From July 1973 through June 1976, a career education project for elementary through postsecondary students was conducted in the Devils Lake public school system of North Dakota, located in a rural agricultural area with large numbers of disadvantaged, handicapped, and American Indian students. Objectives included development of positive self-concept, positive attitudes toward work, and decisionmaking skills; increase of career awareness; provision of exploratory career experiences and job preparation; and placement in a job or educational program. Procedures followed were inservice workshops, development and adaptation of curriculum, guidance activities, and development and dissemination of occupational information. The final report describes the project and presents the third party evaluation, which deals primarily with the final year's activity. The evaluation, designed to measure specific student outcomes, is presented in the format of activity tables, itemized objectives in terms of student outcome statement, developed and initiated instrumentation, analyzed data, and discussed student outcomes. (NJ)
Final Report

Project No. 502A850003
Grant No. G-381-75-0005

A Developmental Program, Pre-School - Adult, in Career Education for North Dakota

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

Robert L. Lamp, Project Director
North Dakota State Board for Vocational Education
900 East Boulevard Avenue
Bismarck, North Dakota 58505

Carrol E. Burchinal, State Director

July 30, 1976
Final Report

Project No. 502A850003
Grant No. G-381-75-0005

A Developmental Program, Pre-School - Adult,
In Career Education For North Dakota

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

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

Robert L. Lamp, Project Director
North Dakota State Board for Vocational Education
900 East Boulevard Avenue
Bismarck, North Dakota 58505

Carrol E. Burchinal, State Director

July 30, 1976
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title Page</td>
<td>i</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>ii</td>
</tr>
<tr>
<td>List of Tables &amp; Illustrations</td>
<td>iii</td>
</tr>
<tr>
<td>Summary of the Report</td>
<td>1</td>
</tr>
<tr>
<td>Duration of the Project</td>
<td>1</td>
</tr>
<tr>
<td>Goals and Objectives</td>
<td>1</td>
</tr>
<tr>
<td>Procedures Followed</td>
<td>1</td>
</tr>
<tr>
<td>Results and Accomplishments</td>
<td>2</td>
</tr>
<tr>
<td>Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>Conclusions and Recommendations</td>
<td>3</td>
</tr>
<tr>
<td>Body of the Report</td>
<td>5</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>5</td>
</tr>
<tr>
<td>Goals and Objectives</td>
<td>8</td>
</tr>
<tr>
<td>Project Design and Procedures</td>
<td>11</td>
</tr>
<tr>
<td>Results and Accomplishments</td>
<td>15</td>
</tr>
<tr>
<td>In-Service</td>
<td>15</td>
</tr>
<tr>
<td>Materials Developed</td>
<td>18</td>
</tr>
<tr>
<td>Special Projects</td>
<td>21</td>
</tr>
<tr>
<td>Evaluation/Conclusions and Recommendations</td>
<td>23</td>
</tr>
<tr>
<td>Appendices</td>
<td>61</td>
</tr>
<tr>
<td>Appendix A - Advisory Committee Members</td>
<td>61</td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENTS

Many individuals, agencies and organizations were involved in the successful development of this exemplary project in career education. Without the dedicated support, encouragement and involvement of these many individuals, this project would not have been possible.

Special recognition must be given to the project staff - John Geston, Dan Seim, Judy Tarang, Lloyd Lorenz and LeRoy Rice. Their belief in and dedication to the career education concept was the motivating force in the development of the project. The Devils Lake Board of Education, administration and supporting staff are to be complimented for their contributions to the overall success of the project. Finally, the involvement of Mr. Don Boehmer, Third Party Evaluator, was an invaluable asset to the project.

Through the efforts of these individuals and agencies the project activities were brought to a successful conclusion.

--Robert L. Lamp, Project Director
LIST OF TABLES

Table I - Student/Teacher Participation ... 12

LIST OF ILLUSTRATIONS

Illustration I - Project Analysis Chart ... 16
Illustration II - Project Rationale ... 17
Illustration III - Project Evaluation Model ... 36
SUMMARY OF THE REPORT

A. DURATION OF THE PROJECT

This Final Report for the Exemplary Project in Career Education covers the period from July 1, 1973 through June 30, 1976. The evaluation section deals primarily with the final year's activity. A project overview is included as part of the evaluation.

B. GOALS AND OBJECTIVES

The objectives of this project can be summarized into five broad objectives:

1. To assist students in increasing positive self-concepts, develop positive attitudes toward work and develop decision-making skills.
2. To increase career awareness of students in terms of the broad range of options open to them in the world of work.
3. To provide career orientation and meaningful exploratory experiences for students.
4. To provide job preparation in a wide range of occupational areas.
5. To insure the placement of all exiting students in either:
   a. a job
   b. a post-secondary vocational-technical program, or
   c. a baccalaureate program.

C. PROCEDURES FOLLOWED

The objectives of this project will be achieved through a series of related basic activities including:

1. In-service workshops for all teachers, counselors and administrators to develop expertise and attitudes conducive to the career education process.
2. Development and adaptation of curriculum materials that can be integrated and will address themselves to accomplishment of the objectives at the various levels.
3. Establishment of time blocks and exploratory stations at the junior high level to provide students "hands-on" experiences in a variety of occupational clusters.


5. Guidance activities for junior high, secondary and post-secondary students that will focus on developing social-interaction type occupational skills.

6. A close working relationship between the guidance department and the classroom teacher to foster a cooperative effort in meeting the needs of all students.

7. Selection, development, and dissemination of occupational information.

8. Continual evaluative planning, and informational meetings involving educators, parents, business, industry, labor, and other agencies with similar purposes.

D. RESULTS AND ACCOMPLISHMENTS

The results and accomplishments of this Exemplary Project in career education can be summarized as follows:

1. An increased student awareness of occupational options.

2. Career development activities and experiences integrated within the curriculum.

3. Improved communication between home, school and community.

4. Increased emphasis on self-enhancing techniques in the classroom.

5. Increased student placement.

6. An involvement of teachers, counselors, parents and administrators in vocational guidance.

7. An increase in the development of basic skills.

8. Coordination and articulation of K-14 curriculum.

9. An educational program that involves community resources and resource people.

10. Significant gains in providing students with work experience and "hands-on" activities.
Increased opportunities for students to explore career areas of interest to them.

Promotion of the career education concept in satellite school districts.

E. EVALUATION

The evaluation of this project was conducted by an independent third party evaluator, Mr. Don Boehmer. The evaluation design, collection of data and reporting of information followed the guidelines included in the document, "Draft Guidelines for the Evaluation of Career Education Programs." The evaluation was designed to measure specific student outcomes and therefore, became a "product" oriented evaluation rather than "process" oriented.

The format of the evaluation is outlined below:

1. Developed activity treatment tables.
2. Itemized objectives in terms of student outcome statements.
3. Developed and initiated instrumentation.
4. Analyzed data.
5. Discussed student outcomes.

A detailed summary of the evaluation design and findings can be found in the Body of the Report.

F. CONCLUSIONS AND RECOMMENDATIONS

Career education is a concept that has the potential of becoming the vehicle for making our schools and communities more responsive to the career development needs of all students. It is a practical approach for bringing relevance to the curriculum and humanizing the educational process. It is the general conclusion of the project that the career development process needs to receive more emphasis throughout the curriculum.

The following recommendations are offered:

1. Career education efforts should involve the entire school system. The director of the program should be selected from within the school system. It is imperative that this person be someone with a strong existing rapport with the instructional staff.

2. In the evaluation process, it is difficult to select instruments that deal with the affective domain. Close attention should be paid to the statistical data on all instruments used.
3. Any district entering into a project of this nature should give advance consideration to the curriculum revisions and additions that may be necessary to fully implement this type of project.

4. The school board and administration should thoroughly understand all project components and their implications for the district.

5. In-service programs must be made available to local schools for staff orientation and developmental activities.

6. The emphasis on "product" evaluation reveals that significant changes occur in the majority of students exposed to career education through the curriculum. Increased emphasis needs to be placed on "product" evaluation to enhance the transportability of successful project components.

7. Evaluation is an essential part of career education. The document "Draft Guidelines for the Evaluation of Career Education Programs" is a practical and useful approval to a formal evaluation of a career education program.
BODY OF THE REPORT

A. STATEMENT OF THE PROBLEM

The problem area to which the project addressed itself was outlined in the original proposal. The following summarizes the general problem:

Because the project site is in a rural, agricultural area, lacking major industry, the youth have little or no opportunity through observation or direct contact to learn about the range of opportunities available to them in the world of work.

Therefore, the schools must assume a greater responsibility in providing meaningful activities and experiences that will accomplish what many urban children acquire because of living in an urban area. The Devils Lake youth, like many of the youth in North Dakota, presently have very little background or knowledge about themselves and the world of work to draw upon in making career decisions.

In a time of national population growth, North Dakota is becoming less populated. This means that vocational guidance services will be even more difficult to obtain in the areas that are experiencing this population loss. Many local districts are unable to provide financial support necessary to maintain adequate guidance services. This lack of guidance personnel will place a greater responsibility on existing school personnel. With this reliance on current school personnel, there will have to be an up-grading of the instructional staff in order to incorporate these basic guidance functions into their teaching.

Many of the teachers have not been exposed to current career education concepts. In order to insure that the effort of this project addresses itself to these inadequacies, an ongoing program for all teachers will be implemented.

There are no elementary counselors in the proposed project site at this time. Because of this void, elementary children have had very limited exposure to occupations. Very little has been done in developing self-understanding and positive attitudes toward the personal, social and economic significance of work. In the junior and senior high schools, the priorities have been to counsel students in the personal and social aspects of life with little emphasis on career guidance and decision-making. This has resulted in many young people basing their occupational and educational decisions on very little vocational information which makes career decisions haphazard and many times very unrealistic.

Another major concern of educators in the proposed project site is the presence of sub-groups of disadvantaged and handicapped young
people. There are many marginal individuals in this geographic area that are culturally, economically, socially, and educationally deprived. Also, there are approximately 1000 children educated in the Devils Lake area. Another target group in this area is the American Indian. It is felt that encouraging the occupational aspirations and building of positive self-images of young people would be a partial solution to a number of their problems and result in a general up-grading of these groups.

The Vocational Guidance Division of the North Dakota Master Plan Study Committee on Vocational Education, through an analytical survey, revealed the following facts that pertain to locations such as the proposed project site.

1. At least 75% of the students have very limited counseling services available.

2. Only 22 out of 44 entering as freshmen in four-year colleges of North Dakota actually graduate.

3. Guidance counselors in the elementary schools are non-existent.

4. Career education in the elementary curriculum is practically non-existent at this time.

5. It was obvious that programs carried out in some agencies, related to career guidance are unknown to other agencies who should be aware of these programs.

6. It has been indicated that availability and dissemination of occupational information has been inadequate.

7. The dropout problem can be attributed to the fact that the high school curriculum is college oriented. This college oriented curriculum tends to create a feeling of hopelessness in the students who see no chances of using his college oriented high school education in a practical job situation or a base for further training.

We cannot assume that students will see the correlation of what he is learning in school and how it will be used now and in the future. We must provide activities and experiences that will show him this relationship.

The process of creating a bridge between school and earning a living must begin in the early years of a child's life during the time when attitudes are being formed. Therefore, this project will emphasize career education in the elementary school as a developmental, sequential process by integrating it into the curriculum.
Other means of helping students bridge the gap between school and work include:

1. Providing students with experiences designed to assist them in evaluating their interests, aptitudes, abilities, attitudes, values, and needs.

2. Assisting students in recognizing the range of occupations and opportunities that exist for them and how these occupations will affect their lifestyle.

3. Guiding students in recognizing the economic and social value that different forms of work have in our society.

4. Assisting students in gaining an understanding of the psychological meaning of work as it relates to human experience.

5. Assisting students to understand the intent, nature, and possible end results of alternative pathways compatible with their interests and abilities.

6. Helping students see the broad array of occupations available at local, state, and national levels.

7. Helping students explore in detail a number of occupational clusters.

8. Helping students to become aware of opportunities and potential satisfactions of different work roles and to gain some understanding of the occupational structure.

9. Directing students to better understand the nature of the decision-making process and to assist them in recognizing the kinds of future decisions that must be made.

10. Developing skills in job procurement and job stability.

11. Assisting students in developing positive self-concepts.

12. Making an effort to engage local business and community organizations as well as individuals in making the community an extension of the classroom.

This project will utilize other government and community agencies in implementing career education in the proposed project site. A close working relationship will be established between the project and the North Dakota Employment Security Bureau, Bureau of Indian Affairs, State Welfare Board, Labor Department, Local Chamber of Commerce, Department of Public Instruction, State Board of Higher Education, and other agencies.
having similar purposes. Cooperative effort will be pursued with these agencies.

By providing increased career guidance and counseling, all students will have increased knowledge about the career opportunities available to them. With this increased knowledge and a more positive attitude toward himself and all occupations, the student will be able to make more meaningful and appropriate career decisions.

The proposed project reflects experience and findings associated with the Statewide Program in Developmental Vocational Guidance (K-12) and Occupational Preparation for the Changing World of Work, which is being demonstrated in Bismarck, North Dakota. The intent in the proposed project site is to build on the base that has been developed and field-tested in the Bismarck site. Adaptation and implementation will be the major goals.

B. GOALS AND OBJECTIVES

The specific goals and objectives for this Exemplary Project in Career Education are summarized below:

Grades Pre-school - 3

1. Appropriate occupational information will be integrated into the curriculum as evidenced by the materials and techniques used by the teachers throughout the school year.

2. Children will have the experience of observing people at work as evidenced by field trips to the world of work.

3. Children will develop positive attitudes toward the world of work as evidenced by the results of locally developed work attitude inventory.

4. Students will develop a more positive image and understanding of self as evidenced by teacher observation and locally developed pre and post tests.

Grades 4 - 6

1. Appropriate occupational information will be presented to the children in the classroom as evidenced by materials and techniques used by teachers throughout the school year.

2. Children will be provided the experience of observing people at work in various occupations as evidenced by field trips to the world of work.
3. Children will have the opportunity to express goals and aspirations to the teacher and/or counselor as evidenced by the availability of such opportunities.

4. At the end of the school year, the children will have developed interests in varied occupations which will expand their basis for vocational choice as evidenced by the results of a locally developed interest inventory.

5. At the end of the school year the children will have acquired skills in making more realistic decisions related to their abilities as evidenced by the results of activities related to the decision-making process.

6. Appropriate occupational information will be presented to the children as evidenced by materials integrated into the existing curriculum and by the availability of occupational resources.

7. Children will develop positive attitudes toward the dignity of work as evidenced by teacher, parent, and/or counselor observations and/or attitudinal instruments.

Grade 7 - 9

1. Students will become acquainted with job opportunities in the community, job hunting and job applications as evidenced by completion of classroom activities presented by teachers and counselors.

2. Students will become aware of the relationship between school subjects and related occupations as evidenced by the results of a "check list test" on the subject and its related occupations.

3. Students will be provided with the opportunity for "hands-on" exploratory experiences through the development of mini-courses in the shops and laboratories as evidenced by the development of such mini-courses and student participation.

4. Students will become familiar with sources and uses of occupational materials in the library and/or counselor's office as evidenced by the materials available and the documented use of such material.

Grades 10 - 12

1. Students will be provided with the opportunity to acquire basic occupational skills as evidenced by the availability
of such opportunities to students.

2. Students will develop an understanding of the need for continued education or training in career areas as evidenced by a decrease in high school dropouts and/or an increased number of students pursuing training beyond the secondary level.

3. Students will continue to be shown the relationship between subject areas and occupational clusters as evidenced by the results of a "check list test" of the subject area and its related occupational cluster.

4. Students will have the opportunity to sample occupations through summer exploratory activities as evidenced by the availability of such activities.

5. Students will be assisted in assessing their aptitudes, interests, and abilities as they relate to their present and future plans as evidenced by the results of tests, inventories, and records.

6. Students will receive placement counseling as evidenced by percentages of students planning advanced schooling or training and those assisted in entering the labor market.

7. After graduation, students will receive follow-up questionnaires to determine present status and evaluation of past experiences as evidenced by follow-up reports and compilation of results.

Post-Secondary

1. Students will be assisted in reassessing their interests, aptitudes, and abilities as they relate to the changing world of work as evidenced by counselor's log and by curriculum choice.

2. Students will be prepared in job entry skills in occupational clusters of their choice as evidenced by placement and follow-up.

3. Students will be encouraged to further train and upgrade occupational skills as evidenced by increased numbers participating in such activities.

4. Students will develop human relations skills necessary in the world of work as evidenced by an attitudinal measurement designed to measure this objective.
5. Students will be provided information and placement in employment opportunities as evidenced by student placement and follow-up.

6. Students will be provided preparatory and exploratory work experiences and related classroom activities as evidenced by availability of such activities and student participation.

7. After leaving the post-secondary institution each student will receive follow-up questionnaires to determine present status and evaluation of past experiences as evidenced by a follow-up report and compilation of results.

C. PROJECT DESIGN AND PROCEDURES

Design:

The Devils Lake Public School System was selected as the experimental site for this Exemplary Project in Career Education. This district provides elementary, secondary and post-secondary education. The secondary and post-secondary levels provide both academic and vocational opportunities.

The Lake Region Junior College has 660 students and has 30 teachers. The student body is 13% American Indian. The Devils Lake Senior High School has an enrollment of 478 students with 7% American Indian. The junior high has 575 students with 10% American Indian. The junior and senior high schools have 40 teachers, one full-time and one half-time counselor and ten paraprofessionals. The elementary system has 1,020 children with 7% American Indian, has 45 teachers and eight paraprofessionals.

The percent of disadvantaged children, as identified by the State Plan, for the Devils Lake School System is 19.4% as compared to a state average of 10.6%. Satellite schools run close to the state average except those schools which have a large American Indian enrollment, in which case the percentage increases in direct proportion to the Indian student enrollment. The economy in the area is agriculture with 85% of the people engaged in agriculture or agri-related business. The area also encompasses the Devils Lake Sioux Reservation with a population of over 2,000 persons.

The State School for the Deaf is located in the proposed project site and a cooperative effort will be initiated to share facilities and promote inter-related activities with the deaf students and the other students. A spin-off of this activity will be to help the deaf students in the transition from his protected environment to the mainstream of society. Table I illustrates the number of teachers, counselors, paraprofessionals and students involved in the project.
## TABLE I

### STUDENT/TEACHER PARTICIPATION

<table>
<thead>
<tr>
<th>Schools</th>
<th>Grade Level</th>
<th>Students</th>
<th>Teachers</th>
<th>Counselors</th>
<th>Paraprofessional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Jr. High &amp; High School</td>
<td>7-12</td>
<td>677</td>
<td>50</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Minie H.</td>
<td>1-6</td>
<td>226</td>
<td>10</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Prairie View</td>
<td>1-6</td>
<td>472</td>
<td>18</td>
<td></td>
<td>5.5</td>
</tr>
<tr>
<td>Sweetwater</td>
<td>1-6</td>
<td>220</td>
<td>8.5</td>
<td></td>
<td>4.5</td>
</tr>
<tr>
<td>Lake Region Jr. College</td>
<td>13-Adult</td>
<td>650</td>
<td>40</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Satellite Schools</td>
<td>1-8</td>
<td>1,500</td>
<td>79</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6-12</td>
<td>550</td>
<td>59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Procedures:

The procedures for this Exemplary Project in Career Education were based on the goals and objectives as outlined in the original proposal. The procedures utilized were based on the on-going evaluation of the project and can be summarized as follows:

1. The project employed a full time local coordinator, three professional staff and a part time secretary. The primary responsibility of the local coordinator was overall coordination, public information and program accountability. The professional staff worked directly with teachers, administrators and the business community. Their major activity involved teacher orientation, in-service training and assisting teachers in the development and field testing of curriculum materials.

   In addition to the local project staff, a project director and two career education specialists were involved at the state administration level. The project director was responsible for the overall administration, monitoring and reporting for the project. The career education specialists provided technical assistance to the project and worked in schools on a state-wide basis.

2. Teacher and staff orientation were conducted. One week workshops were conducted by personnel from the local project, state career education staff and teachers from the Bismarck School System that were involved in the initial three year Career Education Project entitled "A State-wide Program in Developmental Vocational Guidance (K-12) and Occupational Preparation for the Changing World of Work."

3. A project advisory committee representing the business community, the satellite school districts, various educational agencies and the general public was established. The committee met from time to time to review past project activities and advise on proposed project activities. A list of the advisory committee members can be found in Appendix A of this Report.

4. Steering committees consisting of teachers from each of the various grade levels, K-14, were established. These committees met regularly to discuss project goals and objectives, to plan activities that would incorporate the career education concepts into the curriculum, to foster articulation between the various grade levels and subject matter areas and to evaluate the progress of the project toward the stated goals and objectives.
5. A thorough review of literature, materials and research on career education was conducted. After previewing the materials, selection and purchase was made.

6. A career resource center was established. This center was designed to provide students and teachers with current occupational resource materials to assist them in the career development process. The center was used by individual students, by small groups and by entire classes. A complete guide has been developed that outlines ways that a resource room may be employed by large and small school districts. Further information on this guide may be found in the "Results and Accomplishments" portion of this Report.

7. Presentations were made to various groups on the career education concept and the Devils Lake project. Groups involved included service clubs, PTA's, school administrators and the general public.

8. Writing teams, consisting of teachers, administrators and counselors, were organized. These teams were employed during the summer months to adapt, compile and plan for future career education activities. The materials that were developed by these summer writing teams were field tested by other teachers and then revised and edited for inclusion in the curriculum guides developed.

9. A five week summer exploratory program for junior high school students was conducted. Students from the Devils Lake School System, as well as, the satellite school districts were given the opportunity to explore a variety of occupational areas.

10. In-service sessions were conducted throughout the system. The first year's activities included a systemic workshop followed by small group sessions at the various levels. In-service sessions were continued each year of the project. Teachers were continually exposed to new materials, activities and techniques.

11. A course entitled "Career Exploration - Selected Topics" was initiated. The course, offered at Lake Region Junior College, was designed to provide further career exploration and planning for college freshman and sophomores.

12. Special activities to accomplish the objectives of the project were initiated. They included such things as a placement service, a Career Education Conference, a follow-up survey, a "World of Construction" course, a Career Expo and a "Living Is For Everyone" (LIFE) program. Details of these and other project activities can be found in the "Results and Accomplishments" portion of this Report.
13. The guidance counselors met periodically with the project staff to review materials, discuss projected activities and plan needed career guidance activities.

14. The career development activities were presented to the students within the context of the subject matter being taught. A variety of approaches and techniques were used which included role playing, simulation, gaming, field trips, panel discussions, problem solving, demonstrations, small and large group discussions, interviews, films, filmstrips and many others.

15. All project efforts were coordinated with appropriate persons in the Department of Public Instruction and other related agencies with similar purposes.

D. RESULTS AND ACCOMPLISHMENTS

The results and accomplishments of this Exemplary Project in Career Education can be attributed directly to the classroom teacher. Only through the dedicated efforts of these individuals can the concepts in career education become a part of the students educational experience. With this in mind, the project rationale, as illustrated on the following page, was developed to assist classroom teachers with a sequential development of career education concepts. Illustration III on page 17 summarizes the project analysis chart that was utilized throughout the project. The following results and accomplishments are summarized according to these three specific categories:

1. In-Service:

One week sessions were conducted for all elementary, junior high, senior high and junior college personnel in the Devils Lake School System. This preliminary in-service was designed to acquaint teachers with the basic concepts of career education.

Individual in-service sessions were held with the teachers in their respective buildings. Discussion centered on projected classroom activities, articulation between levels and sequencing of career education objectives.

Conducted on site visitations for teachers from other school districts. From their request, the project staff arranged for classroom visitations, preview of career education resource materials and individual contacts with Devils Lake teachers utilizing career education concepts. Visitations included teachers from Velva, Oberon, Belcourt and Crary.
PAGE 22 CONTAINING A PROJECT ANALYSIS CHART WAS NOT REPRODUCIBLE AND WAS REMOVED FROM THIS DOCUMENT PRIOR TO ITS BEING SUBMITTED TO THE ERIC DOCUMENT REPRODUCTION SERVICE.
PAGE 23 CONTAINING ILLUSTRATION II, PROJECT RATIONALE FROM KINDERGARTEN THRU PLACEMENT, WAS NOT REPRODUCIBLE AND WAS REMOVED FROM THIS DOCUMENT PRIOR TO ITS BEING SUBMITTED TO THE ERIC DOCUMENT REPRODUCTION SERVICE.
Sessions were held with the administration and school level members throughout the project. The basic design of these meetings was to familiarize these individuals with career education and to gain positive support for all teachers to cooperate with program objectives.

Department heads from the secondary and post-secondary were involved in in-service sessions that were designed to improve articulation between the levels. The meetings included not only discussion of the career education concept but also job descriptions, identification of problems and format for integrating career education activities into the curriculum.

Meetings with teachers on a one-to-one basis were another form of in-service training. Major points of discussion during these meetings included individual differences, decision-making process and development of units of study.

The extension course entitled "Career Development Education 490" was offered through North Dakota State University. The course was offered in approximately 20 locations throughout North Dakota and proved to be an excellent in-service method for disseminating career education materials.

Nine one-week workshops were conducted on the campuses of institutions of higher education. The workshops were designed to discuss career education in regard to its practical application into the total curriculum K-12. Nearly 300 administrators, teachers and counselors attended these in-service sessions.

Numerous informational meetings were held with the general public. Groups included PTA's, Kiwanis, Rotary and other civic organizations.

As another method of in-service, teachers from the demonstration site were given the opportunity to visit other career education programs around the state. Numerous teachers visited the Bismarck School System which was the demonstration site for the first three year career education project.

2. Materials Developed:

A major accomplishment of this Exemplary Project in Career Education was the development of resource materials that are designed to assist other school districts, whether large or small, in implementing career education as part of their educational system. All the materials developed are available for statewide dissemination. The following illustrations represent those materials developed through this career education project.
Cluster Posters. A set of 14 charts revealing job opportunities requiring school subject skills.

ACTIVITIES for IMPLEMENTING the ELEMENTS of CAREER EDUCATION

Activities for Implementing the Elements of Career Education. A 23-page booklet listing teacher-directed activities for all levels.

Circle Graphs: Sample circle graphs show secondary curriculum units taught and how CE activities are integrated.

Career Resource: A Guide to Development. A booklet developed locally to recommend ways a resource room may be employed by small and large school districts.
**GUIDE TO 8TH GRADE WORLD OF CONSTRUCTION UNITS**

Central High School
Devils Lake Public Schools

Guide to 8th Grade World of Construction Units.

**ELEMENTARY ACTIVITY CARDS FOR INTERMEDIATE GRADERS**

A 188-packet of cards with activities in five elementary subject areas.

**INDUSTRIAL ARTS FOR ELEMENTARY SCHOOLS**

Industrial Arts for Elementary Schools. A guide to units prepared in several project areas with subject skills worksheets accompanying the activity. Also an elementary leathercraft unit.
3. Special Projects:

In addition to the in-service activities and the materials developed, a variety of special projects were initiated through this project. All special projects were implemented with the purpose of assisting the student with his career development planning. The special projects are summarized as follows.

**Career Exploration** - A mini-course designed for boys and girls in the ninth grade. Provided opportunity to explore occupations, centered around the 15 occupational clusters. Activities included such projects as shadowing a worker, visiting with guest speakers, viewing audio-visual materials, studying occupational briefs and discussing job opportunities in different localities.

**Summer Exploratory Program** - A summer exploratory program was conducted for junior high school students from the demonstration site as well as students from the satellite school systems. The program was designed to provide students with the opportunity to explore a variety of occupational clusters through a "hands-on" approach. Students from eight school districts attended the five-week program. Programs offered included automotive tune-up, small engine mechanics, fashions and clothing, typing and office practice, sports and recreation, carpentry, photography, electronics, park development and health.

**Multi-County Career Education Conference** - A day long career education conference was conducted to acquaint participants with the basic concepts of career education. One-hundred people from throughout North Dakota attended the conference. The theme evolved around the school, the parent and the community and their involvement in the career education process. Activity included presentations from regional, state and local career education specialists, teacher demonstrations and reactions to the concept from business/industry representatives, school officials and parents.

**Career Exploration/Selected Topics** - A career education course was initiated at the post-secondary level. The course, taught at Lake Region Junior College, was designed to provide students with the opportunity to further explore themselves and their occupational opportunities. It was an effort designed to assist the student in the career planning process. Topics included in the course were group interaction skills, group testing, group interpretation, group counseling, utilizing career education materials, problem solving skills, job seeking skills and future planning.
LIFE (LIVING IS FOR EVERYONE) PROGRAM - A 12 week course entitled LIFE was developed and offered to eighth grade students. The course was designed to provide career exploration in consumer and homemaking and industrial arts so that boys and girls will have the opportunity to discover and appreciate the occupations of people involved in consumer and homemaking and construction. Three basic goals were inherent in the course: 1) to help students ascertain the time, money and personalities involved in a satisfying career; 2) to provide students with a wide range of careers open to those interested in these areas; 3) to develop in the student, an awareness of self - his capabilities and limitations with emphasis on having and planning goals for his life.

World of Construction - This course was initiated to provide students with increased opportunities for "hands-on" experiences. Fashioned after the McKnight materials the course offered eighth grade students the opportunity to become involved with the construction industry. Not only did they become aware of the many occupations involved, they were also exposed to management/labor relations, bargaining and estimating.

Career Expo '75 - To help in providing career information to students prior to the regular yearly career day, where students visit the various college representatives, a Career Expo Day activity was implemented.

The primary purpose of this activity was to provide students with direct first hand information about what it's like in the world of work. To accomplish this goal, a number of employers and employees from the local community were contacted as to if they would be willing to act as resource people.

The majority of the individuals contacted were very receptive to visit with interested students about their particular trade/occupation.

Advisor/Advisee Program - See "Evaluation" portion of this report.
CAREER EDUCATION EVALUATION REPORT '75-'76

PROJECT:
DEVILS LAKE PUBLIC SCHOOL
DEVILS LAKE  NORTH DAKOTA

BY:
DON BOEHMER
3rd PARTY EVALUATOR
STARKWEATHER  NORTH DAKOTA
The evaluation for this project was conducted by Mr. Don Boehmer, an independent third party evaluator. The final evaluation report appears as submitted by Mr. Boehmer. Included in the report are those conclusions, implications and recommendations that are significant to program effectiveness.
Title of Project:

A DEVELOPMENTAL PROGRAM, PRE SCHOOL - ADULT,
IN CAREER EDUCATION FOR NORTH DAKOTA

Duration of Project: July 1, 1973 - June 30, 1976
Federal Funds Requested: $341,278.00
Total Funds Received: $327,080.00

Applicant Organization: North Dakota State Board for Vocational Education
Project Site: Devils Lake Public Schools
Devils Lake, North Dakota

The following is an overview of the three year period during which the Career Education Project was implemented in Devils Lake. The original project application describes the Devils Lake School System as follows:

"The Devils Lake School System was selected for the site of the program because it is the only school district in this section of the state which provides elementary, secondary, and post-secondary education, and offers both the academic and vocational.

The Lake Region Junior College has 660 students and has 30 teachers. The student body is 13% American Indian. The Devils Lake senior high school has an enrollment of 478 students with 7% American Indian. The junior high has 575 students with 10% American Indian. The junior and senior high schools have 40 teachers, 1 full-time and 1 half-time counselor, and ten paraprofessionals. The elementary system has 1,020 children with 7% American Indian, has 45 teachers and 8 paraprofessionals.

The percent of disadvantaged children, as identified by the State Plan, for the Devils Lake School System is 19.4% as compared to a state average of 10.6%. Satellite schools run close to the state average except those schools which have a large American Indian enrollment, in which case the percentage increases in direct proportion to the Indian student enrollment. The economy in the area is agriculture with 85% of the people engaged in agriculture or agri-related business. The area also encompasses the Devils Lake Sioux Reservation with a population of over 2,000 persons.

The State School for the Deaf is located in the proposed project site. The city of Devils Lake has a population of about 6,500 people. The city also has two parochial schools, the St. Joseph's Elementary and the St. Mary's Junior - Senior High Schools. In total these two schools
have an enrollment of approximately 450 students. After the completion of this project, the enrollment stands basically the same. It appears, however, that the instructional staff has grown considerably.

The original project application listed expected outcomes in 13 areas. Because these outcomes were not stated behaviorally, this can only be answered from a somewhat subjective basis. The stated expected outcomes were as follows:

1. An increased student awareness of occupational options
2. Career development activities and experiences integrated with all curriculum
3. Better communication between school, home, and community
4. Students making more realistic career choices
5. A more meaningful and relevant curriculum for students
6. An increased emphasis on the affective domain of individuals
7. An increase in student placement
8. An increase in vocational offerings at the secondary and post-secondary level
9. A total involvement of teachers, counselors, parents, and administrators in vocational guidance
10. An increased employability and job satisfaction of participants
11. A reduction in the drop-out rate
12. An increase in the development of basic skills and
13. An educational program that reaches beyond the walls of the school and beyond the realm of the classroom teacher.

The most obvious change from a vocational standpoint has been the construction of a new Vocational-Technical High School. This has resulted in a dramatic increase in course offerings related to skill training, vocational exploration, and general career education opportunities. A quick review of the curriculum to be offered for the 1976-1977 school term both in the regular high school program and in the vocational high school program includes the following:

<table>
<thead>
<tr>
<th>Introduction to Computers</th>
<th>Auto Mechanics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Trades</td>
<td>Food Service</td>
</tr>
<tr>
<td>Distributive Education</td>
<td>Health Occupations</td>
</tr>
<tr>
<td>Business Education</td>
<td>Office Education</td>
</tr>
<tr>
<td>Metals and Welding</td>
<td>Small Engine Repair</td>
</tr>
<tr>
<td>Industrial Arts</td>
<td>Drafting</td>
</tr>
<tr>
<td>Printing</td>
<td>Newswriting</td>
</tr>
<tr>
<td>Occupational Home Economics</td>
<td>Family Living</td>
</tr>
<tr>
<td>Independent Living for Boys</td>
<td>ROTC</td>
</tr>
<tr>
<td>Recreational Vehicle Mechanics</td>
<td>Creative Crafts</td>
</tr>
<tr>
<td>Tutor Interpretation for Deaf Students</td>
<td>Agricultural and Natural Resources</td>
</tr>
<tr>
<td></td>
<td>Child Care</td>
</tr>
</tbody>
</table>

26

33
There may be some additional programs that the evaluator is not aware of. In addition, Devils Lake School District has made excellent progress towards providing vocational opportunities for the handicapped. This is evidenced by programs involving the deaf students, work-study and independent living for the mentally handicapped, increased opportunities in vocational areas for the child with severe learning disabilities and/or emotional disturbance. Although not entirely related to this project, the Devils Lake School System has reduced its drop-out rate substantially. The drop-out rate for the past five school terms:

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971-72</td>
<td>9.3%</td>
</tr>
<tr>
<td>1972-73</td>
<td>6.6%</td>
</tr>
<tr>
<td>1973-74</td>
<td>5.5%</td>
</tr>
<tr>
<td>1974-75</td>
<td>4.1%</td>
</tr>
<tr>
<td>1975-76</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

The third party evaluator has witnessed a variety of things that have taken place because of this project.

A. Revision and re-alignment of the industrial arts program
B. "Hands-on" experiences for junior high school students in the World of Construction
C. A part-time industrial arts program for elementary students
D. Curriculum revision and sequencing
E. The construction of career education oriented materials
F. Groups in-service training
G. The implementation of the advisee-advisor concept
H. Purchase and infusion of commercial career education oriented instructional materials
I. The infusion of methods and procedures to allow for student realization of career education objectives
J. Business community involvement in the school
K. Opportunities for teacher to grow professionally by visiting other programs
L. Increased communication with the Lake Region Junior College
M. An increased emphasis on the affective domain both at the elementary and junior-senior high level
N. More interest on the part of the administration and guidance staff on post-secondary placement

No data was obtained through this project that would suggest an increase in the development of basic skills or an increase in job satisfaction. There is ample evidence, however, suggesting that at least to some degree, 11 of the 13 expected outcomes have in part been achieved. The 1975-1976 report includes the implementation of the program titled, Advisor-Advisee. It should be noted that in addition to the career education funds, $3,000 was obtained through a mini-grant through Title III, ESEA.

Of the $327,080 received by the State Board for Vocational Education, approximately $202,400 were used to implement this project at the Devils Lake site. The budget for the 1973-1974 school year was $68,164; 1974-1975 budget was $66,534; and the budget for the 1975-1976 school term was $67,704. A budget breakdown for the 1975-1976 school term is as follows:
I. PERSONNEL

A. Salaries $44,427.00
B. Benefits 4,500.00
C. Subsistence 800.00
D. Travel 1,500.00
E. Consultant 500.00
F. Writers 1,700.00

II. SERVICES

A. Evaluation $5,000.00
B. Duplication 3,877.00

III. SUPPLIES AND MATERIALS $4,100.00

IV. COMMUNICATIONS

A. Postage & Telephone $800.00

V. EQUIPMENT $500.00

The original project application was written with extremely broad goals and objectives. This made the project difficult to evaluate from a product standpoint. During the second year, the evaluation scheme devised by Development Associates, Inc. from Washington, D.C. was implemented. Project evaluation was facilitated through having the staff follow through with this model. This process is described in this report as it relates to the evaluation of 1975-1976 data.

Initially, the Devils Lake project began with the hiring of a project director. At the conclusion of the project, three additional staff members and a secretary were involved. Any school district wishing to implement a similar career education project should give careful consideration to the following:

A. In the opinion of the evaluator, a project of this type should grow from within the whole school district. Interest should be generated in advance so that the staff is amply motivated before the onset of the actual project. It might be helpful if the director could be selected from within the school district. If this was done, it would be imperative that this person be someone who had a strong existing rapport with the teaching staff.

B. The third party evaluator should be involved if at all possible with the project from the initial writing stage.

C. Selection of evaluation instruments is difficult in the affective domain. Close attention should be paid to the statistical data on all instruments used. Many of the affective tests have
extremely low reliability coefficients.

D. A district entering into a project of this type should give advance consideration to the curriculum revisions and additions that may be necessary to fully implement this type of a project.

E. The school board and the administration should thoroughly understand all of the project components and their possible implications for the district. This type of support will be crucial to the success of the project.

EVALUATION REPORT 1975-1976 GOALS AND OBJECTIVES

The following data is a report on the measurement and accomplishment of 1975-1976 project objectives. In reading this report the reader should keep the following in mind:

1. This is an evaluation based on "Product" not "Process" objectives. No assessment or verification of methodology has been made.

2. The assessment model that has been followed was developed by: Development Associates Inc., 1521 New Hampshire Avenue NW, Washington, DC 20036.

3. A degree of inference has been made in some instances. It is not always possible to deal with each objective in a totally "clean" manner. In addition, there is always overlap in objectives. All reported scores on the accomplishment of objectives should be viewed in the light of "results as they were assessed."

The reporting format is as follows:

1. The evaluator's sketch summarizing Development Associates Model as perceived by the third party evaluator.

2. The Development Associates treatment table (sample) completed by a staff member at the Devils Lake project site for 1975-1976. (a treatment table was prepared by each staff member)

3. The completed career education objectives table in terms of expected student outcomes for 1975-1976. (sample completed by one staff member)
EVALUATION PROPOSAL

CAREER ED 1975-76

DON BOEHMER

1. Students will demonstrate increased self-awareness.

2. Students will display a different (positive) attitude toward themselves.

3. Students will know the major duties and required abilities of different types of work.

4. Students will show increased knowledge of different types of tools.

5. Students will demonstrate an increased knowledge of different kinds of jobs.

Objectives

A pre/post comparison will be made in 4 areas. The survey will be constructed by the third party evaluator.

Design

The data sample will include 80-100 students in grades 3-6. Students will be taken from teachers who will agree to implement activities suggested in the Devils Lake Elementary Career Education Guide. The students will be taken from a combination of the Prairie View, Sweetwater, and Minnie H Elementary Schools. Surveying will begin after September 16, 1975. All surveys will be given on a 1 to 1 basis.

Data Sources and Sampling

Test-retest reliability has been conducted with the survey to be used. As a minimum, the following techniques will be used to analyze the data:

1. median and mean
2. analysis of covariance
3. "T" test

Analysis
EVALUATION PROPOSAL

CAREER ED 1975-76

DON BOEINER

1. Students will be able to describe their own current abilities and limitations.

2. Students will display a more positive attitude toward themselves.

3. Students will demonstrate generally useful information processing skills.

4. Students will be able to demonstrate generally useful decision-making skills.

5. Students will increase their knowledge of some important factors that affect work success and satisfaction.

6. Students will increase their knowledge of the steps to be taken and the factors to be considered in career planning.

7. Students will demonstrate active involvement in career decision-making. (total score)

8. Students will be able to identify sources of additional education in major types of paid and unpaid work.

Objectives

The performance profile from "Creating Your Future" will be administered on a pre-post basis. The 34 questions will be grouped under six of the above goals. The grouping will be arbitrarily made by the evaluator. A positive movement in a group of questions will indicate the implementation of a project goal. Total scores will be used for objective #7. Objective #8 will relate to the Resource Room.

Design

All students who are enrolled in Mr. Seim's class will take the pre-post survey. This activity will be done during the second and third quarter. Thirty to fifty (30-50) students per section are expected to be involved.

Data Sources and Sampling

Data will be analyzed on a pre-post basis. Median and mean scores will be used.

Analysis
1. Students will demonstrate an increase in their knowledge of different kinds of jobs.

Based on the content of the P.I.E.S. kit, a pre/post survey will be constructed by the project evaluator.

The data will be collected from grade 11-12 students enrolled in this unit. It is estimated that 50-40 students will be involved.

Students will be compared on a pre/post basis for gains using informal methods.
EVALUATION PROPOSAL
CAREER ED 1975-76

DON BOEHMER

1. Students will be able to describe their own interests.

2. Students will have an increased knowledge of different kinds of jobs.

3. Students will be able to identify, locate, and utilize sources of information to solve career decision-making problems.

4. Students will be able to identify, locate, and utilize sources that contain information about existing paid or unpaid work possibilities.

A comparison can be made between data collected from 1974-75 to 1975-76. The primary evaluation data, however, will be obtained from individual interviews of students reflecting the benefit of the room in relation to pre-stated objectives.

The data will be taken from interviewing students in the Resource Room. Interviewing will be done at random September through May. Data will be collected from a minimum of 100 grade 7-12 students.

The data will be evaluated by the third party evaluator and reported by grade level. Informal methods of analysis will be used.
EVALUATION PROPOSAL

CAREER ED 1975-76

DON BOEHMER

1. Students will be able to describe their own abilities and limitations as this relates to the world of construction.

2. Students will be able to recognize and relate tools to specific jobs.

3. Students who are leaving the formal education system will be successful in being placed in a paid occupation, in further education, or in unpaid work that is consistent with their current career education. (this objective relates to students leaving prior to completing grade 12)

4. Students will know the important factors that affect work (a) success and (b) satisfaction.

Objectives

A pre-post survey will be constructed by the evaluator. This survey will be directly related to the course outline and the test, "World of Construction." This will be done prior to the start of the second 12-week period. Mr. Homan will also need to work directly with the evaluator in regard to the measurement of objective #3.

Design

Students surveyed in this program will be taken from two of Mr. Homan's sections dealing with the program. All surveying will be done on an individual basis. Approximately 40 students will be involved. Data for objective #4 will be taken from a log kept by Mr. Homan and personal interviews with students.

Data Sources and Sampling

The evaluator will make pre/post comparison analysis of the data using informal methods.

Data Analysis

41

34
EVALUATION PROPOSAL
CAREER ED 1975-76
DON BOEHMER

1. Students will demonstrate an increase in their understanding of their own current abilities and limitations.

2. Students will demonstrate a more positive attitude toward themselves.

3. Students will demonstrate an increase in numerical skills.

4. Students will demonstrate an increase in knowledge of different job roles.

5. Students will demonstrate an increase in their knowledge of the steps to be taken and the factors considered in career planning.

6. Students will be able to identify, locate, and utilize sources that contain information about existing paid and unpaid work possibilities.

The following conditions/data will need to be provided by the project director. A pre/post standardized math achievement test score for each child enrolled in the treatment group. The survey from "Creating Your Future" will be given by the evaluator on a pre/post basis. A survey will be constructed by the evaluator on objectives 4 and 6. (the project director will provide the evaluator a list of career education activities conducted by the teacher of the treatment group for the 1975-76 school term)

A comparison will be made on a pre/post basis by group, by objective. A correlation coefficient will be obtained for gains in all objective areas. Statistical correlation will be obtained from the University of North Dakota.

The pre/post surveying will be done with all students in treatment group S-J-7. This is estimated to be 130 students.
ILLUSTRATION III
PROJECT EVALUATION MODEL

1. State/review original project goals and objectives

2. Discuss/plan
   a. treatment?
   b. group?
   c. projected outcome?
   d. possible staff needs - assignments?

3. Prepare an overview of project, may include:
   a. narrowing or expanding of focus

4. Complete outcome-question treatment group matrix
   a. specify treatment (methods)
   b. identify students by treatment
   c. identify treatment groups
   d. complete the outcome-question treatment group matrix

5. Formulate evaluation questions

6. Design/select instruments

7. Specify data sources

8. Collect data

9. Analysis of data
   a. specify statistical procedures used

10. Report findings by projected outcomes

11. Make/discuss recommendations

Instrument Evaluation
1. reliability
2. validity
3. other
<table>
<thead>
<tr>
<th>ACTIVITY AREA</th>
<th>SPECIFIC TREATMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1B Students will be able to describe their own current interests</td>
<td>1. General interest survey 2. Types of information used in center</td>
</tr>
<tr>
<td>2C Students will be able to demonstrate generally useful information - processing skills</td>
<td>1. Students will be able to locate and use information in the CRC</td>
</tr>
<tr>
<td>4A Students will know the major duties and required abilities of different types of paid and unpaid work</td>
<td>1. Knowledge will be gained through the use of materials in the center 2. Resource persons will be used in the classroom</td>
</tr>
<tr>
<td>4F Increased knowledge of different kinds of jobs</td>
<td>1. Resource persons and field trips 2. Information and activities provided by teachers (Goulding, Kurtz, and Johnson)</td>
</tr>
<tr>
<td>5C Students will be able to identify, locate, and utilize sources of information to solve career decision-making problems</td>
<td>1. Students will use information in the center and will also know other sources of information such as the library, the guidance office, etc.</td>
</tr>
<tr>
<td>7A Students will be able to identify, locate, utilize sources that contain information about existing paid or unpaid work possibilities</td>
<td>1. Students will know about the Job Shop 2. They will also know about job openings in the state of North Dakota</td>
</tr>
</tbody>
</table>
WORLD OF CONSTRUCTION
ACTIVITY TREATMENT TABLE
75-76

<table>
<thead>
<tr>
<th>ACTIVITY AREA</th>
<th>SPECIFIC TREATMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd &amp; 3rd (12) week periods</td>
<td></td>
</tr>
<tr>
<td>8th World of Construction</td>
<td>A. Wire electric cord</td>
</tr>
<tr>
<td></td>
<td>B. Solder joints</td>
</tr>
<tr>
<td></td>
<td>C. Read tape</td>
</tr>
<tr>
<td></td>
<td>D. Square Boards</td>
</tr>
<tr>
<td>8th World of Construction</td>
<td>A. I will spend time teaching economic and educational influence in their development.</td>
</tr>
<tr>
<td>8th World of Construction</td>
<td>A. General wood construction tools</td>
</tr>
<tr>
<td></td>
<td>B. Tools used in wiring a cord</td>
</tr>
<tr>
<td></td>
<td>C. Tools used in soldering copper joints</td>
</tr>
<tr>
<td>8th World of Construction</td>
<td>A. Students will know success and satisfaction in building mock wall fish houses, and picnic tables.</td>
</tr>
<tr>
<td>Placement</td>
<td>Drop-outs -- visit with those who are leaving formal education -- upon referral by principal</td>
</tr>
</tbody>
</table>
### Sample

**Career Education Objectives in Terms of Student Outcome Statements**

**Resource Room:** 75-76

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Treatment Group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Students will demonstrate increased self-awareness.</strong></td>
<td></td>
</tr>
<tr>
<td>A. Students will be able to describe their own current abilities and limitations.</td>
<td>X</td>
</tr>
<tr>
<td>B. Students will be able to describe their own current interests and values.</td>
<td></td>
</tr>
<tr>
<td>C. Students will display positive attitudes toward themselves.</td>
<td></td>
</tr>
<tr>
<td>D. Students will recognize that social, economic, educational and cultural forces influence their development.</td>
<td></td>
</tr>
<tr>
<td><strong>II. Students will demonstrate increased competency in basic academic/vocational skills.</strong></td>
<td></td>
</tr>
<tr>
<td>A. Students will be able to demonstrate generally useful numerical skills.</td>
<td></td>
</tr>
<tr>
<td>B. Students will be able to demonstrate generally useful communication skills.</td>
<td></td>
</tr>
<tr>
<td>C. Students will be able to demonstrate generally useful information processing skills.</td>
<td>X</td>
</tr>
<tr>
<td>D. Students will be able to demonstrate generally useful decision-making skills.</td>
<td></td>
</tr>
<tr>
<td>E. Students will be able to demonstrate generally useful interpersonal skills.</td>
<td></td>
</tr>
<tr>
<td><strong>III. Students will demonstrate increased awareness of work values and possess a desire to engage in paid and/or unpaid work.</strong></td>
<td>X</td>
</tr>
<tr>
<td>A. Students will recognize the basis of various work values.</td>
<td></td>
</tr>
<tr>
<td>B. Students will possess positive attitudes toward paid and unpaid work.</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td></td>
</tr>
<tr>
<td>IV. Students will demonstrate increased awareness of and knowledge about work:</td>
<td></td>
</tr>
<tr>
<td>A. Students will know the major duties and required abilities of different types of paid and unpaid work.</td>
<td></td>
</tr>
<tr>
<td>B. Students will know differences in work conditions and life styles associated with different types of paid and unpaid work.</td>
<td></td>
</tr>
<tr>
<td>C. Students will know entry requirements for major types of paid and unpaid work.</td>
<td></td>
</tr>
<tr>
<td>D. Students will know the impact of social and technological change on paid and unpaid work.</td>
<td></td>
</tr>
<tr>
<td>E. Students will know the important factors that affect work success and satisfaction.</td>
<td></td>
</tr>
<tr>
<td>F. Increased knowledge of different kinds of jobs.</td>
<td></td>
</tr>
<tr>
<td>G. Relate tools to specific jobs.</td>
<td></td>
</tr>
<tr>
<td>V. Students will demonstrate increased competency in career decision-making skills.</td>
<td></td>
</tr>
<tr>
<td>A. Students will be able to associate their own abilities and limitations with possible success in present or future paid and unpaid work.</td>
<td></td>
</tr>
<tr>
<td>B. Students will be able to relate their personal interests and values to types of paid and unpaid work and their associated life styles.</td>
<td></td>
</tr>
<tr>
<td>C. Students will be able to identify, locate, and utilize sources of information to solve career-decision-making problems.</td>
<td></td>
</tr>
<tr>
<td>D. Students will be able to determine the potential for future advancement/personal growth in work of their choosing.</td>
<td></td>
</tr>
</tbody>
</table>
E. Students will know the steps to be taken and the factors to be considered in career planning.

F. Students will demonstrate active involvement in career decision-making.

IV. Students will demonstrate good work habits.

A. Students will be able to plan work effectively.

B. Students will be able to adapt to varied work conditions.

C. Students will have a positive attitude toward the concept of quality in relation to a work task.

D. Students will have a positive attitude toward conservation of environmental and human resources in accomplishing work tasks.

E. Students will have a positive attitude toward responsibility for their own behavior and accomplishment of self imposed work tasks.

F. Students will demonstrate a desire for continuous learning, both in school and out.

VII. Students will demonstrate work-seeking and work-getting skills.

A. Students will be able to identify, locate and utilize sources that contain information about existing paid and unpaid work possibilities.

B. Students will be able to demonstrate skills required in applying for and accepting work.

VIII. Students who are leaving the formal education system will be successful in being placed in a paid occupation, in further education, or in unpaid work that is consistent with their current career education.
<table>
<thead>
<tr>
<th>IX. Students will be aware of means available for continued education once they have left the formal educational system.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Students will be able to identify sources of additional education in major types of paid and unpaid work.</td>
</tr>
<tr>
<td>B. Students will be able to identify means to support additional education for themselves in major types of paid and unpaid work.</td>
</tr>
</tbody>
</table>
ELEMENTARY OBJECTIVES
Grades 3, 5, 6

1. Students will show an increased knowledge of different types of tools.
2. Students will know the major duties and required abilities of different types of work.
3. Students will demonstrate an increased knowledge of different kinds of jobs.
4. Students will demonstrate increased self-awareness.
5. Students will display a different (positive) attitude toward themselves.

SAMPLE - 114 grades 3, 5, 6 students from two elementary schools in Devils Lake. The grade 3 sample contained 18 students, grade 5, 40 and grade 6, 56 students. Four surveys were developed by the project evaluator. The total number of items in the surveys was 78. A reliability coefficient was completed for the surveys on a test-retest basis, the coefficient was .9122. All surveys were read by the examiner and given a one to one basis. The same examiner was used in all cases.

Results: Grade 3: School 1:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Pre Test Mean</th>
<th>Post Test Mean</th>
<th>Mean Difference</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.22</td>
<td>7.83</td>
<td>-1.125</td>
<td>NS</td>
</tr>
<tr>
<td>2</td>
<td>13.28</td>
<td>13.94</td>
<td>- .979</td>
<td>NS</td>
</tr>
<tr>
<td>3</td>
<td>12.56</td>
<td>14.83</td>
<td>-3.096</td>
<td>S at .01</td>
</tr>
<tr>
<td>4-5</td>
<td>11.22</td>
<td>12.20</td>
<td>- .732</td>
<td>NS</td>
</tr>
<tr>
<td>TOTAL</td>
<td>44.27</td>
<td>48.88</td>
<td>-4.000</td>
<td>S at .01</td>
</tr>
</tbody>
</table>

Comments: Pre/post change on objective #3 was significant at the .01 level of confidence. These students have increased their knowledge of different kinds of jobs. It is interesting to note the differences on objective 1, 2, 4, 5 were not significant, however, the total on all surveys combined was. This would suggest that to a degree all objectives were partially achieved by some students in grade 3.
### Results: Grade 5: School 1:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Pre Test Mean</th>
<th>Post Test Mean</th>
<th>Mean Difference</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8.60</td>
<td>8.95</td>
<td>-.812</td>
<td>NS</td>
</tr>
<tr>
<td>2</td>
<td>16.2</td>
<td>16.75</td>
<td>-.944</td>
<td>NS</td>
</tr>
<tr>
<td>3</td>
<td>18.6</td>
<td>19.5</td>
<td>-1.424</td>
<td>NS</td>
</tr>
<tr>
<td>4-5</td>
<td>11.35</td>
<td>12.00</td>
<td>-5.121</td>
<td>S at .01</td>
</tr>
<tr>
<td>TOTAL</td>
<td>Not Computed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments: Pre/post mean differences on the survey used to measure objectives number 4-5 was significant at the .01 level of confidence. This particular section of the survey contained 20 occupations. Students were asked which of the occupations they would be able to do when they finished high school. "Yes" answer increased significantly on a pre/post basis indicating more students felt they could work in the occupation following the treatment. Here the evaluator has made the inference that this is an indication of self-awareness and in a positive direction.

### Results: Grade 6: School 1:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Pre Test Mean</th>
<th>Post Test Mean</th>
<th>Mean Difference</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9.55</td>
<td>9.77</td>
<td>-1.045</td>
<td>NS</td>
</tr>
<tr>
<td>2</td>
<td>18.03</td>
<td>18.55</td>
<td>-1.785</td>
<td>NS</td>
</tr>
<tr>
<td>3</td>
<td>20.84</td>
<td>21.45</td>
<td>-1.080</td>
<td>NS</td>
</tr>
<tr>
<td>4-5</td>
<td>12.03</td>
<td>14.65</td>
<td>-3.846</td>
<td>S at .01</td>
</tr>
<tr>
<td>TOTAL</td>
<td>Not Computed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments: Pre/post mean differences on the survey used to measure objectives 4-5 were significant at the .01 level of confidence. These suggest a positive change in self-awareness.
Results: Grade 5: School 2:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Pre Test Mean</th>
<th>Post Test Mean</th>
<th>Mean Difference</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
<td>9.45</td>
<td>0.224</td>
<td>NS</td>
</tr>
<tr>
<td>2</td>
<td>16.36</td>
<td>17.50</td>
<td>-2.06</td>
<td>S at .05</td>
</tr>
<tr>
<td>3</td>
<td>19.64</td>
<td>21.14</td>
<td>-1.994</td>
<td>S at .05</td>
</tr>
<tr>
<td>4-5</td>
<td>10.64</td>
<td>13.95</td>
<td>-3.581</td>
<td>S at .01</td>
</tr>
<tr>
<td>TOTAL</td>
<td>45.82</td>
<td>62.05</td>
<td>-14.169</td>
<td>S at .01</td>
</tr>
</tbody>
</table>

Comments: Pre/post mean differences are significant at the .05 level of confidence for objectives 2 and 3. Objectives 4 and 5 are significant at the .01 level. Total pre/post mean differences are significant at the .01 level. This suggests that students have made progress in:

1. knowing the major duties and required abilities of different types of work (jobs).
2. demonstrated increased self-awareness and a more positive attitude toward themselves.
3. the total pre/post mean difference suggests that all objectives were implemented to a degree with objectives 2, 3, 4, 5 having a higher degree of attainment than 1.

Results: Grade 6: School 2:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Pre Test Mean</th>
<th>Post Test Mean</th>
<th>Mean Difference</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9.64</td>
<td>9.96</td>
<td>-0.372</td>
<td>NS</td>
</tr>
<tr>
<td>2</td>
<td>17.76</td>
<td>18.84</td>
<td>-4.191</td>
<td>S at .01</td>
</tr>
<tr>
<td>3</td>
<td>21.12</td>
<td>22.04</td>
<td>-2.404</td>
<td>S at .05</td>
</tr>
<tr>
<td>4-5</td>
<td>11.72</td>
<td>14.36</td>
<td>-3.428</td>
<td>S at .01</td>
</tr>
<tr>
<td>TOTAL</td>
<td>48.56</td>
<td>64.80</td>
<td>-15.072</td>
<td>S at .01</td>
</tr>
</tbody>
</table>

Comments: Pre/post mean differences were significant at the .01 level for objectives 2, 4, 5. Pre/post total mean differences were significant at the .01 level. This suggests that students have:

1. increased their knowledge of the major duties and required abilities of different types of work.
2. demonstrated increased self-awareness and a more positive attitude toward themselves.
3. the total pre/post mean differences suggest that all objectives were implemented to a degree with objectives 2, 3, and 4, 5 having a higher degree of attainment than 1.
JUNIOR HIGH OBJECTIVES

Grade 7

1. Students will demonstrate an increase in their understanding of their own current abilities and limitations.

2. Students will demonstrate a more positive attitude toward themselves.

3. Students will demonstrate an increase in numerical skills.

4. Students will demonstrate an increase in knowledge of different job roles.

5. Students will demonstrate an increase in their knowledge of the steps to be taken and the factors considered in Career Planning.

6. Students will be able to identify, locate and utilize sources that contain information about existing paid and unpaid work possibilities.

SAMPLE - A total of 107 grade seven students were surveyed on a pre/post basis. Three instruments were used. (1) Math section of the wide range achievement test. (2) A project constructed survey of different job roles. (3) A performance profile "Creating Your Future" published by Education Achievement Corporation. This is an affective type survey. It contains 31 questions of which each student was asked to rate each statement on a scale of 1-7. Questions were regrouped to match staff/matrix objectives. Three individuals were used to regroup questions for purposes of agreement. Data on seventh grade students was also obtained from students in the Career Education Resource Room. (see Resource Room section).

Results:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Pre Test Mean</th>
<th>Post Test Mean</th>
<th>Mean Difference</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>28.48</td>
<td>30.17</td>
<td>-1.987</td>
<td>S at .05</td>
</tr>
<tr>
<td>(Math)</td>
<td>2 24.79</td>
<td>24.74</td>
<td>-0.06</td>
<td>NS</td>
</tr>
<tr>
<td>3</td>
<td>18.27</td>
<td>21.68</td>
<td>-3.41</td>
<td>S at .01</td>
</tr>
<tr>
<td>(Jobs)</td>
<td>5 5.55</td>
<td>6.47</td>
<td>-0.92</td>
<td>S at .01</td>
</tr>
<tr>
<td>4</td>
<td>18.11</td>
<td>19.72</td>
<td>-1.61</td>
<td>S at .01</td>
</tr>
<tr>
<td>5</td>
<td>30.00</td>
<td>34.35</td>
<td>-4.35</td>
<td>S at .01</td>
</tr>
</tbody>
</table>

6 See Resource Room Survey

53
Comments: Objective 1 - pre/post mean differences indicate that students have increased their understanding of their own current abilities and limitations. Objective 2 - pre/post mean differences suggest no change in the group in terms of a more positive attitude toward themselves. Objective 3 - math gains were examined statistically using both grade equivalents and raw scores. The gains in both raw scores and grade equivalent exceeded one year of growth. Pre/post mean differences were significant at the .01 level of confidence in both instances. Objective 4 - pre/post mean differences were significant at the .01 level of confidence. This suggests the students have increased their knowledge of job roles. Objective 5 - pre/post mean differences were significant at the .01 level of confidence. This suggests that the students have increased their knowledge of the steps to be taken and the factors considered in Career Planning. Objective 6 - data from the resource room survey will support the implementations of this objective.

Grade 8

1. Students will be able to describe their own abilities and limitations as they relate to the World of Construction.

2. Students will be able to recognize and relate tools to specific jobs.

3. Students who are leaving the formal education system will be successful in being placed in a paid occupation, in further education, or in unpaid work that is consistent with their current career education. (This objective relates to students leaving prior to completing grade 12 and is not limited to grade 7.)

4. Students will know the important factors that affect work success and satisfaction.

/SAMPLE/ - Sixty-one grade 8 students were surveyed on a pre/post basis using a 60 item objective survey constructed by the third party evaluator. All students were surveyed on a one to one basis. The survey was read to them. The 61 students were involved in a "hands on" experience in the World of Construction program. This program was taught directly by a career education staff member in the Devils Lake Project.

Results: Group 1: 30 Students:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Number of Students Regressing</th>
<th>Number of Students Advancing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean - Pre Test Score</td>
<td>34.03</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>Mean - Post Test Score</td>
<td>42.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean - Pre/Post Differ</td>
<td>8.44</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Results: Group 2: 31 Students:

<table>
<thead>
<tr>
<th>Mean - Pre Test Score</th>
<th>Number of Students Progressing</th>
</tr>
</thead>
<tbody>
<tr>
<td>37.48</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mean - Post Test Score</th>
<th>Number of Students Advancing</th>
</tr>
</thead>
<tbody>
<tr>
<td>56.32</td>
<td>31</td>
</tr>
</tbody>
</table>

Mean - Pre/Post Difference 18.84

Comments: Both groups, 1 and 2 have made mean score gains on a Pre/Post basis beyond chance. Objective 1 - both groups, 1 and 2, have gained knowledge in the World of Construction as taught in this course and measured by the evaluator. It is reasonable to assume that as a result of this they have a better understanding of their limitations and abilities as they relate to the areas taught and assessed. Objective 2 - both groups, 1 and 2, are better able to recognize and relate tools to specific jobs. Objective 3 - note: this refers to all students grades 7-12. The project has no data to support this objective. The following statements were received from the project staff member responsible for this objective.

"The project I started on for students leaving the formal education system did not work out. The students I talked to had heard what I had to say from principals, teachers, counselors, parents and from other people. I really feel a program like this would work out better after the student had dropped out of school for a year. I feel they would at that time listen to reason better. At this time they would know what life is and how it works. Most of the students who drop out would like to get a diploma from high school someday.

"This program might have been more successful had I worked with potential drop-outs instead of waiting until they had actually left the school setting. Students who are freshmen or sophomores who have indicated a potential as drop-outs would be, in my opinion, easier to talk with about the advantages of remaining in school. At this time one could show the different options available to help him through an education program."

Objective 4 - both groups, 1 and 2, increased their knowledge of tools, their relationships to specific trades, and information about specific occupations. They have also had an opportunity to evaluate their own abilities and limitations. It is reasonable to assume they have gained some skill in at least being able to evaluate some jobs in terms of success and satisfaction that these positions offer.

Other: The evaluator visited this program in operation several times during the 1975-1976 school term. Several observations were noteworthy. (a) Students were being provided with a type of "hands on" experience not typically done by grade 8 students; i.e. constructing actual saleable buildings! (b) Students were
obviously interested and highly motivated by the tasks and the construction. (c) Experience provided to the students was "real" not just "book and lecture" type.

Grades 11-12

**SAMPLE** - Twenty-four students participated in a week career education seminar taught by a project staff member. This was conducted three times. Two of the programs were evaluated by the third party evaluator. Again the 31 questions were regrouped under appropriate objectives. Questions were taken from the Performance Profile "Creating Your Future". The objectives were as follows.

Objective 1 - students will be able to describe their own current abilities and limitations. Objective 2 - Students will display a more positive attitude toward themselves. Objective 3 - Students will demonstrate generally useful information processing skills. Objective 4 - Students will demonstrate active involvement in career-decision making. Objective 5 - Students will increase their knowledge of some important factors that affect work success and satisfaction. Objective 6 - Students will increase their knowledge of the steps to be taken and the factors to be considered in career planning. Objective 7 - students will be able to demonstrate generally useful decision-making skills. Objective 8 - Students will be able to identify sources of additional education in major types of paid and unpaid work.

**Results:**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Pre Test Mean</th>
<th>Post Test Mean</th>
<th>Mean Difference</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>28.48</td>
<td>36.17</td>
<td>-1.987</td>
<td>$ at .05</td>
</tr>
<tr>
<td>2</td>
<td>24.79</td>
<td>24.74</td>
<td>.106</td>
<td>NS</td>
</tr>
<tr>
<td>3</td>
<td>10.36</td>
<td>10.08</td>
<td>-.683</td>
<td>NS</td>
</tr>
<tr>
<td>4</td>
<td>18.72</td>
<td>20.54</td>
<td>-3.118</td>
<td>$ at .05</td>
</tr>
<tr>
<td>5</td>
<td>49.30</td>
<td>48.23</td>
<td>-.722</td>
<td>NS</td>
</tr>
<tr>
<td>6</td>
<td>30.00</td>
<td>34.35</td>
<td>-4.218</td>
<td>$ at .01</td>
</tr>
<tr>
<td>7</td>
<td>151.57</td>
<td>157.72</td>
<td>-1.588</td>
<td>NS</td>
</tr>
<tr>
<td>8</td>
<td>No Objective Data Gathered</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments:** Objective 1 - pre/post test mean differences suggest that this objective has been accomplished. As measured, students are better able to describe their own current abilities.
and limitations. Objective 2 - not accomplished as measured. Objective 3 - not accomplished as measured. Objective 4 - pre-post test mean differences demonstrate active involvement in career decision-making. Objective 5 - not accomplished as measured. Objective 6 - pre/post mean differences suggest that students have increased their knowledge of the steps to be taken and factors to be considered in career planning. Objective 7 - all questions were grouped for an analysis of total score. The pre/post differences were not significant. Objective 8 - no objective data was gathered by the evaluator on this objective. The evaluator did discuss this with the staff member responsible to implement the objective. Two tasks completed by the students seem to relate: (a) students used and discussed the tape series "Planning Beyond High School," published by the Wilson Educational Cassettes Corp. (b) students were required to write a college, a university, a Jr. College and a vocational college for information about these programs. A comparison was made between each type of institution. In the light of this information the evaluation feels that in past this objective has been accomplished.

JUNIOR SENIOR HIGH
RESOURCE ROOM:

Note: the following data was taken on a random basis from students using the career education Resource Room. The data could be used to substantiate other objectives in addition to those projected. It will, for reporting purposes, be treated separate.

Objectives: (1) students will be able to describe their own interests, (2) students will have an increased knowledge of different kinds of jobs, (3) students will be able to identify, locate and utilize sources of information to solve career decision-making problems, (4) students will be able to identify, locate and utilize sources that contain information about existing paid or unpaid work possibilities.

SAMPLE - Eighty-seven students grades 7-12. All students were surveyed on an individual basis. The survey and results are attached.

Results:

Objective 1 - Fifty-two students took interest/aptitude surveys in the Resource Room. It is reasonable to assume that some of these students are more knowledgeable about their own current interests. In addition 83% of the students surveyed indicated that as a result of being in the Resource Room they had a better understanding of their own aptitudes and abilities for work.
Objective 2 - students listed in excess of 30 topics (careers) explored in the Resource Room. In addition, 90% of the students surveyed indicated they had received information on specific jobs as a result of using the resources in the room.

Objective 3 & 4 - the 1975-1976 data reported on the survey will strongly support both objectives. It would appear that as a result of this program's activities, students are better able to identify, locate and utilize sources of information to solve career decision-making problems. The same applies to information about existing paid or unpaid work possibilities.

Comments: The survey results were also tabulated comparing data from 1974-1975 to 1975-1976 taken from the resource room. All areas showed an increase in percentages.

TOTAL 7-11

For what reasons are you using the Career Resource Center?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get materials for assignments</td>
<td>41</td>
<td>(54)</td>
</tr>
<tr>
<td>Find out about jobs</td>
<td>16</td>
<td>(45)</td>
</tr>
<tr>
<td>Games</td>
<td>10</td>
<td>(16)</td>
</tr>
<tr>
<td>Nothing else to do</td>
<td>6</td>
<td>(19)</td>
</tr>
<tr>
<td>Bring materials back</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Learn about high school and college courses</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>(14)</td>
</tr>
</tbody>
</table>

Were you looking for information on a specific topic? Yes No

If so, what topic? _______________________

Have you used this center before? ______ How many times? ______

Are you here as a result of: your own interest? ______ 28% (32%)
| teacher assignment? ______ 37% (35%)
| both of the above? ______ 35% (32%)
As a result of using this resource room, I have:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>?</th>
</tr>
</thead>
<tbody>
<tr>
<td>70% (82%)</td>
<td>4% (16%)</td>
<td>25% (2%)</td>
</tr>
<tr>
<td>82% (90%)</td>
<td>17% (18%)</td>
<td>1% (2%)</td>
</tr>
<tr>
<td>64% (79%)</td>
<td>17% (21%)</td>
<td>19% (0%)</td>
</tr>
<tr>
<td>69% (72%)</td>
<td>7% (28%)</td>
<td>24% (0%)</td>
</tr>
<tr>
<td>56% (70%)</td>
<td>10% (29%)</td>
<td>34% (1%)</td>
</tr>
<tr>
<td>58% (83%)</td>
<td>17% (16%)</td>
<td>25% (1%)</td>
</tr>
<tr>
<td>67% (70%)</td>
<td>20% (29%)</td>
<td>12% (1%)</td>
</tr>
<tr>
<td>59% (60%)</td>
<td>21% (39%)</td>
<td>20% (1%)</td>
</tr>
</tbody>
</table>

A better understanding of the educational level and work activity of jobs.
More information about some specific jobs.
A better understanding of work places.
Been able to seek out information about an occupation.
A better understanding of some of the values of work.
A better understanding of things that influence the selection of an occupation.
A better understanding of my own aptitudes/abilities for work.
A better understanding of how and where to obtain a job.
A better understanding of what to expect from my first job.

Student Grade Level 7-12

Are you aware that you can obtain/take an interest survey in the resource room? 70% Yes (60%) 30% No (40%). Have you done so? 41% Yes (52%) 59% No (48%).

The following topics were listed by students surveyed as the topic the student was seeking information on in the Resource Room

(Partial List)

Dietitian
Optometrist
Secretary
Receptionist
Broadcaster
Computer Systems Analyst
Farmer
Fiberglass Worker
Steel Worker
Nurse (RN)
Nurse (LPN)
Clerk
Stewardess

Motorcycle Mechanic
Pilot
Architect
Drafting
Materials Engineer
Biology
Medical Doctor
Dental Hygienist
Music Field
Typist
Veterinarian
Army
Trucking
Other: One staff member had planned a career education activity around the Picture Interest Exploration Survey Kit. The stated objective was: students will demonstrate an increase in their knowledge of different kinds of jobs. Instead of this activity the staff member was placed in charge of implementing the program titled Advisor/Advisee.

The following information has been extracted from the original Title III ESEA mini-grant application. It is hoped this will provide the reader with a background concerning the program. A copy of the final program evaluation follows.

ADVISOR/ADVISEE
INITIAL APPLICATION

Statement of Needs

All parts of a guidance program should be directed to the same goal--self awareness, personal growth, social development. But school group work programs are either non-existent or they tend to be so inadequately coordinated and their objectives so inconsistent that their contribution is not what it should be. Devils Lake Central School is one of those schools that have no coordinated group guidance activities. As a result, group self-enhancement, problem solving and value clarification activities are left to hit-or-miss individual-teacher planning.

The lack of coordinated group guidance services at Central School, and the importance of that function to teaching and learning, identifies the problem. So as to better serve all of the students--more often--with patterns and designs for planning a high school program; creating and maintaining positive self and peer relations; solving problems and making decisions, a program called the Advisor/Advisee has been established. The framework already exists. Young people are gregarious. Teachers do work with students.

Parent/teacher contacts regarding a student's activities, programming, and the like virtually become nil at the secondary level. The school is as much to blame for the separation of home and school as is the home guilty of not inquiring about their children's progress (or lack of it).

Student registration for a high school program, whether it be for one semester, one school year, or three consecutive years has been a major concern for parents, students and school officials. Two counselors for a school population of 1090 cannot adequately counsel and disseminate options available to all students. Too often the present system identifies errors in program planning after a student has progressed through months, perhaps years, of academic endeavor.
Too, it is recognized that many students become frustrated with academic/vocational choices as they relate to interests, aptitudes and abilities. A general flow of information regarding these concepts would assist the young learner to "put-it together."

Population to be Served

Students in grades seven through twelve, numbering approximately 1090, will be randomly assigned to a regular staff member. Forty-six staff members will be given a list of advisees.

Process Objectives

Once the advisor/advisees have been assigned, they will meet twice each week for a 15 - 20 minute session. More especially the advisor may schedule a one-to-one conference with a student and/or parent. With the advisor/advisee program, teachers will be encouraged to make parental contact relative to the students school activities, progress, etc. Likewise, the parent will be aware of a "contact person" within the school who should be consulted when questions arise.

Students (advisees) will be given activities during sessions with teachers (advisors) that will facilitate experiences in goal-setting skills, values clarification, self-enhancement and decision-making skills. In conjunction with these activities, information relative to high school program-planning and post-secondary plans will be explored along with resources available.

As a result of the aforementioned activities, advisees will be able to develop short and long-range learning goals as evidenced by high school planning sheets.

An approach to decision-making of these kinds will be more appropriate for Advisees, as evidenced by evaluation, because of self-enhancement activities, interest and ability batteries.

Advisees will be able to develop standards for improving academic/vocational accountability as evidenced by advisor/advisee/parent input.

Advisors will arrange for parent/teacher conferences as recommended or desired by the advisee, teacher or parent.

Advisees will become more aware of referral agencies and their function as evidenced by evaluation.

Advisors will participate in three in-service workshops during the 1975-1976 school year to better facilitate their group-guidance activities.

Each seventh and tenth grade advisee will remain assigned to the same advisor for a three year period. As the advisee advances from junior
high school (end of grade nine) into senior high school two factors will take place: 1) the advisee will be assigned a new advisor; 2) the "replacement" will be a seventh grader. Graduating seniors will be replaced in an advisors group by an incoming sophomore. Hence, the advisee group will be multi-aged.
June 10, 1976

Dr. Richard Kunkel
Mr. John Geston
Devils Lake Public School
Devils Lake, ND 58301

Re: Evaluation Advisor/Advisee
Program 1975-1976 School Term

Gentlemen:

Please consider this letter as my report relating to the evaluation of your project. This report addresses itself to the process and performance objectives stated in your initial Title III application for the mini-grant funds. To evaluate the project, data was taken from three sources: 1) parents; 2) students; 3) teachers.

I. During May of 1976, 50 parents were randomly selected and sent a questionnaire concerning the project. In turn, I received 22 of the survey sheets back.

II. In December 1975, 50 students were randomly selected from grades 7 - 12. Each student was individually interviewed by Mrs. Sue Dunbar whom I employ for this type of activity. It should be pointed out that each student was interviewed on a one-to-one basis.

During the second week of May, these students were again interviewed in the same fashion with the same form. I constructed this evaluation form. Pre/post data exists on 47 students. Three were lost due to moving, etc. The distribution of students interviewed included eight 7th graders, nine 8th graders, ten 9th graders, nine 10th graders, six 11th graders, and five 12th graders.

In discussing the data, it is necessary to look at this as a group of 47 students. The sample at each grade level is too small to compare one grade level with another. It was not our intent to make this kind of comparison. I only make reference to this so that you will understand why this type of comparison is not being made.

III. The teacher sample was gathered by Mr. Geston and turned over to me. Thirty of the teacher final report forms on the program were returned to me by Mr. Geston.
Results:

1. Of the 22 surveys received, 6 parents were not aware of the advisor/advisee program and 14 were. The majority of the parents who were aware found out about the program through their children.

2. Of these 22, 5 parents suggested that the program be dropped, 14 felt that the school district should emphasize it, and 3 made no response.

3. The results were divided on a 50-50 basis in terms of whether it had a positive or negative effect on their child. Several parents felt the program was positive even if their child did not particularly find it helpful.

4. Two parents reported that they had contact with their child's advisor, while 20 had not.

5. In analyzing the data for parents and their comments or recommendations, three questions or comments seemed to be repeating themselves.
   a. Some children cannot relate to some teachers on a personal basis. Thus, they questioned if in some instances the child could be allowed the freedom of selecting his own advisor.
   b. Some parents felt it was difficult for their child to discuss his or her personal problems in front of other students.
   c. Several parents felt that there was a need for better organization of this program.

The results on the student data is as follows:

1. On the initial survey, 41 students said they had met with their advisor, 6 said they had not. On the post survey, 42 said they had met with their advisor, 5 said that they had not. Only one student said that he had not been assigned an advisor.

2. The types of meetings both on the pre and post survey, indicate that over 75% of the advisor/advisee meetings contained more than 10 students. Only a few students met on a one-to-one basis with their advisor.

3. There was a significant increase in the number of meetings held by the advisors after December 14, 1975, as compared to the first one-half of the year. On the post survey, 3 students
indicated that they had no meetings, 3 students indicated that they had 1 meeting, 3 had 3 meetings, 4 had 4 meetings, 1 had 5 meetings, 1 had 7 meetings, 1 had 8 meetings, and 19 had more than 10 meetings.

4. It is outside the scope of this report to discuss the content of the advisor/advisee meetings as the list is almost endless. This can be verified by looking at the students list of activities and by the teacher lists as well. I have attached a tabulated resume of the results of the content of these meetings that you may refer to. Generally speaking, the content of the meetings is most heavily centered around the students relationship to the Devils Lake School System. All areas on the survey indicate an increase in the discussion of these items when compared on a pre-post basis.

5. In asking the children to judge or rate the program, on the pre survey, 16 were positive toward the program and 29 felt it was too early to tell or a waste of their time. This changed to 37 being positive and 9 undecided or negative.

Comments and suggestions from the students included the following:

a. A need for more organization and planning.

b. More availability of one-to-one interaction between the student and his advisor.

c. A need to select their own advisor in some cases.

d. A need for more enthusiasm in the program on the part of some teachers.

e. Some students also felt that participation on their part in this program should not be mandatory.

6. The evaluation of the data received from teachers is not as clear cut as the other two groups. In terms of high average or low significance and the teachers judgements of how the students benefited from the program, no one rated it as high; 13 marked average; and 16 marked low. The first three items of the survey filled out by the teachers seemed to me to question their agreement with the goals and objectives of the project. In regard to these three goals, the teachers are overwhelmingly positive. They don't however, agree on the same basis with how these goals should be implemented. If you review the tally marks from the teachers forms, you will notice that although the sample was only 30, a few people seemed to have a need to mark yes and no on some questions which would indicate that perhaps they were undecided. One would have to say that the teachers are divided in regard to
their feelings about this program. It appears that about 50 percent of the teachers are in favor of this program and 50 percent are not, even though they support its goals and objectives.

Teachers comments and suggestions that appear to be significant are as follows:

a. If the program is to continue, more one-to-one involvement is needed.

b. Many teachers felt that the program has merit and that difficulties encountered this year were related to the newness of the program.

c. Some teachers felt there had to be more selectivity in regard to matching some teachers to some students.

d. Some teachers felt that they were not qualified to deal with some of the problems presented by a few of the students.

e. A small number of teachers felt that student's personal problems were not a part of their job.

f. Some teachers felt the program presented too many scheduling difficulties but that this might be helped by more flexibility on meeting times.

Summary

1. In reviewing the data from 22 parents, 30 teachers, and 47 students, my perspective would be as follows:

The most positive group of people interviewed are students. This should be interpreted as an accomplishment by the school district as the goals and objectives of this project were directed toward the students and for their benefit. The second most positive group are the parents. The least positive group surveyed were the teachers themselves. Very few teachers disagree with the goals of this type of project but they do not agree on its manner of implementation. This is not uncommon on the part of educators. In reading the students and teachers reports, I got the impression that one or two teachers may not have attempted to implement any goals or objectives from this project. I am in no position to document whether or not this has happened. If it has, it appears that something needs to be built in to provide for more accountability.

2. In reviewing all three sources of data, several things are apparent in all three sources that should be looked at.
a. Some type of a system that would allow reassignment of students to teachers where personality conflict is apparent.

b. Provisions need to be made for more availability of advisors to interact with students on a one-to-one basis in regard to a student's personal problems. If this cannot be done, perhaps an avenue needs to be developed or expanded where these students are referred to another person or agency such as to the school's guidance program.

c. There appears to be organizational problems that to some degree center around scheduling and its relation to minimum number of meetings and mandatory attendance. This is probably more a function of the newness of the program rather than anything else. Coordination of a program of this type requires a rather large degree of one person's time.

d. One of the most positive aspects in reviewing the data is in regard to the students being able to have a forum so to speak, in which they may openly discuss problems that relate to them and to this school. In my opinion, this project has provided many students with this opportunity.

In reviewing this project, it appears that the process objectives have been implemented by the majority of the teachers in the Devils Lake Junior-Senior High School. The majority of the 50 students we interviewed have internationalized a significant degree of the product objectives.

If you have any questions about the evaluation, I would be glad to answer them. I think that it would be a good idea to retain the raw data from the evaluation sheets as it might be useful to anyone who plans on implementing this program in another district. The data describes many activities used by teachers as well as problems of implementation throughout the year. I appreciate the opportunity to have been involved in this project.

Respectfully,

Donald Boehmer
APPENDIX A

ADVISORY COMMITTEE MEMBERS
Jerry Cousette
Employment Security Bureau
Devils Lake Office
Devils Lake, ND 58301

Scott Engman
Regional Administration Vocational Rehabilitation
Devils Lake, ND 58301

John Moran
Business - Industry
Devils Lake, ND 58301

Charlie Mertens
Legislator
Devils Lake, ND 58301

Everett Johnson
Bureau of Indian Affairs
Ft. Totten, ND 58335

Mike Conners
Chamber of Commerce
Devils Lake, ND 58301

Ed Grossman
Director of Elementary Education (Administration)
Minnie H. Elementary School
Devils Lake, ND 58301

Mrs. Doris LaVanger
Elementary Education (Teacher)
Prairie View Elementary School
Devils Lake, ND 58301

Les Christianson
Secondary Education (Administration)
Devils Lake, ND 58301

Les Nyhus
Secondary Education (Administration)
Devils Lake, ND 58301

Ed Halvorson
Secondary Education (Teacher)
(Math & Science)
Devils Lake, ND 58301
Norris Fagerlund  
Secondary Education (Teacher)  
(Vocational Ag)  
Devils Lake, ND 58301

Allan Hayek  
State School for the Deaf  
Devils Lake, ND 58301

Mrs. Helen Foughty  
School Board  
Devils Lake Public Schools  
Devils Lake, ND 58301

James Kling  
School Counselor  
Central High School  
Devils Lake, ND 58301

Ron Timpe  
Post Secondary Educator  
(English)  
Lake Region Jr. or College  
Devils Lake, ND 58301

Tom Palmer  
Post Secondary Educator  
(Vocational Ed)  
Lake Region Junior College  
Devils Lake, ND 58301

Alyn Kostecki  
Secondary Student  
Devils Lake Public High School  
Devils Lake, ND 58301

Melissa Bulock  
Secondary Student  
Devils Lake Public High School  
Devils Lake, ND 58301

Harley W. Johnson  
Citizen in School District  
Devils Lake, ND 58301

Rev. Roger Leonhardt  
Devils Lake, ND 58301
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>School District</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ron Broeker</td>
<td>Superintendent</td>
<td>Minnewaukan School District</td>
<td>Minnewaukan, ND 58351</td>
</tr>
<tr>
<td>Harry Reynolds</td>
<td>Superintendent</td>
<td>Ft. Totten School District</td>
<td>Ft. Totten, ND 58335</td>
</tr>
<tr>
<td>Leonard Bubach</td>
<td>Superintendent</td>
<td>Sheyenne School District</td>
<td>Sheyenne, ND 58374</td>
</tr>
<tr>
<td>Peter J. Bunde</td>
<td>Superintendent</td>
<td>Churches Ferry School District</td>
<td>Churches Ferry, ND 58325</td>
</tr>
<tr>
<td>Les Stensgaard</td>
<td>Superintendent</td>
<td>Crary School District</td>
<td>Crary, ND 58327</td>
</tr>
<tr>
<td>Donald J. Kukla</td>
<td>Superintendent</td>
<td>Starkweather School District</td>
<td>Starkweather, ND 58377</td>
</tr>
<tr>
<td>Lloyd Kuehn</td>
<td>Superintendent</td>
<td>Warwick School District</td>
<td>Warwick, ND 58381</td>
</tr>
<tr>
<td>Earl Logue</td>
<td>Superintendent</td>
<td>Oberon School District</td>
<td>Oberon, ND 58357</td>
</tr>
<tr>
<td>Don Busch</td>
<td>Superintendent</td>
<td>Lakota School District</td>
<td>Lakota, ND 58344</td>
</tr>
<tr>
<td>David Schneider</td>
<td>Superintendent</td>
<td>Edmore School District</td>
<td>Edmore, ND 58330</td>
</tr>
</tbody>
</table>
Dr. Kunkel
Superintendent of Schools
Devils Lake Public Schools
Devils Lake, ND 58301

Merril Berg
Administration
Lake Region Junior College
Devils Lake, ND 58301

Jim Hunt
Local Vocational Director
Lake Region Junior College
Devils Lake, ND 58301

Peter Tierney
St. Michael's Mission
Devils Lake, ND 58301

Sister Mary Jean Sutton
Principal
St. Joseph's Elementary
Devils Lake, ND 58301

Sister Mary Alice Long
Principal
St. Mary's Academy
Devils Lake, ND 58301

Bill Brown
Education Counselor
Bureau of Indian Affairs
Devils Lake, ND 58301

72

65