assessment of career decision-making skills was completed of both ninth and twelfth grade samples. This assessment area was concerned with a measurement of the skills, awareness and involvement of students in identifying, locating and utilizing informational resources for career planning and decision-making.

Ninth Grade. Part C of the Career Development Inventory by Super and Forrest was administered to assess the career decision-making skills of the ninth grade sample groups. This scale is a career information and decision-making scale. The scale contains 30 items.

Table XXXV lists the means and t value for the Composite score of the Information and Decision-Making Scale of the Career Development Inventory for the ninth grade assessment of competency in career decision-

making skills. The t value for the comparison of means between the ninth grade treatment and control groups on the Information and De-

TABLE XXXV

A Comparison of Career Development Inventory - Information and Decision-Making Scale Scores for the Ninth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|-------|------|
| Treatment | 139 | 15.33 | -.91 |
| Control | 131 | 15.70 | |

cision-Making Scale of the Career Development Inventory showed no significant differences between the treatment and control groups.

Twelfth Grade. The New Mexico Career Oriented Activities Checklist and the Information and Decision-Making Scale of the Career Development Inventory were administered to obtain an assessment of the career decision-making skills of the twelfth grade sample groups. The New Mexico Career Oriented Activities Checklist is a measure of the degree to which students have taken commonly accepted steps that assist in making a career decision. The checklist is divided into four subscales as follows: Sources of Information, Precareer Activities, Occupational Training, and Career Planning. The Sources of Information Subscale measures the degree to which students have engaged in activities that provide information about occupations being considered by the students. The Occupational Training Subscale measures the degree to which students have obtained the high school training needed for the occupations being considered. The Career Planning Subscale measured whether the students have made definite plans regarding what they will do upon high school graduation. A Composite score for the entire scale is provided.

Table XXXVI lists the means and t value for the Composite score of the New Mexico Career Oriented Activities Checklist for the twelfth grade assessment. The t value for the comparison of means between the

TABLE XXXVI

A Comparison of New Mexico Career Oriented Checklist Composite Scores for Twelfth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|-------|------|
| Treatment | 84 | 25.20 | -.21 |
| Control | 138 | 25.41 | |

twelfth grade treatment and control groups for the Composite score of the New Mexico Career Oriented Activities Checklist showed no significant differences between the treatment and the control groups.

The means and t value for the twelfth grade treatment and control groups on the Sources of Information Subscale of the New Mexico Career Oriented Activities Checklist are listed in Table XXXVII. The t value

TABLE XXXVII

A Comparison of New Mexico Career Oriented Activities Checklist Sources of Information Subscale Scores for Twelfth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|-------|------|
| Treatment | 84 | 12.00 | -.25 |
| Control | 138 | 12.14 | |

for the comparison of means between the twelfth grade treatment and control groups for the Sources of Information Subscale score of the New Mexico Career Oriented Activities Checklist showed no significant differences between the treatment and control groups.

Table XXXVIII lists the means and t value for the twelfth grade treatment and control groups for the Precareer Activities Subscale of

the New Mexico Career Oriented Activities Checklist. An examination of Table XXXVIII reveals that the t value for the comparison of means between

TABLE XXXVIII

A Comparison of the New Mexico Career Oriented Activities Checklist Precareer Activities Subscale Scores for Twelfth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|------|-----|
| Treatment | 84 | 5.89 | .20 |
| Control | 138 | 5.83 | |

the twelfth grade treatment and control groups for the Precareer Activities Subscale score of the New Mexico Career Oriented Activities Checklist showed no significant differences between the treatment and control groups.

The means and t value for the twelfth grade treatment and control group on the Occupational Training Subscale of the New Mexico Career Oriented Activities Checklist are listed in Table XXXIX. The t value

TABLE XXXIX

A Comparison of the New Mexico Career Oriented Activities Checklist Occupational Training Subscale Scores for Twelfth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|------|-----|
| Treatment | 84 | 3.07 | .57 |
| Control | 138 | 2.99 | |

for the comparison of means between the twelfth grade treatment and control groups for the Occupational Training Subscale score of the New Mexico Career Oriented Activities Checklist showed no significant difference between the treatment and control groups.

Table XXXX lists the means and t value for the twelfth grade treatment and control groups for the Career Planning Subscale of the New

Mexico Career Oriented Activities Checklist. The t value for the comparison of means between the twelfth grade treatment and control groups for the Career Planning Subscale score of the New Mexico Career Oriented

TABLE XXXX

A Comparison of the New Mexico Career Oriented Activities Checklist Career Planning Subscale Scores for Twelfth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|------|------|
| Treatment | 84 | 4.24 | -.90 |
| Control | 138 | 4.43 | |

Activities Checklist showed no significant differences between the treatment and control groups.

The means and t value for the twelfth grade treatment and control group on the Information and Decision-Making Scale of the Career Development Inventory are listed in Table XXXXI. The t value for the compari-

TABLE XXXXI

A Comparison of the Career Development Inventory - Information and Decision-Making Scale Scores for the Twelfth Grade Treatment and Control Groups

| Group | Number | Mean | t |
|-----------|--------|-------|-----|
| Treatment | 80 | 19.23 | .32 |
| Control | 135 | 19.09 | |

son of means between the twelfth grade treatment and control groups for the Information and Decision-Making Scale of the Career Development Inventory showed no significant difference between the treatment and control groups.

Summary - Competency in Career Decision-Making Skills. The results of the measurement of the competency in career decision-making skills of the ninth and twelfth grade samples indicated the following findings:

1. For the ninth grade assessment, there were no significant differences between the treatment and control groups on the Information and Decision-Making Scale of the Career Development Inventory.
2. For the twelfth grade assessment, there were no significant differences between the treatment and control groups on the Information and Decision-Making Scale of the Career Development Inventory. No significant differences existed between the treatment and control groups on the four subscales of the New Mexico Career Oriented Activities Checklist.

SUMMARY FINDINGS

As indicated in the 1974-1975 South Dakota Career Education Evaluation Report, several precautions should be identified in drawing conclusions regarding the efficacy of the South Dakota Career Education Project. These considerations are reiterated since the problem of measuring direct student outcomes is more difficult in the South Dakota Career Education Project. Thus the following considerations are provided in order that the previously explained findings will not be misinterpreted:

1. A highly exacting student outcome evaluation of the South Dakota Career Education Project is complicated by a number of factors. The nature of the South Dakota project is to provide in-service/staff development programs in career education as the foundation for stimulating the development of ongoing curricular programs in the school. The in-service component does not specify the exact design of the curricular components of career education nor can it be fully assured that the educators exposed to the in-service education will implement highly measureable models of career education in the classroom. The South Dakota Career Education Project serves to stimulate an awareness and understanding throughout the state as to possible career development approaches in the schools.
2. A limitation of the present evaluation design is the small number of schools that could be included in the sampling process. Financial and measurement availability restrictions prevented a broader evaluation study. The lack of a current control group also serves

as a delimitation. Since this final project year serves the remaining portion of schools not reached during the first two years of the project, the use of the 1974-1975 control group was mandated.

3. With a national emphasis on increased knowledge and awareness of career education, it is unlikely that the control schools represented puristic models of schools without career development emphasis and exposure. One of the highly plausible results of the tenure of the South Dakota Career Education program is that there may be a direct spin-off to other schools whether or not there has been direct exposure of the schools to the South Dakota Career Education Project. Additionally, the emphasis placed on incorporating career education into the classroom from varied educational sources certainly would have considerable effect on the development of independent career education programs in the control schools.
4. One of the major problems in assessing career education outcomes is the limitations of the tests used in adequately representing the universe of career development information, attitudes and concepts for students. Although the evaluators attempted to select tests that were as representative as possible of the specified career education outcomes, the rudimentary development of tests in this measurement area leaves much to be desired.

The following conclusions are made on the basis of the data obtained from the evaluation measures utilized in the assessment of the South Dakota Career Education Project.

1. Findings related to the self-awareness measurement:
 - a. Students enrolled in schools receiving the services of the South Dakota Career Education Project have a positive attitude and understanding of themselves and the forces that influence their development. This finding is particularly true for the third grade students.
 - b. Sixth grade students enrolled in schools serviced by the South Dakota Career tend to have a somewhat lower self-assessment than students comprising the control group sample.
2. Findings related to the occupational awareness measurement:
 - a. Third grade students enrolled in schools receiving the services of the South Dakota Career Education Project have significantly greater understanding of the world of work. This finding is particularly apparent in the comparison of means for students enrolled in the school that has received services

- on a three year continuous basis.
- b. At the sixth grade level, no measurable difference in occupational knowledge was obtained between students enrolled in schools receiving project services and students comprising the control group. An exception to this finding occurred for students enrolled in the continuous treatment school. In this comparison, students enrolled in the control (non-treatment) school had scores indicative of a significantly greater occupational knowledge.
 - c. At the ninth grade level, the evaluation findings tended to favor the students in the control schools. An exception to this occurred on the Knowledge of Job and Personal Requirements measurement. Students in the treatment schools scored significantly better on this measurement.
 - d. At the twelfth grade level, the control group tended to demonstrate a greater degree of occupational awareness than was true for the sample group receiving the services of the South Dakota Career Education Project.
3. Findings related to the career decision-making skills assessment:
- a. Both the sample group receiving the services of the South Dakota Career Education Project and the control group possessed similar career decision-making skills and awarenesses.

SUMMARY EVALUATION

As the data in this report indicate, certain phases of the South Dakota Career Education Project are having an identifiable student impact. Since this report focuses only on student outcomes, it is important to recognize that more direct facets of the program are receiving wide support throughout the state. The impact of the total three-year program appears to have made an important contribution to the development of improved education for the students in South Dakota schools.

F. CONCLUSIONS, IMPLICATIONS, & RECOMMENDATIONS

The schools that the Career Education staff worked with were, in general, extremely cooperative and receptive to career education. Many schools changed their schedules to accommodate the inservice program. Some schools had to make major adjustments to permit teachers in the various buildings and locations to attend the meetings. School staff members have shown a high level of interest in career education. School administrators, however, need to develop a working framework so their staffs can plan a complete career education scope and sequence integrated into the existing curriculum.

The inservice workshops held with teachers at various school systems seemed to be of special interest to participants at each workshop site. Identifying those having a high level of interest in career education, then working intensively with these people, was an effective method for beginning specific activities in the various schools.

A high degree of awareness of the emphasis on career education was found among teachers, counselors, administrators, and at the higher education levels in the state. This awareness was evident in the interest shown in the project in staff contacts with educators, and served as a solid footing for the efforts of this project. The outstanding cooperation received from institutions and state agencies aided the acceptance of career education across the state.

The summer seminars in guidance, planning, and placement, together with the guidance materials produced by the project, stimulated interest in career education among the counselors in the state. The Division of Elementary and Secondary Education reviewed the role that guidance personnel should have in dealing with students. There is a growing awareness that career planning by all students, rather than the college-bound only, is an important function of guidance personnel.

The project staff built upon successes year by year in its efforts to implement sound career education practices in K-14 education in South Dakota. The impact of the CE Project has also gone beyond South Dakota through visiting groups and requests for materials and information.

Through continued dissemination of career education activities by the project staff, and through follow-up visits to schools where inservice workshops were held as long as three years ago, it is apparent that school personnel are receptive to career education during initial introduction to the concept, and are willing to make a commitment to it over a long period of time.

Many schools in the state are demonstrating that career education has become an intrinsic part of the curriculum.

As an innovation in education, there is apparently an increasing degree of acceptance of career education through and practice at all levels of education in the state. As commitment to career education shows tangible results in the lives of students, acceptance of the concept has continued to grow.

The CE staff feels that a great deal of interest and inspiration toward actually beginning career-oriented lessons has been generated through the inservice meetings. The inservice career education needs of school systems and of individual staff members, and hence student needs, were encountered through the total staff and small group encounters by the CE Project staff.

The direction of career education in South Dakota has now apparently been established as an on-going concept at both the state and local levels. The wide acceptance of the career education concept can be attributed to the activities of this project, and to the emphasis given the concept by the U. S. Office of Education. Any future efforts in career education in South Dakota will have a solid foundation to build upon.

OE 008 350

**Materials Developed For
Comprehensive Program**

**1,276 staff members
involved in workshops**

**Decisions
For Living
Is Popular**

At Beresford

**Students express feelings
about career exploration**

Career awareness . . .

Sioux Valley teachers looked, listened, discussed

**Educational
Opportunities
poster printed**

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**Counseling Foundation
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**Armour plans
elementary
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**Decision making
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**Want Ads Aid
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